



NATIONAL BOARD FOR TECHNICAL EDUCATION

NATIONAL DIPLOMA

IN

HEALTH INFORMATION MANAGEMENT

CURRICULUM AND COURSE SPECIFICATIONS

NOVEMBER 2022

PLOT 'B' BIDA ROAD, P.M.B.2239, KADUNA–NIGERIA



FOREWORD

The National Diploma in Health Information Management curriculum is designed to be used by training institutions to produce manpower for industries nationwide.

The acute shortage of professionally-trained manpower in these industries in Nigeria as well as the need to produce professional practitioners with good ethics and career progression, through the acquisition of desirable knowledge and skills, necessitated the production of this national curriculum.

It is my belief that this curriculum and course specifications which is the minimum required to produce technicians with sound knowledge and skills in Health Information Management, if properly implemented with the required resources (qualified teaching staff in adequate number and mix, adequate consumables, training materials, teaching aids), and qualified candidates are admitted into the programme will lead to the production of competent and skilled technicians required in the sector.

I wish to express my deep appreciation to those that made the review of this curriculum possible. The invaluable contributions of all the members of the committee and resource persons during the national review workshop are appreciated.

I hope that the curriculum would be properly implemented, so as to produce the required Work Force of our dream.

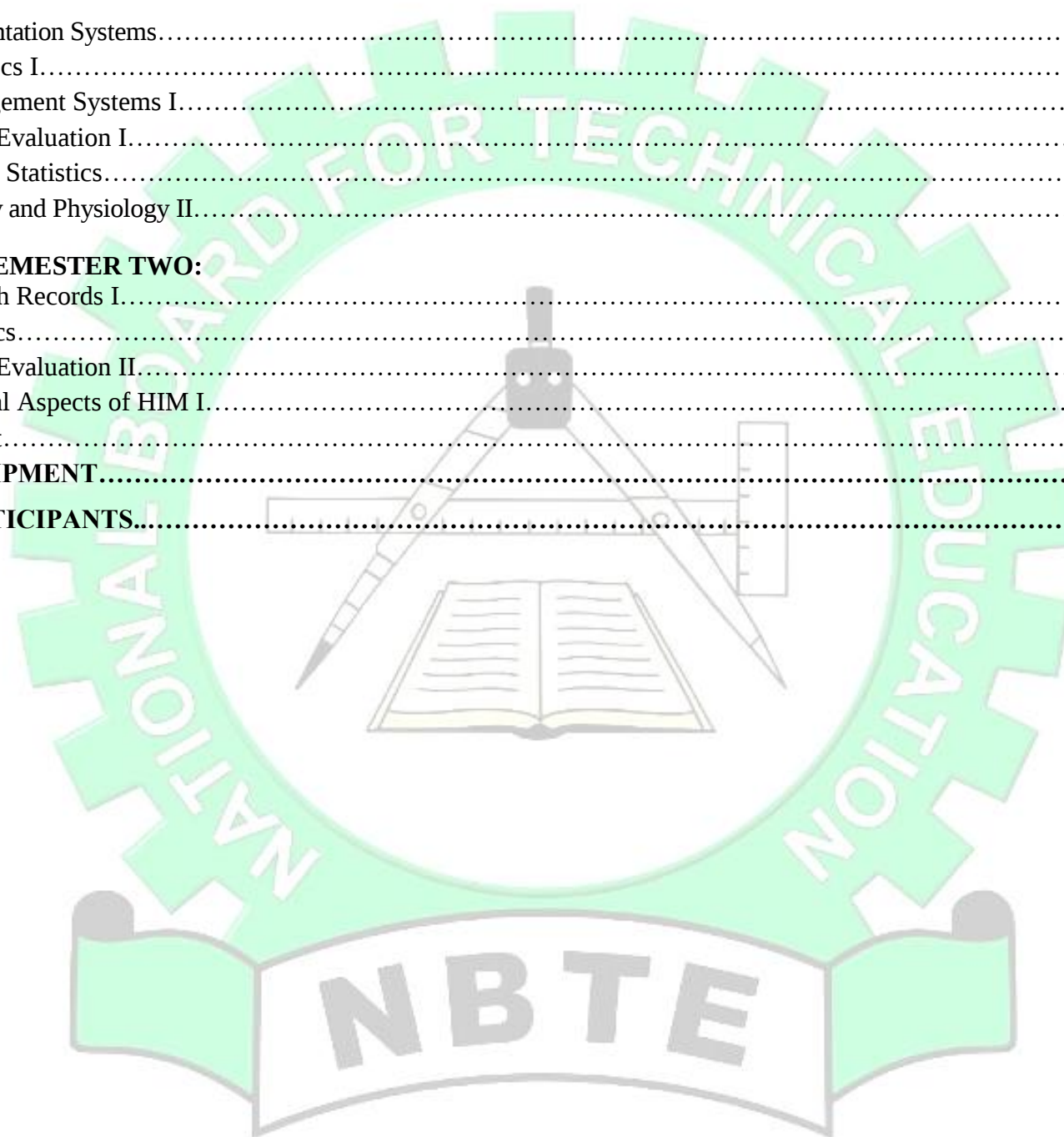
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GENERAL INFORMATION

1.0 TITLE OF PROGRAMME

National Diploma in Health Information Management

2.0 GOAL

The National Diploma in Health Information Management is designed to produce technicians equipped with the knowledge and skills to plan, collate, organize, disseminate, monitor and manage vital information required at the Local, State and National levels in order to ensure effective and comprehensive national health care delivery.

3.0 OBJECTIVES OF THE PROGRAMME

A diplomate of the National Diploma in Health Information Management Programme should be able to:

- i. Assist in planning and organizing health information services in health care delivery system.
- ii. Organize and control health records, under supervision, in health and medical establishments.
- iii. Collect, store, retrieve and preserve health information under supervision.
- iv. Collate, analyze and present health statistical data under supervision
- v. Participate in planning, quality control, evaluation, researches in health care delivery system and serve in other relevant committees for defining standards for health information under supervision.
- vi. Assist in designing, standardizing, and controlling health records forms
- vii. Set up and manage enterprise

4.0 DURATION

The duration of the programme shall be two academic sessions of four semesters, (not less than 17 weeks per semester) including supervised clinical work experience (or SIWES).

5.0 ENTRY REQUIREMENTS

Applicants into the National Diploma HIM programme should possess.

- i. A minimum of 5 credit passes in the relevant subjects, at not more than two (2) sittings at the SSCE, WASSCE or their equivalent. The subjects must include Mathematics, English language, Biology Physics and Chemistry
- ii. At least a minimum score in the UTME

6.0 STAFFING REQUIREMENTS

6.1 Core Teaching Staff

A minimum of four (4) lecturers are required for one stream (40 students). Core teaching staff should possess at least a BSc. in Health Information Management

6.2 Technical Staff

Technical staff should possess ND/HND in Health Information Management

6.3 Headship of the Department

The Head of Department shall Possess not less than a Masters degree in Health Information Management, be registered with the relevant professional body and must be at least a senior lecturer in renk with not less than 10 years industrial/teaching experience

6.4 Career/Academic Prospects

The diplomates would work as Health Information Management Technicians. They can also proceed for HND and BSc. in Health Information Management

7.0 PROGRAMME STRUCTURE

The National Diploma is a two-year terminal academic programme followed by a year of Industrial Attachment carried out in an accredited health facility.

9.0 CURRICULUM

The curriculum of all ND programmes consists of five main components. These are:

- i. Professional/Specialized Courses
- ii. Basic/Foundation Courses
- iii. General Studies/Education
- iv. Supervised Industrial Work Experiences Scheme (SIWES)

10.0 STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)

A six-week mandatory SIWES shall be undertaken by the student at HRORBN-accredited health facility at the end of the second semester of the first year of the ND programme. The student shall be graded as follows:

- i. Logbook evaluation - 50%

ii. Student's Report	- 30%
iii. Confidential Report	- 20%
Total	- 100%

11.0 CERTIFICATION: A diplomate of this programme will be awarded ND in Health Information Management.

12.0 CONDITIONS FOR THE AWARD OF ND CERTIFICATE

Institutions offering accredited programme will award the National Diploma to candidates who successfully completed the programme after passing the prescribed course work, examinations, diploma project, Supervised Work Experience Scheme (SIWES) and attendance.

13.0 INDEXING OF STUDENTS

All newly admitted students must be indexed by the HRORBN within the first semester of the programme.

14.0 PROFESSIONAL LICENSING EXAMINATION TO PRACTICE

At the end of the programme and having satisfied all academic requirements, diplomates will write and pass the Board (HRORBN) Practicing Licensing Examinations part 1

15.0 GRADING OF DIPLOMAS

The National Diploma shall be awarded in four classes:

Distinction	-	CGPA of 3.50 and above
Upper Credit	-	CGPA of 3.0 - 3.49
Lower Credit	-	CGPA of 2.50 - 2.99
Pass	-	CGPA of 2.00 - 2.49

16.0 GRADING OF COURSES:

Courses shall be graded as follows:

MARKED RANGE	LETTER GRADE	WEIGHTING
75% and above	A	4.00
70% – 74%	AB	3.50
65% – 69%	B	3.25
60% – 64%	BC	3.00

55% – 59%	C	2.75
50% – 54%	CD	2.50
45% – 49%	D	2.25
40% – 44%	E	2.00
Below 40%	F	0.0

GUIDANCE NOTES FOR TEACHERS

11.1 The new curriculum is drawn in unit courses. This is in keeping with the provisions of the National Policy on Education which stress the need to introduce the semester credit units which will enable a student who so wishes to transfer the units already completed in an institution of similar standard from which he/she is transferring.

11.2 In designing the units, the principle of the modular system by product has been adopted, and each of the professional modules, when completed provides the student with technician operative skills, which can be used for employment purposes self - and otherwise.

11.3 As the success of the credit unit system depends on the articulation of programmes between the institutions and industry, the curriculum content has been written in behavioral objectives, so that it is clear to all the expected performance of the student who successfully completed some of the courses or the diplomates of the programme. This is slight departure in the presentation of the performance-based curriculum which requires the conditions under which the performance are expected to be carried out and the criteria for the acceptable levels of performance. It is a deliberate attempt to further involve the staff of the department teaching the programme to write their own curriculum stating the conditions existing in their institution under which performance can take place and to follow that with the criteria for determining an acceptance level of performance.

Departmental submission on the final curriculum may be vetted by the Academic Board of the Institution. Our aim is to continue to see to it that a solid internal evaluation system exists in each institution for ensuring minimum standard and quality of education in the programmes offered throughout the Polytechnic system.

11.4 The teaching of the theory and practical work should, as much as possible, be integrated. Practical exercises, especially those in professional courses and laboratory work should not be taught in isolation from the theory. For each course, there should be a balance of theory to practical in the ratio of 50:50 or 60:40 or the reverse.

12.0 FINAL YEAR PROJECT

Final year students in this programme are expected to carry out a project work. This could be on individual basis or group work; but reporting must be undertaken individually. The project should, as much as possible incorporate basic element of design, drawing and complete fabrication of a marketable item or something that can be put to use. Project reports should be well presented and should be properly supervised.

CURRICULUM TABLE

YEAR 1 SEMESTER I

COURSECODE	COURSE TITLE	L	T	P	CU	CH
HIM 111	Health Information Management I	2	0	1	3	3
HIM 112	Language of Medicine	1	0	1	2	2
HIM 113	Communication in Health Information Management	2	0	1	3	3
HIS 111	Mathematics for Health Information Management	2	0	1	3	3
EHT 214	Principles of Epidemiology and Disease Control	2	0	0	2	2
DTE 114	Intro. To Human Anatomy and Physiology	1	0	1	2	2
HIS 112	Descriptive Statistics I & II	2	0	1	3	3
COM 111	Introduction to Computers + Operating Systems	2	0	1	3	3
GNS 101	Use of English I	2	0	0	2	2
GNS 111	Citizenship Education	2	0	0	2	2
TOTAL		17	0	8	25	25

YEAR 1 SEMESTER II

COURSECODE	COURSE TITLE	L	T	P	CU	CH
HIM 121	Disease Classification and Clinical Coding I	1	0	1	2	2
HIS 121	Health Planning and Management I	2	0	0	2	2
HIS 122	Introduction to Probability	2	0	1	3	3
HIS 123	Introduction to Programming	2	0	1	3	3
HIS 124	Computer Packages I	1	0	1	2	2
HIS 125	Primary Health Care for HIM I	1	0	1	2	2
STA 123	Demography I	0	0	3	3	3
EED 126	Intro. To Entrepreneurship	1	0	2	3	3
GNS 102	Communication in English I	2	0	0	2	2
GNS 121	Citizenship Education II	2	0	0	2	2
HIM 122	SIWES	0	0	3	3	3
TOTAL		15	0	9	24	27

YEAR 2 SEMESTER I

COURSECODE	COURSE TITLE	L	T	P	CU	CH
HIM 211	Health Information Management II	2	0	1	3	3
HIM 212	Disease Classification and Clinical Coding II	1	0	2	3	3
HIM 213	Record Documentation Systems	2	0	0	2	2
HIS 211	Health Informatics I	2	0	0	2	2
HIS 212	Database Management Systems I	2	0	0	2	2
HIS 214	Monitoring and Evaluation, I	2	0	0	2	2
HIS 223	Applied General Statistics	2	0	1	3	3
HIS 216	Human Anatomy and Physiology I	1	0	2	3	3
GNS 213	Introduction to Medical Sociology	3	0	0	3	3
GNS 228	Research Methods I	2	0	0	2	2
GNS	Use of English II	2	0	0	2	2
EED 216	Practice of Entrepreneurship	1	0	2	3	3
TOTAL		22	0	7	28	28

YEAR 2 SEMESTER II

COURSECODE	COURSE TITLE	L	T	P	CU	CH
HIM 221	Electronic Health Records I	1	0	1	2	2
HIM 222	Hospital Statistics	1	0	0	1	1
HIS 221	Monitoring and Evaluation II	2	0	0	2	2
HIS 222	Legal and Ethical Aspects of HIM I	2	0	0	2	2
HIS 215	Fundamentals of Data Analysis	1	0	1	2	2
HIM 223	Research Project	0	0	6	6	6
GNS	Communication in English II	2	0	0	2	2
TOTAL		9	0	8	17	17

PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)		
COURSE:	HEALTH INFORMATION MANAGEMENT I		
112re	HIM 111		
DURATION (Hours/Week) Lecture:	2hrs	Tutorial: 0	Practical: - 1
Total:	3 (45hrs/semester)		
UNITS:	3		
GOAL:	This course is designed to enable students acquire knowledge in Health Information Management		
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:		
1.0 Know the History and Development of Health Records			
2.0 Understand the role of health information in healthcare delivery			
3.0 Understand the organization and structure of health records department			
4.0 Understand the development of health information profession			
5.0 Understand the scope and functions of health information personnel			
6.0 Understand the process of initiating patient health records			
7.0 Understand the process of storing and disseminating patients' health records			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)						
COURSE: Health Information Management I Course Code: HIM 111 Contact Hours: 45 Hours						
COURSE SPECIFICATION: Theoretical 2 Practical Content: 1 Content:						
General Objective: 1: Know the history and the development of health records						
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
1.	1.1. Explain the following - Medical Records - Health Records - Health Information - Clinical Records - Health Information Management, etc. 1.2. Describe the early medical records in the following eras: - Egyptian period - Greek period - Greece Roman period - Byzantine period - Jewish period - Islamic period - Medieval period - Renaissance period	Explain 1.1 – 1.3	Textbooks, Charts and Forms, Reading materials.			Explain the following - Medical Records - Health Records - Health Information - Clinical Records - Health Information Management, etc. Outline the history of health records in Nigeria

	- 17th century period - 18th century period - 19th century period - 20th century period 1.3. Outline the history of health records in Nigeria					
General Objective: Understand the role of health information in healthcare delivery						
1.	2.1 Explain the purposes/ uses of health information to the: - Patient - Doctor - Hospital - Community 2.2 Describe the roles of health information/records in: - Patient care - Healthcare planning at the facility, community, and local levels - Health care planning at state and national levels - Measuring and improving quality healthcare services	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.			Explain the purposes/ uses of health information to the: - Patient - Doctor - Hospital - Community

	- Community health - Epidemiology - Healthcare and bioethical research - Monitoring and Evaluating health activities - Health quality control analysis - Witness during litigation				
General Objective 3.0: Understand the organization and structure of health records department					
1.	3.1.List the Units/sections in health record department 3.2.Describe the physical layout of the department 3.3.Explain the functions of the units/section in 3.2 above 3.4.Explain the relationship between the units/sections in 3.1 above 3.5.Describe the centralized and the decentralized approach to organizing the health information department 3.6.Describe the	Explain 3.1 – 3.13	Textbooks, Charts and Forms, Reading materials. Computer Charts		List the Units/sections in health record department, explain their physical layout, functions and relationships. Describe the organizational charts in centralized and the decentralized health information department Outline the necessary positions in a health department and describe the line of command/delegation of responsibilities Describe the planning of a

	organizational charts in 3.5 above 3.7.Outline the necessary positions in the department 3.8.Describe the line of command/delegation of responsibilities in 3.7 3.9.Describe the planning of a health record department 3.10 Enumerate the factors to beconsidered in 3.9 above 3.11Explain the work flow within the department 3.12Describe the organization of the following health information units in: - General outpatient department - Consultative outpatient clinic - Accident and Emergency - Radiology clinic - Physiotherapy department - Other clinical departments 3.13 Explain the relationship					health record department enumerating the factors to beconsidered Explain the work flow within the health record department Describe the organization of the following health information units in: - General outpatient department - Consultative outpatient clinic - Accident and Emergency - Radiology clinic - Physiotherapy department - Other clinical departments Explain the relationship between health record department and other departments in the hospital
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	between health record department and other departments in the hospital					
General Objective: 4.0 Understand the development of health information profession						
1.	4.1 Outline the history of the development of health records/information in the western World (United States of America, United Kingdom, Australia) 4.2 Describe the development of medical/health records in pre- and post-independence Nigeria 4.3 Explain the influence of Western World in the development of health records/information in Nigeria 4.4 Outline the evolution of the following bodies in the development of health information management in Nigeria: Nigerian Association of Medical Record Officers (NAMRO) Nigerian health Records Association (NHRA)	Explain 4.1 – 4.4	Textbooks, Charts and Forms, Reading materials.			Explain the influence of Western World in the development of health records/information in Nigeria and the evolution and roles of the following bodies and the development of health information management in Nigeria: Nigerian Association of Medical Record Officers (NAMRO) Nigerian health Records Association (NHRA) Health Information Managers Association of Nigeria (HIMAN) Association of Health Records & Information Management Practitioners Health Records Officers

	Health Information Managers Association of Nigeria (HIMAN) Association of Health Records & Information Management Practitioners Health Records Officers Registration Board of Nigeria (HRORBN) International Federation of Health Information Management Association					Registration Board of Nigeria (HRORBN) International Federation of Health Information Management Association
General Objective: 5.0 Understand the scope and functions of health information personnel						
1.	5.1 Describe the scope/functions of health information personnel as: -Manage and staff the main entry reception for patients -Develop procedure for admission and discharge of patients -Initiation/documenting patients/client for care	Explain 5.1 and 5.2	Textbooks, Charts and Forms, Reading materials.	perform the following functions of health information personnel as: Manage and staff the main entry reception for patients Develop	Guide students to perform the following functions of health information personnel as: Manage and staff the main entry	Describe the scope/functions of health information personnel

-Provide and process patient records -Receive all patient records after the discharges -Analyze the health records for completeness and accuracy -Abstract diagnoses/procedures, code and index patients' records -Quality review of all imaged documents -Protect/release patient information based on law/ethics -Collect, collate, integrate, analyze and disseminate vital and health data -Assist with all forms of medical evaluative review of the patient records -Maintain accurate bed census			- procedure for admission and discharge of patients - Initiation/documenting patients/client for care - Provide and process patient records - Receive all patient records after the discharges - Analyze the health records for completeness and accuracy	- reception for patients - Develop procedure for admission and discharge of patients - Initiation/documenting patients/client for care - Provide and process patient records - Receive all patient records after the discharges - Analyze the health
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	-Transcribe external report -Retain and dispose of patient's records -Store and retrieve patients' information for legitimate use 5.2 Explain how to analyse quantitatively, qualitatively and statistically the patient's records			Abstract diagnoses/procedures, code and index patients' records Quality review of all imaged documents Protect/release patient information based on law/ethics Collect, collate, integrate, analyze and disseminate vital and health data Assist with	records for completeness and accuracy Abstract diagnoses/procedures, code and index patients' records Quality review of all imaged documents Protect/release patient information based on law/ethics Collect, collate, integrate, analyze	
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				all forms of medical evaluative review of the patient records Maintain accurate bed census Transcribe external report Retain and dispose of patient's records Store and retrieve patients' information for legitimate use Analyse	and disseminate vital and health data Assist with all forms of medical evaluative review of the patient records Maintain accurate bed census Transcribe external report Retain and dispose of patient's records Store and retrieve
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				quantitatively, qualitatively and statistically the patient's records	patients' information for legitimate use 5.2 Explain how to analyse quantitatively, qualitatively and statistically the patient's records	
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General Objective 6.0: Understand the process of initiating patient health records

1.	6.1 Explain the need for patient identification and documentation in health care 6.2 Describe the following Numbering systems: -Alphabetical -Numerical 6.3 Enumerate the merits and demerits of the numbering system in 6.2	Explain 6.1- 6.15	Textbooks, Reading materials Charts and forms. Samples of Forms Secondary data from hospitals /	Identify the materials for the registration of patients Register patients using	Guide the Student to carry out the activities in the learning outcomes	Explain the need for patient identification and documentation in health care Describe the following Numbering systems: -Alphabetical -Numerical Enumerate the merits and demerits of the numbering system in 6.2
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6.4 Describe the following types of numbering: -Serial numbering -Unit numbering -Serial unit numbering 6.5 Outline the merits and demerits of the numbering types in 6.4 6.6 Describe the following adaptations of the unit numbering: -Terminal digit -Middle digit -Family numbering 6.7 List the sources of numbers for patient registration 6.8 Explain the purpose and use of the 'patient master name index' 6.9 Describe the organization of patient master name index 6.10 Identify the materials for the registration of a patient 6.11 Describe the steps in patient registration/initiation 6.12 Describe the methods of delivering patients records 6.13 Explain the following	clinics	the numbering systems listed in 6.2 and 6.4 6.16 Generate patient's records using the methods listed in 6.13.	Describe the following types of numbering: -Serial numbering -Unit numbering -Serial unit numbering Outline the merits and demerits of the numbering types in 6.4 Describe the following adaptations of the unit numbering: -Terminal digit -Middle digit -Family numbering List the sources of numbers for patient registration Explain the purpose and use of the 'patient master name index' Describe the organization of patient master name index Identify the materials for the registration of a patient
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	methods of maintaining records -Individual unit record -Family unit records (family folder) -Patient held records -Home based records 6.14 Explain the merits and demerits of methods in 6.13 above. 6.15 Enumerate the information required from patient at registration				Describe the steps in patient registration/initiation Describe the methods of delivering patients records Explain the following methods of maintaining records -Individual unit record -Family unit records (family folder) -Patient held records -Home based records Explain the merits and demerits of methods in 6.13 above. Enumerate the information required from patient at registration
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General Objective 7.0: Understand the process of storing and disseminating patients' health records

1	7.1 Define following terms: - Filing - Shelving - Mislaying - Misfiling 7.2 Describe the following filing methods	Explain 7.1 – 7.12	Textbooks. Reading materials, Charts and forms, Files Shelves	File document using the methods in 7.2 and 7.3.	Guide the students to carryout the activities in 7.11	Define following terms: - Filing - Shelving - Mislaying - Misfiling Describe the following filing methods
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	- Alphabetical - Numerical 7.3 Describe the following adaptations of filing systems in 7.2 -Phonetic -Methods of numeric filing -Straight numerical -Serial -Serial unit -Terminal digit filing -Middle digit filing 7.4 Explain the changing from serial to unit numbering 7.5 Describe the process of converting to terminal or middle digit filing 7.6 Explain the various types of tracer systems 7.7 Explain merits and demerits of tracer systems in 7.6 above 7.8 Describe filing control in relation to: -Location (centralized and decentralized) -Requisition and charge out system -Use of change slips		Shelve patients' health Records Organise a health records library	Guide the students to carryout the activities in 7.13 and 7.14	- Alphabetical - Numerica Describe the following adaptations of filing systems in 7.2 -Phonetic -Methods of numeric filing -Straight numerical -Serial -Serial unit -Terminal digit filing -Middle digit filing Explain the changing from serial to unit numbering Describe the process of converting to terminal or middle digit filing Explain the various types of tracer systems Explain merits and demerits of tracer systems in 7.6 above Describe filing control in
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	-Colour coding of record folders -Physical facilities in the file area -Safety -Staff organization -Organizational patterns -Transportation of Records -Equipment and supplies -Other file rules and procedures 7.9 Describe types of filing shelves/equipment 7.10 Describe methods of shelving patients' health record 7.11 Explain the organisation of health records library 7.12 Explain need for housekeeping in health records library				relation to: -Location (centralized and decentralized) -Requisition and charge out system -Use of change slips -Colour coding of record folders -Physical facilities in the file area -Safety -Staff organization -Organizational patterns -Transportation of Records -Equipment and supplies -Other file rules and procedures Describe types of filing shelves/equipment Describe methods of shelving patients' health record Explain the organisation of health records library Explain need for housekeeping in health records library
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PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)				
COURSE TITLE: LANGUAGE OF MEDICINE				
COURSE CODE: HIM 112				
DURATION	Lecture:- 1 Hrs	Tutorial:-	Practical:- 1 Hr	Total:- 2Hrs/Wk (30Hrs/Sem)
CREDIT UNITS: 2				
GOAL: This course is designed to introduce the student to basic medical terminologies				
GENERAL OBJECTIVES: On completion of the course, the student should be able to:				
1.0 Understand the basic medical terminologies 2.0 Know prefixes, stems, suffixes and combining vowels in medical terminology 3.0 Know common terms in medical terminology 4.0 Understand the use of homonyms, synonyms and eponyms in medical terminology 5.0 Know lay terms applicable to medicine 6.0 Understand common abbreviations 7.0 Understand the language of medicine in different medical specialties 8.0 Understand Medical Terminology of the body systems 9.0 Understand common terminologies				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: LANGUAGE OF MEDICINE			Course Code: HIS 112		Contact Hours: 3Hrs/Wk (45Hrs/Sem)		
COURSE SPECIFICATION: Theoretical content : 2			Practical Content: 1				
General Objective 1.0: Understand the basic medical terminologies							
Week	Specific Learning Outcomes		Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
1-2	1.1	Explain Medical Terminology	Explain 1.1 to 1.6	Textbooks, Lecture notes, Anatomical charts and workbooks			Explain medical terminologies
	1.2	Describe the history of medical terminology					
	1.3	State the objectives of medical terminology					
	1.4	Explain Medicine and medical practice					
	1.5	Explain surgery					
	1.6	Explain the following terms: X-ray, ECG, EEG, MSCT etc					
General Objective 2.0 Know prefixes, stems, suffixes and combining vowels in medical terminology							
WEEK	Specific Learning Outcomes		Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
3- 5	2.1	Explain prefixes in medical terminology	Explain 2.1 to 2.13	Textbooks, Lecture notes, Anatomical charts and workbooks			Explain prefixes and their types Define suffixes and their types Explain
	2.2	List prefixes in medical terminology					
	2.3	List diagnostic prefixes					
	2.4	List operative prefixes					
	2.5	List symptomatic prefixes					
	2.6	Explain stems					

	2.7 List common stems 2.8 Define suffixes in medical terminology 2.9 List suffixes in medical terminology 2.10 List diagnostic suffixes 2.11 List operative suffixes 2.12 List symptomatic suffixes 2.13 Explain Combining vowels					combining Vowels
General Objective 3.0: Know common terms in medical terminology						
5 - 6	3.1 Explain Word Analysis in Medical terms 3.2 Construct Medical terms 3.3 Illustrate the use of slashes (/) in word construction in medical terminology 3.4 Define singulars in medical terminology 3.5 Define plural 3.6 Define nouns in medical terminology 3.7 List the commonly used singulars and plurals in medical terminology	Explain 3.1 to 3.7	Textbooks, Lecture notes, Anatomical charts and workbooks	Construct medical terminologies	Guide students to construct medical terminologies	Join prefixes, stems, suffixes and vowels to form terms. Construct medical terminologies
General Objective 4.0 Understand the use of homonyms, synonyms and eponyms in medical terminology						
7- 8	4.1 Define homonyms 4.2 List examples of homonyms and their meanings in medical terminology 4.3 Define synonyms	Explain 4.1 to 4.6	Textbooks, Lecture notes, Anatomical			Explain homonyms, synonyms and eponyms

	4.4 List examples of synonyms and their meanings in medical terminology 4.5 Define eponyms 4.6 List examples of eponyms and their meanings in medical terminology		charts and workbooks			
General Objective 5.0: Know lay terms applicable to medicine						
9 - 10	5.1 Define lay terms 5.2 List the common lay medical terms 5.3 Identify colours in medical terminology 5.4 List the medical terms for familiar colours 5.5 List the medical terms for numbers 5.6 Identify the commonly used singulars and plurals in health terms	Explain 5.1 to 5.5	Textbooks, Lecture notes, Anatomical charts and workbooks			Explain lay terms
General Objective 6.0: Understand common abbreviations						
11 - 12	6.1 Explain abbreviations 6.2 State common diagnostic abbreviations 6.3 State common operative abbreviations 6.4 Identify common medical signs and symbols 6.5 Define acronyms with medical examples and their meanings. 6.6 Identify abbreviations of Latin origin used in prescriptions	Explain 6.1 to 6.6	Textbooks, Lecture notes, Anatomical charts and workbooks			Explain abbreviations and acronyms
General Objective 7.0: Understand the language of medicine in different medical specialties						
13	7.1 Explain specialties in medicine. 7.2 List various medical specialties in the	Explain 7.1 and 7.4	Textbooks, Lecture			Explain various medical

	hospitals ◆ Family medicine ◆ Surgery ◆ Orthopedic ◆ Psychiatrics ◆ Paediatrics ◆ Clinical Coding ◆ Health Informatics ◆ Etc 7.3 List various specialists in above 7.2 above 7.4 Explain the functions of various medical specialties in the hospitals.		notes, Anatomical charts and workbooks			specialties.
General Objective 8.0: Understand medical terminologies of the body systems						
14	8.1 Explain the Medical Terminology of common body tissues 8.2 Explain the Medical Terminology of common body organs 8.3 Explain the Medical Terminology of body systems: • Digestive • Respiratory • etc.	Explain 8.1 and 8.3	Textbooks, Lecture notes, Anatomical charts and workbooks			Explain medical terminologies of the body systems.
General Objective 9.0: Understand common terminologies						
15	9.1 Identify selected terms relating to the following:	Explain 9.1 to 9.3	Textbooks, Lecture			Explain common

	◆ Oncology, ◆ Anaesthesiology, ◆ Pharmacology, ◆ Psychiatry, ◆ Radiation and ◆ nuclear medicine. 9.2 Identify abbreviations of medical/health degrees, diplomas and associations. 9.3 Explain hospital terms as contained in the glossary.		notes, Anatomical charts and workbooks		terminologies
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PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: COMMUNICATION IN HEALTH INFORMATION MANAGEMENT			
CODE: HIM 113			
DURATION (Hours/Week) Lecture: 2hrs	Tutorial: 0	Practical: - 1	Total: 3 (45hrs/semester)
UNITS: 3			
GOAL: This course is designed to enable students acquire knowledge and Communication skills in Health Information Management.			
GENERAL OBJECTIVES: On completion of this course, the student should be able to:			
1.0 Understand communication in Health Information Management. 2.0 Know the uses of Health Information, Education and Communication (IEC) materials and media technologies. 3.0 Understand the concepts of health advocacy resources and production. 4.0 Know how to apply knowledge and skills of Communication in Health Information Management.			

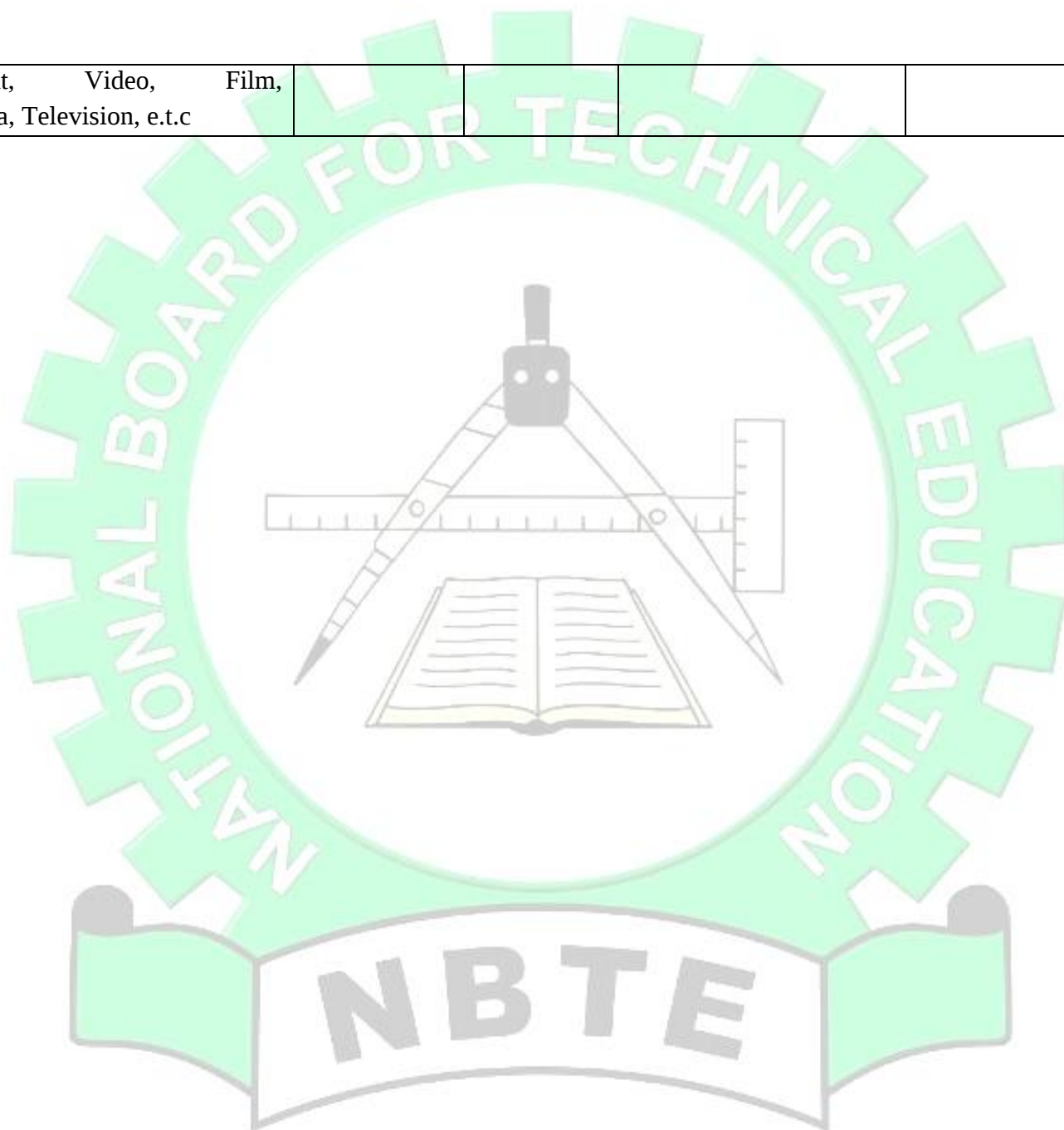
PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)						
COURSE: COMMUNICATION IN HEALTH INFORMATION MANAGEMENT				Course Code: HIM 113	Contact Hours: 45	
COURSE SPECIFICATION: Theoretical Content: 2 Practical Content: 1						
General Objective 1.0: Understand communication skills for Health Information Management.						
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
	1.1. Define communication 1.2. Define Communication skills required for effective media advocacy 1.3. Identify Communication skills for effective media advocacy - Persuasive skills - Active listening skill - Speaking skills - Media advocacy, e.t.c. 1.4. Explain each of the Communication skills identified above. 1.5. State other Communication Skills required for effective communication: - Interview skills - Counseling skills	Explain 1.1 – 1.6	White board / marker Computer and Projectors Charts /Diagrams / Posters e.t.c. Audio Equipment Audiovisual media	Demonstrate the Communication skills listed in 1.3 Interview clients and patients	Guide and Supervise Students to carry out activities listed in 1.5	Explain each of the Communication skills identified in 1.3

	- Questioning skills 1.6 Explain each skill listed in 2.4					
General Objective 2.0: Know the uses of Health Information, Education and Communication (IEC) materials and media technologies						
	2.1 Define Health Information, Education and Communication (IEC) 2.2 List tools and materials for Health Information, Education and Communication (IEC): - Posters, Chart, Diagram - Illustrations, Digital Pictures, Graphics 2.3 Explain uses of IEC materials listed in 3.2. 2.4 Define Communication media and technologies 2.5 List Communication media and technologies - Video, Film, - Television, Internet - Social/Electronic media - Multimedia Projector / LCD projector / video projectors,	Explain 2.1 – 2.6	White board / marker Computer and Projectors Charts /Diagrams / Posters e.t.c. Audio Equipment Audiovisual media	Produce at least one Health Information, Education and Communication (IEC) material. Visit resource centre and identify Communication equipment	Guide and Supervise Students to produce IEC material Identify Communication equipment	Define Health Information, Education and Communication (IEC) List tools and materials for Health Information, Education and Communication (IEC) List Communication media and technologies

	- Digital cameras, video / motion cameras - Computers, Scanners - VCD / DVD players. 2.6 Explain uses of communication media technologies.					
General Objective 3.0: Understand the concepts of health advocacy resources and production.						
	3.1 Define health advocacy. 3.2 Explain concepts and slogans for communicating health advocacy for strategic behavioural communication (SBC). 3.3 List areas of health advocacy - Public health - Environmental health - Health Economics/planning e.t.c 3.4 List tools and materials for communicating health advocacy and campaign - Posters, Chart, Diagram - Illustrations, Digital Pictures, Computer graphics, e.t.c - Video, Film, Television,	Explain 3.1 – 3.6	White board / marker Computer and Projectors Charts /Diagrams / Posters e.t.c. Audio Equipment Audiovisual media	Demonstrate use of the tools and resources for health advocacy Participate in health advocacy and campaign within the community Critique typical examples of health advocacy resources that are relevant in Health Information Management	Guide and Supervise Students to carry out activities listed in 4.7 - 4.9	Explain concepts and slogans for communicating health advocacy for strategic behavioural communication (SBC).

	Internet, Social media, Electronic media e.t.c 3.5 State uses of health information, advocacy and campaigns in Health Information Management 3.6 Explain the procedure for the production of health advocacy resources.					
General Objective 4.0: Know how to apply knowledge and skills of Communication in Health Information Management						
	4.1 Define techniques of presentations. 4.2 Identify techniques of presentations: - Oral presentations - Poster presentations - Seminars, Group discussions, - Electronic presentation, e.t.c. 4.3 List examples of oral presentation: -Lecture, Health talk, Talk shop, Teaching, Tutorial, Speech making 4.4 List components of poster presentation: -Posters, Charts, Diagram, Illustrations, Pictures, e.t.c 4.5 List examples of electronics presentations:	Explain 4.1 – 4.5	White board / marker Computer and Projectors Charts /Diagrams / Posters e.t.c. Audio Equipment Audiovisual media	Demonstrate oral, poster and electronic presentation Apply knowledge and skills of Communication in Health Information Management for solving health problems within the community	Demonstrate oral, poster and electronic presentation Guide and Supervise Students to apply knowledge and skills of Communication in Health Information Management for solving health problems within the community	Define and Identify techniques of presentations :

	PowerPoint, Video, Film, Multimedia, Television, e.t.c				
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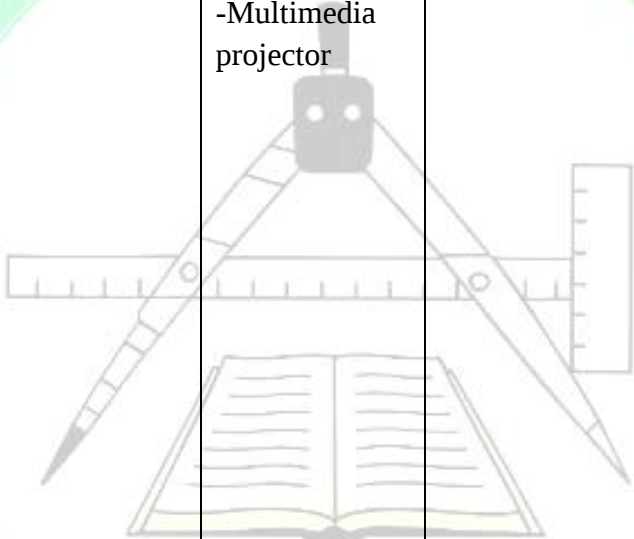


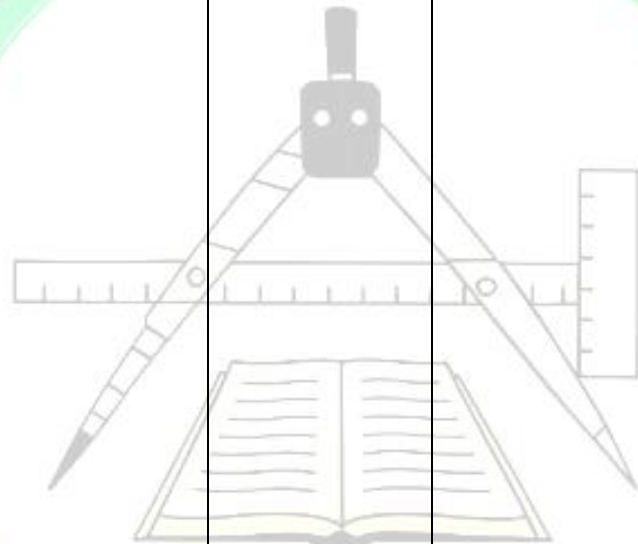
PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)				
COURSE: MATHEMATICS FOR HEALTH INFORMATION MANAGEMENT				
CODE: HIM 111				
DURATION Lecture/Practical: 2hrs	(Hours/Week)	Tutorial: 0	Practical: - 0	Total: 3 (45hrs/semester)
UNITS: 2				
GOAL: This course is designed to enable students to know the Mathematical calculations involved in Health Information Management.				
GENERAL OBJECTIVES: On completion of this course the diplomates should be able to:				
1.0 Understand indices, logarithms and surds 2.0 Understand the concept and manipulation of sequences and series. 3.0 Understand the solution of quadratic equations, simple inequalities and the Cartesian equation of a circle. 4.0 Understand the remainder and factor theorems and their applications. 5.0 Understand the basic concept of differentiation and its applications in solving practical problems. 6.0 Understand integration as the reverse of differentiation and its application to practical problems. 7.0 Understand the basic rules of mathematical logic and their application to mathematical proofs				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)						
COURSE TITLE: MATHEMATICS FOR HEALTH INFORMATION MANAGEMENT			Course Code: HIM 111	Contact Hours: 3Hrs/Wk (45Hrs/Sem)		
COURSE SPECIFICATION: Theoretical content			Practical Content: 1			
General Objective 1.0: Understand indices, logarithms and surds						
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
	1.1 Explain indices 1.2 State the laws of indices 1.3 Evaluate the product and quotient of indices 1.4 Determine the value of an index raised to an exponent 1.5 Define logarithms 1.6 State the laws of logarithms 1.7 Define the relationship between logarithms and indices 1.8 Define surd 1.9 Evaluate simple surds (restricted to square roots of whole numbers only) 1.10 Reduce surd to the form $a + \sqrt{b}$	1.1 – 1.11	- White board marker - Multimedia projector Computer			Explain indices State the laws of indices Evaluate the product and quotient of indices Determine the value of an index raised to an exponent Define logarithms State the laws of logarithms Define the relationship between

	1.11 Apply the concepts in 1.1 – 1.9 to solve problemse.g. (i). 34×63 (ii) $2 + \sqrt{3}$(iii) $y = b.x = \log y = \log b + n \log$					logarithms and indices Define surd Evaluate simple surds (restricted to square roots of whole numbers only) Reduce surd to the form $a + \sqrt{b}$ Apply the concepts in 1.1 – 1.9 to solve problemse.g. (i). 34×63 (ii) $2 + \sqrt{3}$(iii) $y = b.x = \log y = \log b + n \log$
General Objective 2.0: Understand the concept and manipulation of sequences and series.						
	2.1 Define series. 2.2 Define arithmetic progression 2.3 Derive an expression for the nth term of an A.P. 2.4 Derive an expression for the sum of the first nth terms of an A.P.	Explain 2.1 – 2.11	Textbooks, Charts and Forms, reading materials, secondary data from hospitals and clinics			Define series. Define arithmetic progression Derive an expression for the nth term of an A.P.

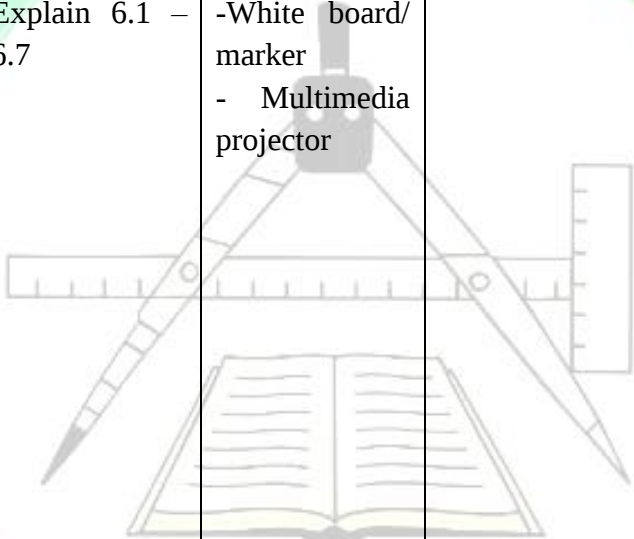
	2.5 Solve problems involving A.P. 2.6 Define Geometric Progression. 2.7 Derive an expression for the nth term of a G.P. 2.8 Derive an expression for the sum of the first n terms of a G.P. 2.9 Solve problems involving G.P. 2.10 Calculate the sum of the finite A.P. e.g. Find the 20th term of the sequence: 2,4,6,8,... Find also the sum of the first 20 terms. 2.11 Determine the conditions for the convergence of an infinite G.P.					Derive an expression for the sum of the first n terms of an A.P. Solve problems involving A.P. Define Geometric Progression. Derive an expression for the nth term of a G.P. Derive an expression for the sum of the first n terms of a G.P. Solve problems involving G.P. Calculate the sum of the finite A.P. e.g. Find the 20th term of the sequence: Find also the sum of the first 20 terms.
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					Determine the conditions for the convergence of an infinite G.P
General Objective 3.0: Understand the solution of quadratic equations, simple inequalities and the Cartesian equation of a circle.					
	3.1. Explain the quadratic equations, simple inequalities and the Cartesian equation of a circle 3.2 Solve quadratic equation by:(i) factorization e.g. $2x^2+3x-2=(2x-1)(x+2)$(ii) completing the square e.g. $2x^2+3x-2$ *** 3.3 Derive the general formula for solving the equation of the form $ax^2+bx+c=0$ 3.4 Solve simple inequalities in one variable involving the product of two linear factors, e.g. $(x+3)(x+5)=0$ 3.5 Illustrate the range of values of x on the	Explain 1.1 – 1.10	- White board/ marker -Multimedia projector 		Explain the quadratic equations, simple inequalities and the Cartesian equation of a circle Solve quadratic equation by:(i) factorization e.g. $2x^2+3x-2=(2x-1)(x+2)$(ii) completing the square e.g. $2x^2+3x-2$ *** Derive the general formula for solving the equation of the form $ax^2+bx+c=0$ Solve simple inequalities in one variable involving the product of two linear factors, e.g. $(x+3)(x+5)=0$ Illustrate the range of

	number line. 3.6 State the general equation of a circle 3.7 State the formula for the centre of a circle 3.8 State the formula for the radius of a circle 3.9 Deduce the centre and radius of the circle of the form $x^2+y^2=1$ 3.10 Solve simultaneously two equations, one linear and the other quadratic in two unknowns.					values of x on the number line. State the general equation of a circle State the formula for the centre of a circle State the formula for the radius of a circle Deduce the centre and radius of the circle of the form $x^2+y^2=1$ Solve simultaneously two equations, one linear and the other quadratic in two unknowns.
General Objective 4.0: Understand the remainder and factor theorems and their applications.						
	4.1. Explain the remainder and factor theorems and their applications 4.2. Define the remainder theorem. 4.3. Define the factor theorem.	Lectures Explain the concepts covered	- White board/ marker -Multimedia projector	Sketch graphs of polynomial functions up to the cubic	Demonstrate how to Sketch graphs of polynomial functions up to the cubic	Explain the remainder and factor theorems and their applications Define the remainder theorem.

	4.4. Apply the concepts in 4.1 – 4.3 above to factorize polynomials e.g. $f(x)=2x^2+3x-2$ and $f(-2)=2$ then $(x+2)$ is a factor 4.5. Obtain the zeros of polynomials functions 4.6. Sketch graphs of polynomial functions up to the cubic					Define the factor theorem. Apply the concepts in 4.1 – 4.3 above to factorize polynomials e.g. $f(x)=2x^2+3x-2$ and $f(-2)=2$ then $(x+2)$ is a factor Obtain the zeros of polynomials functions Sketch graphs of polynomial functions up to the cubic
General Objective 5.0: Understand the basic concept of differentiation and its applications in solving practical problems.						
	5.1 Define differentiation as an incremental notation of a function 5.2 Differentiate a function using the idea of a limit from the first principle e.g. $y=x^2$, $\sin x$, $\cos x$, $\tan x$, etc. 5.3 Define the gradient of a curve 5.4 Determine the gradient of a curve at a given point by	Explain 5.1 – 5.10	-White board/ marker - Multimedia projector	Determine the gradient of a curve using the method of differentiation e.g. $y=2x^2+3x-2 = \text{gradient of } y=4x+3$ at the given point. Identify maximum and	Determine the gradient of a curve using the method of differentiation e.g. $y=2x^2+3x-2 = \text{gradient of } y=4x+3$ at the given point. Identify	Define differentiation as an incremental notation of a function Differentiate a function using the idea of a limit from the first principle e.g. $y=x^2$, $\sin x$, $\cos x$, $\tan x$, etc. Define the gradient of a curve

	drawing 5.5 Solve problems involving gradient of a curve 5.6 Explain the condition for turning point of a function 5.7 Distinguish between maximum and minimum values of a function 5.8 Solve problems related to maximum and minimum of a function e.g. Find max and min. of $y=x^3-8x^2+3x+15$ 5.9 Explain the rate of change of a function e.g. distance, time. 5.10 Solve problems involving rate of change of a function Apply differentiation to kinetic problems such as velocity and acceleration.			minimum points of a function graphically	maximum and minimum points of a function graphically	Determine the gradient of a curve at a given point by drawing Solve problems involving gradient of a curve Explain the condition for turning point of a function Distinguish between maximum and minimum values of a function Solve problems related to maximum and minimum of a function e.g. Find max and min. of $y=x^3-8x^2+3x+15$ Explain the rate of change of a function e.g. distance, time. Solve problems involving rate of change
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						of a function Apply differentiation to kinetic problems such as velocity and acceleration.
General Objective 6.0: Understand integration as the reverse of differentiation and its application to practical problems						
	6.1 Determine the definite integral of a function 6.2 Illustrate definite integral as a representation of an area; volume etc. 6.3 Solve problems involving linear kinetics. 6.4 Apply integration to estimate plane area and volume of an object. 6.5 Compare direct integration and trapezoidal rule as methods of estimating plane areas and volume of an object. 6.6 Solve problems applying trapezoidal rule. 6.7 Integrate function like $ax^m + bx^n$ where m and n are integers.	Explain 6.1 – 6.7 	-White board/ marker - Multimedia projector			Determine the definite integral of a function Illustrate definite integral as a representation of an area; volume etc. Solve problems involving linear kinetics. Apply integration to estimate plane area and volume of an object. Compare direct integration and trapezoidal rule as methods of estimating plane areas and volume of an object. Solve problems

					applying trapezoidal rule. Integrate function like ax^m+bx^n where m and n are integers.
General Objective 7.0: Understand the basic rules of mathematical logic and their application to mathematical proofs					
1.1 Define the essential connectives, negation, conjunction, disjunction, implication and bi-implication. 1.2 Illustrate the essential connectives defined above 1.3 Describe grouping and parenthesis in logic 1.4 Explain truth tables 1.5 Define tautology 1.6 Give examples of types of tautology e.g. (i) If P and Q are distinct atomic sentences, which of the following are tautologies? (a) $P \rightarrow Q$ (b) $P \vee Q \rightarrow Q$ (c) $P \vee (P \wedge Q)$(ii) Let P=Jane Austen was a contemporary of Beethoven. Q=Beethoven	Explain 8.1 – 8.13	-White board/ marker - Multimedia projector			Define the essential connectives, negation, conjunction, disjunction, implication and bi-implication. Illustrate the essential connectives defined above Describe grouping and parenthesis in logic Explain truth tables Define tautology Give examples of types of tautology e.g. (i) If P and Q are distinct atomic sentences, which of the following are

	was a contemporary of Gauss, $R = \text{Gauss}$ was a contemporary of Napoleon, $S = \text{Napoleon}$ was a contemporary of Julius Ceaser. (Thus P, Q and R are true values of sentences $(P \vee Q) = R$, $(P \wedge Q)$, $P \wedge Q \wedge R$.) 1.7 Define universal quantifier and existential quantifier. 1.8 Translate sentences into symbolic form using quantifiers. E.g. some freshmen are intelligent' can be stated as for some x, x is a freshmen and x is intelligent' can translate in symbols as $(\exists x) (Fx \wedge Ix)$. 1.9 Define the scope of a quantifier. 1.10 Define 'bound' and 'free' variables. 1.11 Define 'term' and 'formula'. 1.12 Give simple examples of				tautologies? (a) $P \vee Q$ (b) $P \vee Q \vee P$ (c) $P \vee (P \wedge Q)$ (ii) Let $P = \text{Jane Austen}$ was a contemporary of Beethoven. $Q = \text{Beethoven}$ was a contemporary of Gauss, $R = \text{Gauss}$ was a contemporary of Napoleon, $S = \text{Napoleon}$ was a contemporary of Julius Ceaser. (Thus P, Q and R are true values of sentences $(P \vee Q) = R$, $(P \wedge Q)$, $P \wedge Q \wedge R$.) Define universal quantifier and existential quantifier. Translate sentences into symbolic form using quantifiers. E.g. some freshmen are intelligent' can be stated as for some x, x is a freshmen and x is intelligent' can translate in symbols as
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	these definitions. 8.13 Explain the validity of formulae				$(/x) (Fx \& Ix).$ Define the scope of a quantifier. Define 'bond' and 'free' variables. Define 'term' and 'formula'. Give simple examples of these definitions. Explain the validity of formulae
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214 PRINCIPLE OF EPIDEMIOLOGY AND DISEASE CONTROL

PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)		
COURSE:	HUMAN ANATOMY AND PHYSIOLOGY I		
CODE:	HIS 114		
DURATION (Hours/Week) Lecture:	1hrs	Tutorial: 0	Practical: - 1
UNITS:	2		
GOAL:	This course is designed to enable student acquire knowledge of blood and other systems of the body.		
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:		
1.0 Understand human blood and other systems of the body			
2.0 Understand body resistance to infection			
3.0 Understand types of immunity			
4.0 Know blood groups			
5.0 Understand the structure of the heart and blood vessels			
6.0 Know the body lymphatic system			
7.0 Know the respiratory system.			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: HUMAN ANATOMY AND PHYSIOLOGY I			Course Code: HIM 114		Total: 2 (30hrs/semester)		
COURSE SPECIFICATION: Theoretical contents			Practical Content: 1				
General Objective 1.0: Understand human blood and other systems of the body							
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation	
	1.1 Describe the red blood cells and its contents 1.2 Describe the following: - - Production of red blood cells - Formation of haemoglobin - Iron metabolism - Destruction of red blood cells - The anaemias - Effects of anaemia on the Circulatory system - Polycythemia and the effects of polycythemia on the Circulatory system.	Explain 1.1 – 1.3	Charts overhead projector classroom resources	Observe Red Blood Cell under microscope	Show students Red Blood Cell (RBC) under the microscope	Describe red blood cells and its contents Describe the following: - - Production of red blood cells - Formation of haemoglobin - Iron metabolism - Destruction of red blood cells - The anaemias - Effects of anaemia on the Circulatory system - Polycythemia and the effects of polycythemia on the Circulatory system.	

General Objective 2.0: Understand body resistance to infection						
	2.1 Explain the resistance of body to infection 2.2 Explain the role of the following in body resistance to infection: - The leukocytes (white blood cells) - General characteristics of leukocytes - Life span of the white cells - Properties of neutrophils, monocytes and macrophages - Inflammation and function neutrophils and macrophages - Agranulocytosis	Explain 2.1 – 2.2	Charts overhead projector classroom resources	2.3 Observe White Blood Cell under microscope	Show students (white blood cells) WBC	Explain the resistance of body to infection Explain the role of the following in body resistance to infection: -The leukocytes (white blood cells) -General characteristics of leukocytes -Life span of the white cells -Properties of neutrophils, monocytes and macrophages -Inflammation and function neutrophils and macrophages - Agranulocytosis
General Objective 3.0: Understand types of immunity						
	3.1 Explain leukaemia 3.2 Describe the effects of leukaemia on the body	3.1 – 3.6	Pictures Classroom resources			Explain leukaemia Describe the effects

	vis-à-vis immunology and allergy					of leukaemia on the body vis-à-vis immunology and allergy
3.3	Define the following:- Innate immunity Acquired immunity					Define the following: - Innate immunity Acquired immunity
3.4	Describe the two basic types of Acquired immunity Vaccination and Passive immunity					Describe the two basic types of Acquired immunity Vaccination and Passive immunity
3.5	Describe allergy including: - Allergy in normal people - Delayed reaction allergy - Allergy in the allergic "Person"					Describe allergy including: -Allergy in normal people -Delayed reaction allergy -Allergy in the allergic "Person"
General Objective 40: Know blood groups						
4.1	Explain blood Groups	Explain 4.1 –	Fresh Blood	Demonstrate Blood coagulation	Demonstrate blood coagulation	Explain blood Groups
4.2	Explain the significance of blood group in	4.6				

	transfusion, organ and tissue transplant					Explain the significance of blood group in transfusion, organ and tissue transplant
4.3	Explain the following: - Antigenic and immune reactions of blood - A.O.B. Blood groups - The A and B antigens – called agglutininogen - The agglutinins - The agglutination process in transfusion reaction - Blood typing - The blood types Rhesus (RH) - Other blood factors					Explain the following: -Antigenic and immune reactions of blood -A.O.B. Blood groups -The A and B antigens – called agglutininogen -The agglutinins -The agglutination process in transfusion reaction -Blood typing -The blood types Rhesus (RH) -Other blood factors
4.4	Explain transfusion reactions resulting from mismatched blood groups - transplantation of tissues and organs					Explain transfusion reactions resulting from
4.5	Explain haemostasis and blood coagulation process in the following: - Events in haemostasis - Mechanism of blood coagulation - Conditions that cause excessive bleeding in					

	human beings - Thromboembolic conditions in humans - Anticoagulants for tests (bleeding time, clotting time and prothrombin time)					-mismatched blood groups -transplantation of tissues and organs Explain haemostasis and blood coagulation process in the following: -Events in haemostasis -Mechanism of blood coagulation -Conditions that cause excessive bleeding in human beings -Thromboembolic conditions in humans -Anticoagulants for tests (bleeding time, clotting time and prothrombin time)
General Objective 5.0: Understand the structure of the heart and blood vessels						
	5.1 Describe cardio-vascular system 5.2 Describe the structure and	Explain 5.1 - Models of heart, circulatory 5.11 with models of				Describe cardio-vascular system

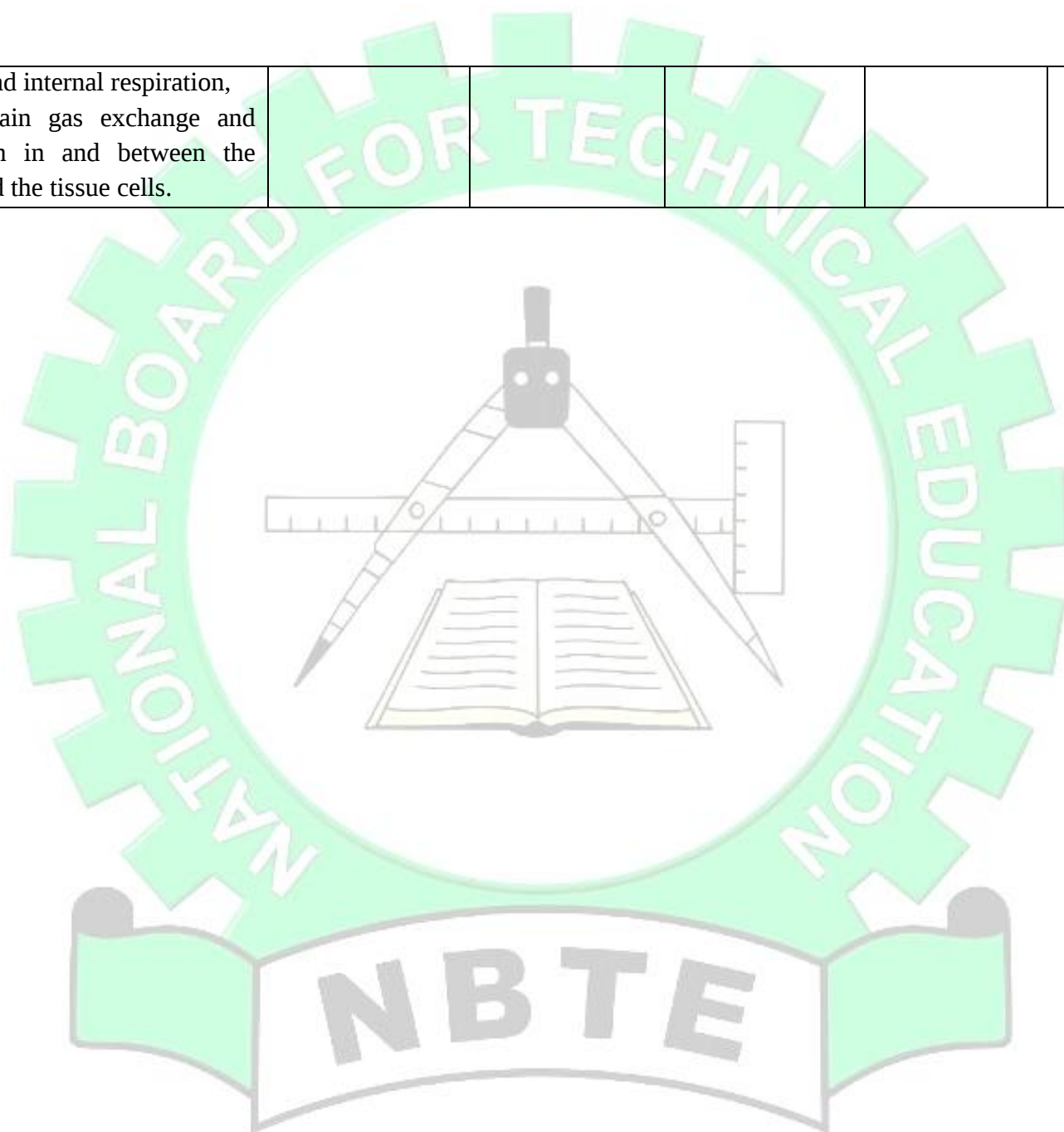
	functioning of the heart	the heart, the	system.			Describe the structure and functioning of the heart
5.3	Describe the blood circulatory system	the circulatory system.				Describe the blood circulatory system
5.4	Describe the structure of the arterial veins and capillaries					
5.5	Describe the structure of the veins					
5.6	Explain the following:			5.12	Dissect the model of the heart, draw and label	Guide the student to perform the task in 5.12
-	Anatomises and collateral circulation					Describe the structure of the arterial veins and capillaries
-	Growth of blood vessels					Describe the structure of the veins
-	Vital line and placental circulation					
-	General development of the heart and vessels					Explain the following:
-	Circulation					-Anatomises and collateral circulation
5.7	Describe the anatomy of the heart under the following:-					-Growth of blood vessels
-	General configuration of the heart					-Vital line and placental circulation
-	Interior of the heart					-General development of the heart and vessels
-	Tissues of the heart					-Circulation
-	Heart chambers and their functions					
5.8	Describe the blood movement through the					

	heart 5.9 Describe tissues of the heart, heart chambers and functions 5.10 Describe the blood under the following:- - Blood vessels - Aorta - Descending thoracic aorta 5.11 Identify the position of the following veins in the body: - Veins of the neck and head - Veins of the upperlimb - Superior vena cava and its drainage area - Veins of the lower limbs - Inferior vena-cava and its drainage areas - Portal veins and its tributaries.			5.13 Dissect a small mammal and draw the circulatory system and cross sections of the heart.	Describe the anatomy of the heart under the following:- -General configuration of the heart -Interior of the heart -Tissues of the heart -Heart chambers and their functions Describe the blood movement through the heart Describe tissues of the heart, heart chambers and functions Describe the blood under the following:- -Blood vessels -Aorta -Descending thoracic aorta
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						Identify the position of the following veins in the body: -Veins of the neck and head -Veins of the upperlimb -Superior vena cava and its drainage area -Veins of the lower limbs -Inferior vena-cava and its drainage areas -Portal veins and its tributaries.
General Objective 6.0: Know the body lymphatic system						
	6.1 Explain body lymph and its functions 6.2 Describe lymphatic system 6.3 Describe the following: -Lymphatic vessels; -Lymph nodes disposition, structure and relation to lymph	Explain 6.1-6.3 using picture or model to lecture and illustrate	Picture, models			Explain body lymph and its functions Describe lymphatic system Describe the

	vessels; -Main collecting lymphatic channels					following: -Lymphatic vessels; -Lymph nodes disposition, structure and relation to lymph vessels; -Main collecting lymphatic channels
General Objective 7.0: Know the respiratory system.						
	1.1 Describe the respiratory system 1.2 Explain respiration 1.3 Explain cellular respiration 1.4 Describe the human respiration system: - The respiratory passage (structure and functions of the nose) - Nasal cavity - Nasal pharynx - Larynx - Trachea and bronchi - Mediasternum - Lungs/lung tissues/alveoli 1.5 Describe types of respiration i.e. external	Explain 1.1 – 1.6 illustrate with a model	Classroom resources Models	Dissect a small mammal, draw and label its respiratory system.	Demonstrate the dissection of a small mammal Guide the student to draw and label the parts	Describe the respiratory system Explain respiration Explain cellular respiration Describe the human respiration system:

	and internal respiration, 1.6 Explain gas exchange and utilization in and between the blood and the tissue cells.					
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PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE:	DESCRIPTIVE STATISTICS I			
CODE:	HIS 114			
DURATION (Hours/Week) Lecture:	2hrs	Tutorial: 0	Practical: - 1	Total: 3 (45hrs/semester)
UNITS:	2			
GOAL:	This course is designed to enable students to acquire a basic knowledge of descriptive statistics.			
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:			
1.0 Understand the nature of statistical data, their types and uses				
2.0 Understand the procedures for collection of statistical data.				
3.0 Understand the difference between total coverage and partial coverage in data collection				
4.0 Understand the methods of data compilation				
5.0 Understand the methods of data presentation				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: DESCRIPTIVE STATISTICS I				Course Code: HIM 114		Total: 3 (45hrs/semester)	
COURSE SPECIFICATION: Theoretical content : 0				Practical Content: 1			
General Objective 1.0: Understand the nature of statistical data, their types and uses							
Week	Specific Learning Outcomes		Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
	1.1	Define Statistics	Explain the nature of statistics	Books of recorded statistics	Identify sources of statistical data	Encourage use of Internet by the students.	Define Statistics
	1.2	Identify various sources of statistical data					Identify various sources of statistical data
	1.3	State important uses of statistics	Introduce various sources and discuss how they are used	Classroom resources	Identify sources for specific needs	Guide the students to carry out the activities	State important uses of statistics
	1.4	State uses of statistical data			Collect data for statistical analysis		State uses of statistical data
	1.5	Explain quantitative data	(e.g. social, economic, health, biological,		Determine scale of measurement of data found		Explain quantitative data
	1.6	Identify various scales of measurement					Identify various scales of measurement
General Objective 2.0: Understand the procedures for collection of statistical data.							
	2.1	Describe basic sampling techniques:	Explain simple random sampling,	Textbooks Lecture notes	Determine the concept of random sampling using	Discuss simple random	Define Statistics
	2.2	Distinguish between the					Identify various

	various methods of data collection 2.3 Explain the process of carrying out field work to collect data. 2.5 Design questionnaires and formats for data collection 2.6 Identify the problems and types of errors that arise in data collection. 2.7 Collect data on various sources listed in 2.2 above.	Discuss systematic sampling Discuss stratified sampling Discuss quota sampling.		simple data Collect primary and secondary data Collect primary and secondary data	sampling, Guide students to carry out field work to collect data	sources of statistical data State important uses of statistics State uses of statistical data Explain quantitative data Identify various scales of measurement
General Objective 3.0: Understand the difference between total coverage and partial coverage in data collection						
	3.1 Distinguish between census and sampling surveys. 3.2 Explain the process of undertaking a statistical sample 3.3 Explain the meaning and purpose of pilot enquires. 3.4 Outline the advantages and disadvantages of sampling. 3.5 Distinguish between probability and non-probability methods	Explain 3.1 -3.9. Use examples to illustrate theoretical contents	Classroom resources	Collect statistical samples as required	Guide students to collect statistical samples as required in 3.9	Distinguish between census and sampling surveys. Explain the process of undertaking a statistical sample Explain the meaning and purpose of pilot

	3.6 Explain the various probability-sampling methods 3.7 Explain the various non-probability sampling method (purpose, judgement and quota) 3.8 Explain the use of post enumeration surveys. 3.9 Collect data applying the sampling methods in 3.6 above					enquires. Outline the advantages and disadvantages of sampling. Distinguish between probability and non-probability methods
General Objective 4.0: Understand the methods of data compilation						
	4.1 Identify the different categories of collected data 4.2 Classify the data into the various categories 4.3 Verify the sorted data 4.4 Identify the different data storage methods Compile discrete and continuous data	Explain 4.1 – 4.4	Classroom resources	Identify the different categories of collected data Classify the data into the various categories Verify the sorted data Identify the different data storage methods	supervise student to perform the tasks spelt out in 4.1 – 4.5	Explain different categories of data Explain different data storage methods

				Compile discrete and continuous data		
General Objective 5.0: Understand the methods of data presentation						
	5.1 Identify the various types of statistical table frequency and contingency tables, simple informative tables, table for reference, complex tables) 5.2 Explain various methods of data presentation (tabular, graphical, pictorial, text etc) 5.3 Explain merits and demerits of chart/diagrams above.	Explain 5.1 – 5.3	Textbooks Classroom resources	Construct scatter diagrams frequency tables, and graphs. Present life data	supervise studentsto perform the tasks listed.	Identify the various types of statistical table frequency and contingency tables, simple informative tables, table for reference, complex tables) Explain various methods of data presentation (tabular, graphical, pictorial, text etc) Explain merits and demerits of chart/diagrams above.

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)				
COURSE TITLE: PROBABILITY THEORY FOR HIM				
COURSE CODE: HIS 114				
DURATION	Lecture:- 2Hrs	Tutorial:-	Practical:- 1 Hr	Total:- 3Hrs/Wk (45Hrs/Sem)
CREDIT UNITS: 3				
GOAL: This course is designed to enable the student know the basic concepts of probability theory.				
GENERAL OBJECTIVES: On completion of the course, the student should be able to:				
1.0 Understand the concepts of permutations and combinations in probability 2.0 Understand the concept of sample space 3.0 Understand the concept of probability 4.0 Understand the concept of discrete random variable 5.0 Understand the discrete probability distribution 6.0 Understand the concept of mathematical expectation 7.0 Understand the distributions of the function of discrete random variables 8.0 Understand the concept of continuous random variable 9.0 Understand the continuous probability distribution 10.0 Understand the normal probability distribution and its application in medical field 11.0 Understand the expectation of continuous random variable				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)						
COURSE TITLE: PROBABILITY THEORY FOR HIM		Course Code: HIS 114		Contact Hours: 3Hrs/Wk (45Hrs/Sem)		
COURSE SPECIFICATION:		Theoretical content : 2		Practical Content: 1		
General Objective 1.0: Understand the concepts of permutations and combinations in probability						
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
1	1.1 Explain arrangement and selection. 1.2 Give examples of arrangement and selection in hospital settings 1.3 Explain permutations and combinations 1.3 Experiment permutations and combinations in hospital settings.	Explain 1.1 to 1.3	Textbooks, lecture notes, Reading materials.	Experiment permutations and combinations in hospital settings.	Guide Students to experiment permutations and combinations.	Explain permutations and combinations
General Objective 2.0Understand the concept of sample space						
2 - 3	2.1 Define statistical experiments 2.2 Define a sample space and sample point. 2.3 Explain how to construct sample spaces using simple experiments: - tossing a coin - rolling a die, etc.	Explain 2.1 to 2.12	Textbooks, lecture notes, statistical kits (coins, dice)	Carry out statistical experiments.	Guide Students to carry out statistical experiments.	Define statistical experiments Define a sample space and sample point. Explain how to construct sample spaces using

	2.4 Define Events 2.5 Illustrate events with examples. - Emergency case arrival - Missing case file. - Patient's Admission etc. 2.6 Explain simple and compound events. 2.7 Define mutually exclusive events. 2.8 Illustrate mutually exclusive events: - Tossing a coin, - Throwing a die etc 2.9 Define independent events 2.10 Differentiate mutually exclusive and independent events. 2.11 Define inclusive events. 2.12 Illustrate 2.11 with examples.					simple experiments: - tossing a coin - rolling a die, etc.
General Objective 3.0: Understand probability						
4 - 5	3.1 Explain axiomatic approach 3.2 Explain relative frequency approach 3.3 Define probability of an event	Explain 3.1 to 3.11	Textbooks, Lecture notes, Statistical	Calculate the probability of an event	Illustrate calculation of an event using probability	Explain types of probability Calculate the probability of an event

	3.4 Define probability as a function of the sample space 3.5 Calculate the probability of an event 3.6 State the properties of probabilities of events 3.7 State addition law of probability 3.8 State the multiplication law of probability 3.9 Define conditional probability 3.10 State the Baye's theorem (rule) 3.11 Explain how to calculate conditional probabilities using the Bayes' formula	Explain probabilities of events Illustrate conditional probability using various approaches.	kits	Demonstrate conditional probabilities by simple experiments. Demonstrate conditional probabilities by simple experiments. Demonstrate conditional probabilities using Bayes' formula Demonstrate conditional probabilities using Bayes' formula	
General Objective 4.0: Understand discrete random variable					
6	4.1 Define a random variable 4.2 Define discrete random variable with	Explain 4.1 to 4.3	Improved visual aids of list of discrete		Explain random variable and discrete random variable

	examples. 4.3 Define discrete random variable with examples.		variables Real life data from medical services			
General Objective 5.0: Understand discrete probability distribution						
7	5.1 Explain discrete probability mass function (pmf) 5.2 State properties of a probability mass function. 5.3 Define Bernoulli, Binomial, Poisson, and Hypergeometric probability 5.4 State properties of the c.d.f 5.5 Define the c.d.f. of the p.m.f.in 5.3 above. 5.6 Compute the mean of the various discrete distributions in 5.3 above using the method of expectation 5.7 Illustrate with examples the application	Explain 5.1 to 5.5	Textbooks, Lecture Notes, statistical tables and scientific calculators			Explain discrete probability functions

	of discrete probability distribution to practical life situations of the distributions in 5.3 above.					
General Objective 6.0: Understand mathematical expectation						
8	6.1 Explain the concept of mathematical expectation. 6.2 Define the expectation of discrete random variable 6.3 State the properties of the expectation of a discrete random variable 6.4 Explain how to compute mean and variance of a discrete random variable using the method of expectation.	Explain 6.1 – 6.4	Textbooks Lecture Notes	Compute mean and variance of a discrete random variable using the method of expectation.	Demonstrate the computation of mean and variance of a discrete random variable using the method of expectation.	Explain mathematical expectation Explain how to compute mean and variance of a discrete random variable using the method of expectation.
General Objective 7.0: Understand continuous random variables						
9	7.1 Define Continuous Random Variable 7.2 Distinguish between continuous and discrete random variables.	Explain 7.1 and 7.2	Textbooks Lecture Notes			Explain Continuous Random Variable
General Objective 8.0: Understand the continuous probability distribution						
10-11	8.1 Define probability density function (pdf). 8.2 State the properties of probability	Explain 8.1 – 8.7	Text books Lecture Notes			Define probability density function (pdf).

	density function and distribution 8.3 Define a distribution function or a continuous random variable 9.4 State the properties of cumulative distribution function c.d.f. 9.5 State the properties of uniform and exponential distributions 9.6 State the properties of exponential distributions 9.7 Illustrate with examples, the practical applications of the distributions in 9.5 and 9.6 above				State the properties of probability density function and distribution Define a distribution function or a continuous random variable State the properties of cumulative distribution function c.d.f. State the properties of uniform and exponential distributions State the properties of exponential
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						distributions Illustrate with examples, the practical applications of the distributions in 9.5 and 9.6 above
General Objective 10.0: Understand the normal probability distribution and its application in medical fields						
12-13	10.1 Define normal distribution. 10.2 State the properties of a normal distribution. 10.3 Define the standard normal distribution. 10.4 Explain the normal distribution table 10.5 Apply normal distribution to solve practical problems from medical/health practices. 10.6 Explain the normal approximation to the binominal and Poisson distribution.	Explain 10.1 – 10.8	Textbooks, Lecture Notes, Normal distribution table			Define normal distribution. State the properties of a normal distribution. Define the standard normal distribution. Explain the normal distribution table

	10.7 Apply the approximations in 10.6 above to solve practical problems from medical/health practices. 10.8 Understand the concept of the expectation of continuous random variables				Apply normal distribution to solve practical problems from medical/health practices. Explain the normal approximation to the binominal and Poisson distribution. Apply the approximations in 10.6 above to solve practical problems from medical/health practices.
General Objective 11.0: Understand the expectation of continuous random variable					
	11.1 Define expectation of continuous random variables 11.2 Compute the expectations for the continuous probability distributions uniform, normal, exponential etc.	Explain 11.1 – 11.4	Textbooks Lecture Notes Normal distribution		Define expectation of continuous random variables

	11.3 Compute the variances of distributions in 11.2 above. 11.4 Apply 11.2 to solving practical problems in medical/health practices.		table			Compute the expectations for the continuous probability distributions uniform, normal, exponential etc.
General Objective 12.0: Understand the moments and non-moments generating function of probability distributions						
15	12.1 Define moments 12.2 Compute the moments of continuous random variables about the origin and the mean 12.3 Define moment generating function. 12.4 State properties of moment generating function. 12.5 Compute moments of discrete and continuous random variables and probability distributions applying moment generating function. 12.6 State the relationship between expectation and moment. 12.7 Compute the mean and the variance of	Explain 12.1 – 12.7	Textbooks Lecture Notes			Define moments Compute the moments of continuous random variables about the origin and the mean Define moment generating function. State properties of moment generating function.

	discrete and continuous random variables and probability distribution using moments				Compute moments of discrete and continuous random variables and probability distributions applying moment generating function. 12.6 State the relationship between expectation and moment.
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PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)		
COURSE:	INTRODUCTION TO COMPUTERS		
CODE:	COM 111		
DURATION (Hours/Week) Lecture:	2hrs	Tutorial: 0	Practical: - 1
UNITS:	2		
GOAL:	This course is designed to enable students to acquire a basic knowledge of computers.		
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:		
1.0 Understand the history, classification and import of computers.			
2.0 Know the concept of computer hardware			
3.0 Know the concept of computer software.			
4.0 Understand computer data processing systems.			
5.0 Know the procedures for computer and data preparation.			
6.0 Understand security and safety procedures within a computer environment.			
7.0 Understand the concept of a computer network			
8.0 Understand the use of the internet.			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: INTRODUCTION TO COMPUTERS			Course Code: COM 111		Total: 2 (30hrs/semester)		
COURSE SPECIFICATION: Theoretical content : 0			Practical Content: 1				
General Objective 1.0: Understand the history, classification and import of computers.							
Week	Specific Learning Outcomes		Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
	1.1	Define the computer	Explain 1.1 – 1.6	White Board.			Define the computer
	1.2	Describe the development of computers, in particular abacus,Pascal, Babbage, Hollerith and ENIAC.		PC loaded with Power point and connected to OHP			Describe the development of computers, in particular abacus,Pascal, Babbage, Hollerith and ENIAC.
	1.3	Classify computers according to generations from 1st - 5th generation (any subsequent generation)					Classify computers according to generations from 1st - 5th generation (any subsequent generation)
	1.4	Distinguish between analogue, digital, and hybrid computers					
	1.5	Explains the social implication of computers on society in particular privacies and quality of life.					
	1.6	List the benefits of computers to the society.					

						Distinguish between analogue, digital, and hybrid computers Explains the social implication of computers on society in particular privacies and quality of life. List the benefits of computers to the society.
General Objective 2.0: Know the concept of computer hardware						
	2.1 Define Hardware 2.2 Describe computer hardware configuration. 2.3 List some input and output units 2.4 Describe the functions of the output unit. 2.5 Describe the components and functions of the various hardware units	Explain 2.1 – 2.11	White Board. PC loaded with Power point and connected to OHP	Identify the various components of a computer system	Guide the students to identify the various components of a computer system	Define Hardware Describe computer hardware configuration. List some input and output units

	2.6 Describe the function of C.P.U. 2.7 List some auxiliary Units. 2.8 Describe the function of the auxiliary memory 2.9 Define bits, byte, nibble, and word and storage size 2.10 Explain computer software programming languages 2.11 Differentiate between the levels. (Low and High-level languages)				Describe the functions of the output unit. Describe the components and functions of the various hardware units Describe the function of C.P.U. List some auxiliary Units. Describe the function of the auxiliary memory Define bits, byte, nibble, and word and storage size Explain computer software programming languages
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						Differentiate between the levels. (Low and High-level languages)
General Objective 3.0: Know the concept of computer software.						
	3.1 Explain software and its various types 3.2 Distinguish between the low - level and high - level languages. 3.3 Explain source and object programmes. 3.4 Explain computer packages and its various types	Explain 3.1 – 3.4	White Board. PC loaded with Power point and connected to OHP	Load computer packages on computer system Networked PCs Different computer packages for loading	Demonstrate how to load various computer packages on computer systems and supervise the student to do same	Explain software and its various types Distinguish between the low - level and high - level languages. Explain source and object programmes. Explain computer packages and its various types
General Objective 4.0: Understand computer data processing systems.						
	4.1 Explain different data processing techniques 4.2 Explain offline and online	Explain 4.1 – 4.4	WhiteBoard. PC loaded with	Identify real life problems requiring the	Guide the students on how to	Explain different data processing techniques

	concepts 4.3 Define batch processing, real time, time sharing and distributed processing 4.4 Differentiate between batch processing, real time processing, time-sharing and distributed processing system.		Power point and connected to OHP Networked PCs loaded with different computer packages	application of the various data processing techniques. Apply the various data processing techniques listed in 4.1	identify real life problems requiring the various data processing techniques	Explain offline and online concepts Define batch processing, real time, time sharing and distributed processing Differentiate between batch processing, real time processing, time-sharing and distributed processing system.
General Objective 5.0: Know the procedures for computer and data preparation.						
	5.1 Explain how to operate a computer system 5.2 Initialize and format storage media.	Explain the principles and procedures of operating the computer system, the fix up, start up and	White Board. PC loaded with Power point and connected to OHP	Boot and shut down computer system Format a flash/CD	Guide the students on how to operate the computer. Show	Explain how to operate a computer system Initialize and format storage media.

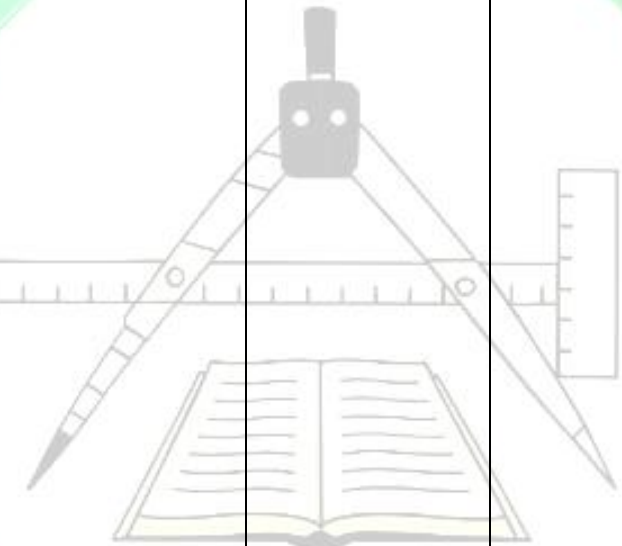
		shut-down systems Explain initialization and formatting of storage devices such as disks and flash	Diskettes Networked PCs and storage media such as flash		different storage media to students	
General Objective 6.0: Understand security and safety procedures within a computer environment.						
	6.1	Describe data control techniques, operating procedure of a computer installation, safety regulation in computer installation, method of preventing hazards such as fire, flooding and sabotage	Explain 6.1 – 6.5	White Board PC loaded with relevant software packages and connected to OHP Networked PCs and storage media such as diskette	Formulate passwords Guide students on how to formulate simple password that they could easily remember	Describe data control techniques, operating procedure of a computer installation, safety regulation in computer installation, method of preventing hazards such as fire, flooding and sabotage Describe security methods in
	6.2	Describe security methods in computer installation and the need for users passwords				
	6.3	Explain the need for computer room security.				
	6.4	Explain computer system auditing				
	6.5	Explain the need for file				

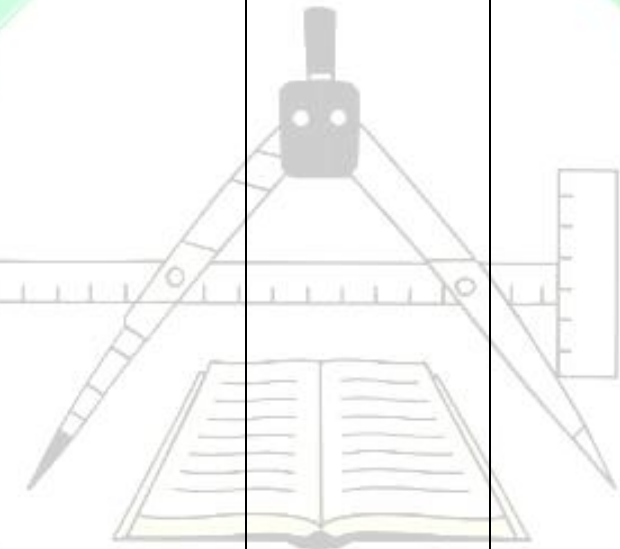
	security in computer installation.					computer installation and the need for users passwords Explain the need for computer room security. Explain computer system auditing Explain the need for file security in computer installation.
General Objective 7.0: Understand the concept of a computer network						
	7.1 Define network 7.2 Describe different types of network organization such as star, ring and bus 7.3 Explain LAN and WAN	Explain 7.1 – 7.3	White Board PC loaded with power point and connected to OHP Networked PCs and storage media such as diskette	Identify the various computer topologies Identify different organizations using the different topologies.	Guide the students on how to identify various network topologies.	Define network Describe different types of network organization such as star, ring and bus Explain LAN and WAN
General Objective 8.0: Understand the use of the internet.						
	8.1 Define internet	Define internet	White Board.	Compose and send	Demonstrate	Define internet

8.2 Describe its resources			e- mail.	the processes involved in browsing and searching the internet.	Describe resources of internet
8.3 Explain the processes involved in browsing and searching the internet for materials.	Describe resources of internet	PC loaded with power point and			
8.4 Explain the meaning of ISP.	Explain the processes involved in browsing and searching the internet.	Networked PCs connected to the internet.			Explain the processes involved in browsing and searching the internet.
8.5 Explain the concept of e-mail address.		internet browser connected to OHP			
8.6 Describe the processes of acquiring an e-mail address.					
8.7 Describe the process of sending and receiving an e-mail.					

PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)		
COURSE:	CITIZENSHIP EDUCATION I		
CODE:	GNS 111		
DURATION (Hours/Week) Lecture: 2hrs	Tutorial: 0	Practical: - 1	Total: 2 (30hrs/semester)
UNITS:	2		
GOAL:	This course is designed to expose the student to the basic concepts, principles and provisions of the Nigerian Constitution		
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:		
1.0 Understand the constitution of Nigeria.			
2.0 Understand the federal system of government in Nigeria			
3.0 Know the constitutional rights and obligations of Nigerian citizens.			
4.0 Understand citizenship.			
5.0 Know the fundamental objectives and directive principles of state policy of Nigeria.			

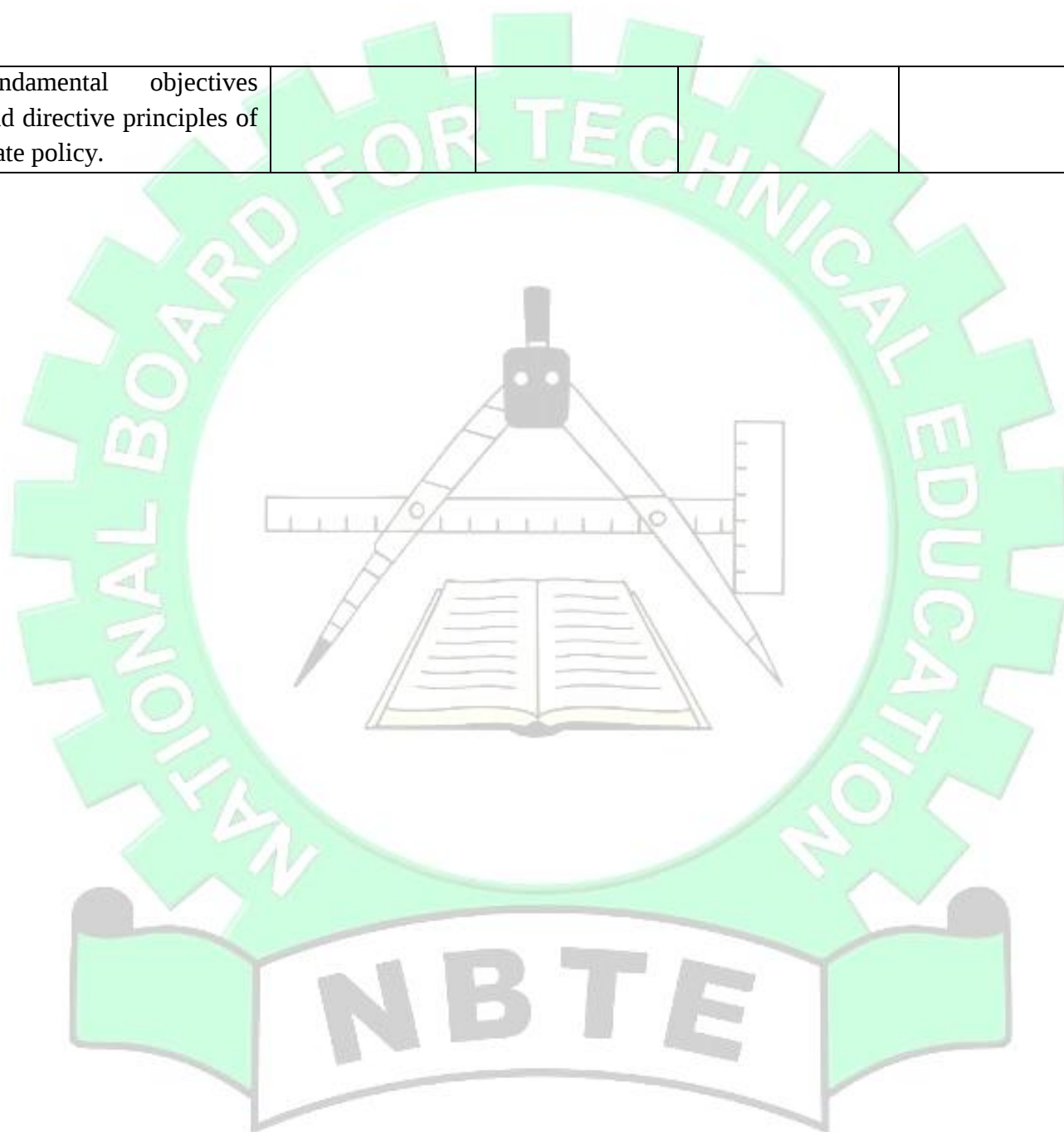
PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)						
COURSE TITLE: CITIZENSHIP EDUCATION I			Course Code: GNS 111	Total: 2 (30hrs/semester)		
COURSE SPECIFICATION: Theoretical content: 0			Practical Content: 1			
General Objective 1.0: Understand the constitution of Nigeria.						
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
	1.1 Explain the term constitution. 1.2 Distinguish the different types of constitutions. 1.3 Highlight some provisions of an international constitution. 1.4 Assess the effectiveness of international constitutions. 1.5 Recognise the supremacy of the Nigerian constitution to other laws with emphasis on the 1989 constitution. 1.6 Evaluate the main parts of the Nigerian constitution. 1.7 Draft a constitution for an association. 1.8 Trace the historical development of the Nigerian constitution. 1.9 Discuss the merits and					Explain the term constitution. Distinguish the different types of constitutions

	demerits of each of the Nigerian constitutions. 1.10 Explain the concept of “rule of law”					
General Objective 2.0: Understand the federal system of government in Nigeria						
	2.1 Describe a Federation 2.2 Distinguish a federation from a confederation. 2.3 Outline the basis for the federal system in Nigeria. 2.4 Examine the evolution, structure and functions of the federal system in Nigeria. 2.5 Analyse the relationships among the three tiers of government in Nigeria. 2.6 Evaluate the revenue allocation formula in operation in Nigeria. 2.7 Compare and contrast other Federations with Nigeria.					Evaluate the revenue allocation formula in operation in Nigeria. Compare and contrast other Federations with Nigeria.
General Objective 3.0: Know the constitutional rights and obligations of Nigerian citizens.						
	3.1 Examine the significance of rights and obligations in Nigeria. 3.2 Assess government’s					

	protection of fundamental rights as contained in the Nigeria Constitution					
General Objective 4.0: Understand citizenship.						
	4.1 Discuss the significance of citizenship. 4.2 Analyse the principles and benefits of citizenship. 4.3 Explain the differences in the modes of acquiring citizenship. 4.4 Evaluate the merits and demerits of each type of citizenships, 4.5 Analyse the basis for the acquisition and withdrawal of Nigerian citizenship. 4.6 Examine the benefits derivable from Nigerian citizenship.					
General Objective 5.0: Know the fundamental objectives and directive principles of state policy of Nigeria.						
	1.1 State the fundamental obligations of government as provided in the constitution. 1.2 Explain the general					

	provisions of the fundamental objectives and directive principles of state policy.					
1.3	Explain the political, economic, social and education policies of Nigeria.					
1.4	Explain the directive principles and policy of the Nigerian government on culture, the mass media, national ethics and duties of the citizen.					
1.5	Assess the conformity, observance and application of the fundamental objectives and directive principles of state policy by governments and people of Nigeria.					
1.6	Recommend improvements on the provisions, conformity, observance and application of the					

	fundamental objectives and directive principles of state policy.				
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PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)				
COURSE TITLE: DISEASE CLASSIFICATION AND CLINICAL CODING I				
COURSE CODE: HIM 121				
DURATION	Lecture: - 1 Hrs	Tutorial: -	Practical: - 1 Hr	Total: - 2Hrs/Wk (30Hrs/Sem)
CREDIT UNITS: 2				
GOAL: This course is designed to introduce the student to the principles of disease classification and coding				
GENERAL OBJECTIVES: On completion of this course, the student should be able to:				
1.0 Know fundamentals of disease classification. 2.0 Understand International Classification of Disease (ICD) Process. 3.0 Understand the Tabular list of inclusions and Four-Digit Categories. 4.0 Understand special Tabular Lists 5.0 Understand basic coding procedures. 6.0 Understand basic classification of surgical operations and other procedures 7.0 Understand coding procedure for surgical operation 8.0 Understand disease and procedure index 9.0 Know uses of Index Data 10.0 Know the Introduction to ICD 11				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: Know fundamentals of disease classification.			Course Code: HIS 114		Contact Hours: 3Hrs/Wk (45Hrs/Sem)		
COURSE SPECIFICATION: Theoretical content: 2			Practical Content: 1				
General Objective 1.0: Know fundamentals of disease classification							
Week	Specific Learning Outcomes		Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
1 - 2	1.1	Explain the history of disease classification	Explain 1.1 to 1.5	Textbooks, lecture notes,			Explain the fundamentals of disease classification
	1.2	Explain the basis for disease classification		ICD books			
	1.3	Explain the purpose of disease classification					
	1.4	Define Data Classification and Nomenclature					
	1.5	State the aims and objective of data classification					

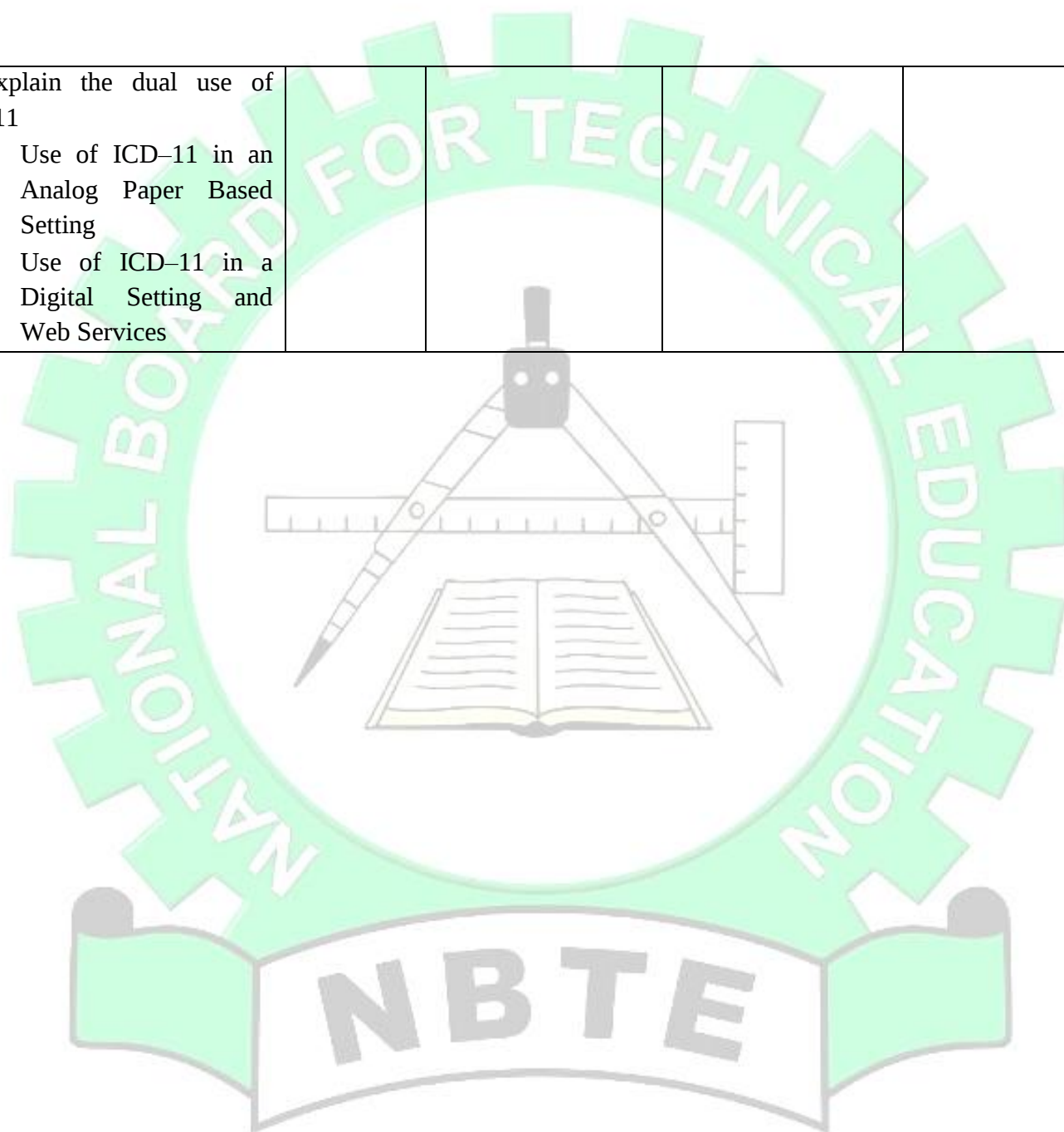
General Objective 2.0 Understand International Classification of Disease (ICD) Process							
3 - 7	2.1	History and Development of ICD	Explain 2.1 to 2.10	Textbooks, lecture notes, ICD books Clinical Coding Workbooks	Demonstrate the ICD process	Guide students to demonstrate the ICD process	Demonstrate the ICD process
	2.2	Explain general principle of International Classification of Disease (ICD) Process					
	2.3	Describe the structure of ICD					
	2.4	Explain the special coding pattern in the ICD					
	2.5	Explain dual classification of certain diagnostic statements in the ICD					
	2.6	Describe the Numbering System of the ICD					
	2.7	Explain the three-digit categories – of ICD – 9					
	2.8	Explain the fourth- digit categories – of ICD – 9					
	2.9	Explain the operational fifth digits – of ICD – 9					
	2.10	Explain the Alphanumeric of the ICD – 10					
General Objective 3.0: Understand the Tabular list of inclusions and Four-Digit Categories							
3.8	3.1 State the seventeen chapter of the ICD – 9 3.2 State supplementary	Explain 3.1 to 3.4	Textbooks, lecture notes,	Differentiate between the chapters in ICD -9	Guide the students to differentiate between the chapters in ICD -	Explain Tabular list of inclusions and	

	classification of the ICD – 9 (E-codes, V-codes, M-codes and the classification of industrial accidents etc). 3.3 State the twenty-one chapters of ICD – 10 3.4 Explain the arrangement of the chapters in ICD-9 and ICD-10		ICD books, Clinical Coding Workbooks	and ICD-10	9 and ICD-10	Four-Digit Categories
General Objective 4.0 Understand special Tabular Lists						
	4.1 Describe the basic tabular list 4.2 Explain the mortality list of 50 causes 4.3 Explain the morbidity list of 30 causes	Explain 4.1 to 4.3	Textbooks, lecture notes, ICD books, Clinical Coding workbooks			Explain special tabular lists
General Objective 5.0: Understand basic coding procedures.						
10 - 11	5.1 Describe coding and its purpose 5.2 Identify tools for coding 5.3 Describe procedure for coding diagnostic/operation 5.4 Explain selection of conditions for coding 5.5 Identify conditions to code for a record on discharge	Explain 5.1 to 5.6	Textbooks, lecture notes, ICD books, Clinical Coding workbooks	Demonstrate how to code diagnostic/operation	Demonstrate how to code diagnostic/operation	Explain basic coding procedures

	5.6	Explain the recording of code number in discharge summary.					
General Objective 6.0: Understand basic classification of surgical operations and other procedures							
12	6.1	Describe the OPLS classification of surgical operation (current edition)	Explain 6.1 to 6.3	Textbooks, lecture notes, ICD books, Clinical Coding Workbooks			Explain the basic classification of surgical operations and other procedures
	6.2	Describe ICDS – 10 volume III procedure for classification.					
	6.3	Explain the structures of the classification system in 6.1 –6.2 above.					
General Objective 7.0: Understand coding procedure for surgical operation							
	7.1	Explain the selection of the operation procedure for surgery	Explain 7.1 and 7.2	Textbooks, lecture notes, ICD books, Clinical Coding Workbooks			Explain coding procedure for surgical operation
	7.2	Explain the coding procedure for 7.1 above					

General Objective 8.0: Understand disease and procedure index						
14	8.1 Define indexing 8.2 Explain types of index – manual- automated 8.3 Describe methods of indexing as in: - ◆ simple index ◆ cross index ◆ single card index ◆ multiple card index	Explain 8.1 and 8.3	Textbooks, lecture notes, ICD books, Clinical Coding Workbooks			Explain disease and procedure index
General Objective 9.0: Know uses of Index Data						
15	9.1 Explain the uses of: - - Research - quality control - statistical reports 9.2 Explain the retrieving of data from index	Explain 9.1 to 9.2	Textbooks, lecture notes, ICD books, Clinical Coding Workbooks			Explain the uses of Index Data
General Objective 10.0 Know the introduction to ICD 11						
15	10.1 Explain the structure of ICD 11 10.2 Explain the chapters of ICD 11	Explain 10.1 to 10.3	Textbooks, lecture notes, ICD books, Clinical Coding Workbooks			Explain the basic structure of ICD 11

	10.3 Explain the dual use of ICD 11 ◆ Use of ICD–11 in an Analog Paper Based Setting ◆ Use of ICD–11 in a Digital Setting and Web Services					
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PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE:	HEALTH PLANNING AND MANAGEMENT I			
CODE:	HIS 121			
DURATION (Hours/Week) Lecture:	2hrs	Tutorial: 0	Practical: - 0	Total: 2 (30hrs/semester)
UNITS:	2			
GOAL:	This course is designed to enable the student acquire basic knowledge in health planning and management.			
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:			
1 Understand the basics of health planning				
2 Know the basic theories of personality				
3 Understand the concept of management				
4 Understand the basics of decision making				
5 Understand health care system in Nigeria				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)						
COURSE TITLE: CITIZENSHIP EDUCATION I HEALTH PLANNING AND MANAGEMENT I				Course Code: GNS 111	Total: 2 (30hrs/semester)	
COURSE SPECIFICATION: Theoretical content : 2				Practical Content: 0		
General Objective 1.0: Understand the basics of health planning						
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
	1.1 Define planning 1.2 List the types of planning 1.3 Outline the principles of planning 1.4 Describe strategic planning and its parameters 1.5 Describe tactical planning 1.6 Describe the planning cycle 1.7 Explain the importance of planning in health care	Explain 1.1 – 1.7	Textbooks, Journals			Explain types of planning, their principles and importance
General Objective 2.0: Know the basic theories of personality						
	2.1 Define personality 2.2 Outline the various types of personality theories 2.3 Explain the following theories - Psychoanalytic theories - Behavioural theories - Narrow band theories of personality 2.4 Explain the need for	Lectures	Textbooks Journals			Outline the various types of personality theories and need for their understanding in health management

	understanding personality theories in Outline the various types of personality theories					
General Objective 3.0: Understand the concept of management						
	3.1 Define management 3.2 List the components of management 3.3 Identify the following management schools: - Classical Schools - Behavioural schools - Scientific management schools - Systems schools - Contingency schools	Explain 3.1 – 3.3	Textbooks Journals			Define management List the components of management Identify management schools:
General Objective 4.0: Understand the basics of decision making						
	4.1 Define decision making 4.2 Outline the various types of decision-making process 4.3 List the steps in decision making process 4.4 Explain decision making process in the health care sector	Explain 4.1 – 4.4	Textbooks Journals Charts showing decision making cycle			Explain decision making process in the health care sector

General Objective 5.0: Understand health care system in Nigeria					
	5.1 Define the following terms: - Health - Health Care - Health Service 5.2 Explain the evolution of Nigerian health services system 5.3 Explain the place of health services in National Development Plans since 1946 to date. 5.4 Describe the structure of Nigerian Health Care system: ➤ Primary Health Care ➤ Secondary Health Care ➤ Tertiary Health Care 5.5 Define Primary Health Care 5.6 Describe the principles of Primary Health Care 5.7 Explain the roles of National Primary Health Care Development Agency (NPHCDA)		Textbooks Journals		Explain the place of health services in National Development Plans since 1946 to date. Describe the structure of Nigerian Health Care system: Explain the roles of National Primary Health Care Development Agency

PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE:	STATISTICAL THEORY FOR HIM			
CODE:	HIS 122			
DURATION (Hours/Week) Lecture: 2hrs	Tutorial: 0	Practical: - 1	Total: 3 (45hrs/semester)	
UNITS: 3				
GOAL:	The course is designed to enable the student to acquire knowledge of statistical theories			
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:			
1.0 Understand the concept of random variable and discrete probability distribution.				
2.0 Understand the concept of mathematical expectation.				
3.0 Understand the distributions of the function of discrete random variables.				
4.0 Understand the concept of continuous random variables continuous probability distributions.				
5.0 Understand the normal distribution and its applications				
6.0 Understand the concept of the expectation of continuous random variables				
7.0 Understand moments and non-moment generating functions of probability distributions				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: STATISTICAL THEORY FOR HIM				Course Code: HIS 122		Total: 3 (45hrs/semester)	
COURSE SPECIFICATION: Theoretical content : 0				Practical Content: 1			
General Objective 1.0: Understand the concept of random variable and discrete probability distribution.							
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation	
	1.1 Define a random variable 1.2 Give examples of discrete random variable. 1.3 Explain discrete probability distribution 1.4 State the properties of a probability mass function 1.5 Define some common discrete probability mass functions (PMFs):Bernoulli, Binomial, Poisson 1.6 Define a discrete cumulative distribution function (c.d f.).	Explain 1.1 – 1.8	Improved visual aids of list of discrete variables Textbooks			Define a random variable Give examples of discrete random variable. Explain discrete probability distribution State the properties of a probability mass function Define some common discrete probability mass functions(PMFs):Bernoulli, Binomial, Poisson Define a discrete cumulative distribution function (c.d f.). State properties of the c.d.f.	

	1.7	State properties of the c.d.f.					Define the c.d.f. of the p.m.fs in 1.5 above:Bernoulli, Binomial, Poisson
	1.8	Define the c.d.f. of the p.m.fs in 1.5 above:Bernoulli, Binomial, Poisson					
General Objective 2.0: Understand the concept of mathematical expectation.							
	2.1	Explain the concept of mathematical expectation	Explain 2.1 – 2.5 Textbooks Secondary data from hospitals / clinics, Data generated from the class	Apply mathematical expectation to practical life situations of the distributions in 2.4 and 2.5	Illustrate with examples the application of mathematical expectation to practical life situations of the distributions in 2.4 and 2.5.	Explain steps in computing the mean and variance of a discrete random variable using the method of expectation. Explain steps in computing the mean of the following discrete distributions in using the method of expectation:Bernoulli, Binomial, Poisson	
	2.2	Define the expectation of a discrete random variable.		Compute mean and variance of: - Bernoulli, - Binomial, Poisson			
	2.3	State and prove the properties of the expectation of a discrete random variable					
	2.4	Explain steps in computing the mean and variance of a discrete random variable using the method of expectation.					
	2.5	Explain steps in computing the mean					

	of the following discrete distributions in using the method of expectation: Bernoulli, Binomial, Poisson					
General Objective 3.0: Understand the distributions of the function of discrete random variables.						
	3.1 Define the functions of a random variable 3.2 Explain steps in computing the means and variances of the functions of discrete random variables.	Explain 3.1 and 3.2	Textbooks Secondary data from hospitals / clinics	Apply the method in 3.2 to solve practical problems.	Guide and supervise the student to perform the tasks in 3.2	Define the functions of a random variable Explain steps in computing the means and variances of the functions of discrete random variables.
General Objective 4.0: Understand the concept of continuous random variables continuous probability distributions.						
	4.1 Define Continuous Random Variable. 4.2 Differentiate between continuous and discrete random variables 4.3 Define probability density function (pdf). 4.4 State the properties of probability density function and distribution. 4.5 Define a distribution function or a continuous	Explain 4.1 – 4.6	Textbooks Classroom resources Secondary data from hospitals / clinics	Apply a continuous random variable or distribution or cumulative distribution function using live data.	Illustrate with example, the practical applications of the distributions in 4.5 and 4.6 above using live data	Define Continuous Random Variable. Differentiate between continuous and discrete random variables Define probability density function (pdf). State the properties of probability density

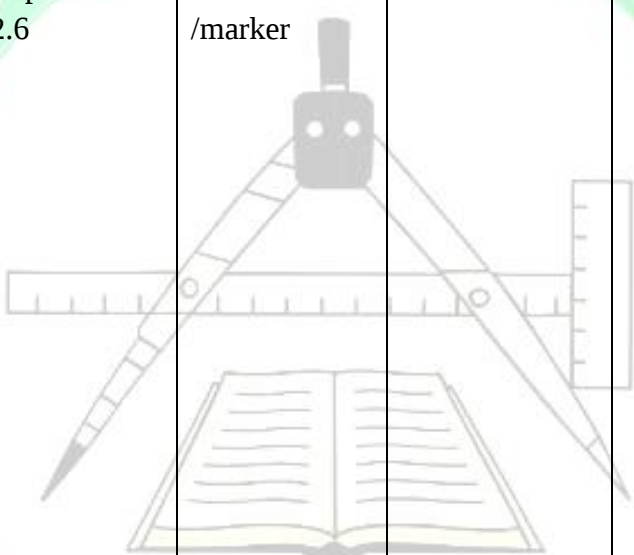
	random variable. 4.6 State the properties of cumulative distribution function (c.d.f)					function and distribution. Define a distribution function or a continuous random variable. State the properties of cumulative distribution function (c.d.f)
General Objective 5.0: Understand the normal distribution and its applications						
5.1	Define normal distribution.	Explain 5.1 – 5.8	Textbooks	Apply normal distribution to solve practical problems.	Guide the student to apply normal distributions and approximations to solve practical problems	Define normal distribution.
5.2	State the properties of a normal distribution.		Classroom resources	Apply the approximations in 5.6 and 5.7 to solve practical problems.		State the properties of a normal distribution.
5.3	Define the standard normal distribution.		Secondary data from hospitals / clinics			Define the standard normal distribution.
5.4	Explain the normal distribution table.					Explain the normal distribution table.
5.5	Explain the use of normal distribution to solve practical problems.		statistical tables			Explain the use of normal distribution to solve practical problems.
5.6	Explain the normal approximation to the binominal distribution.					Explain the normal approximation to the
5.7	Explain the normal					

	approximation to the Poisson distribution. 5.8 Explain the use of approximations in 5.6 and 5.7 above to solve practical problems.					binominal distribution. Explain the normal approximation to the Poisson distribution. Explain the use of approximations to solve practical problems.
General Objective 6.0: Understand the concept of the expectation of continuous random variables						
6.1 Define expectation of continuous random variables.	6.2 Explain steps in computing the expectations of continuous probability and normal distributions	6.3 Explain steps in computing the variance of distribution in 6.2 above.	Explain the concepts covered	Textbooks Classroom resources Secondary data from hospitals / clinics, Statistical tables	6.4 Apply 6.3 to solving practical problems	6.4 Explain steps in computing the expectations of continuous probability and normal distributions
General Objective 7.0: Understand moments and non-moment generating functions of probability distributions						
1.1 Define moments	1.2 Explain steps in computing moments of	Explain 7.1 – 7.7	Textbooks Classroom resources	Apply 7.2, 7.5, 7.7 in solving practical	Demonstrate the application of 7.2, 7.5	Explain steps in computing moments of continuous random

	continuous random variables about the origin and the mean. 1.3 Define moment generating function. 1.4 State properties of moment generating function. 1.5 Explain steps in computing moments of discrete and continuous random variables and probability distributions applying moment generating function. 1.6 State the relationship between expectation and moment. 1.7 Explain steps in computing mean and variance of discrete and continuous random variables and probability distribution using moments		Secondary data from hospitals / clinics statistical tables	problems and 7.7 in solving practical problems	variables about the origin and the mean. Explain steps in computing moments of discrete and continuous random variables and probability distributions applying moment generating function. Explain steps in computing mean and variance of discrete and continuous random variables and probability distribution using moments
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PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: INTRODUCTION TO PROGRAMMING			
CODE: HIS 123			
DURATION (Hours/Week) Lecture: 2hrs	Tutorial: 0	Practical: - 1	Total: 3 (45hrs/semester)
UNITS: 3			
GOAL: This course is designed to introduce students to programming concepts using Visual BASIC Programming Language.			
GENERAL OBJECTIVES: On completion of this course, the student should be able to:			
1.0 Understand basic concepts of programming 2.0 Know the concepts of Debugging Program Codes 3.0 Understand Algorithm and Flowcharts 4.0 Know Internal Representation of Data 5.0 Know Programming Techniques 6.0 Understand the use of Visual Basic in Interface design, writing and debugging codes. 7.0 Understand the application of visual basic in Health Information Management			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: INTRODUCTION TO PROGRAMMING			Course Code: HIS 123		Total: 3 (45hrs/semester)		
COURSE SPECIFICATION: Theoretical content: 0			Practical Content: 1				
General Objective 1.0: Understand basic concepts of programming							
Week	Specific Learning Outcomes		Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
	1.1	Define: - Programming, Programming Languages	Explain 1.1 – 1.8	-White board/ marker			Define: - Programming, Programming Languages
	1.2	Classify Programming Languages according to Level				Classify Programming Languages according to Level	
	-	Machine Language			- Multimedia projector		Define Translators
	-	Low Level Language					State types of Translators
	-	High Level Language					Describe Characteristic of a Good Programming Language
	1.3	Explain each level listed in 1.2 above and give examples					Explain Structure of a good Program
	1.4	Define Translators					
	1.5	State types of Translators					
	-	Compilers					
	-	Interpreter					
	-	Assembler					
	1.6	Explain each type of translators listed in (1.5) above					
	1.7	Describe Characteristic					

	of a Good Programming Language 1.8 Explain Structure of a good Program					
General Objective 2.0: Know the concepts of Debugging Program Codes						
	2.1 Explain Debugging Code 2.2 Explain the following Program Process Errors: ➤ Conversion Errors ➤ Round-off Errors ➤ Syntax Errors ➤ Run-time errors ➤ Logical errors 2.3 Explain Processing errors steps 2.4 Explain Desk Checking Logic 2.5 Explain Setting Breakpoints 2.6 Explain Stepping through Code: ➤ Step Over ➤ Step Into ➤ Step Out	Explain 2.1 – 2.6 			Explain Debugging Code Explain the following Program Process Errors: ➤ Conversion Errors ➤ Round-off Errors ➤ Syntax Errors ➤ Run-time errors ➤ Logical errors Explain Processing errors steps Explain Desk Checking Logic Explain Setting Breakpoints Explain Stepping through Code: ➤ Step Over ➤ Step Into ➤ Step Out	
General Objective 3.0: Understand Algorithm and Flowcharts						
	3.1 Define - Algorithm	Explain 3.1 – 3.3 White board /marker	Draw flowcharts	Demonstrate how to draw	Define - Algorithm	

	- Flowcharts 3.2 Describe a Program using Algorithms 3.3 Describe a Program using Algorithms and Flowcharts		Computer MS Visio using a flowcharting tool such as MS Vision Write Algorithm using Pseudocode Write Algorithm using Flowcharts Write a simple program logic using algorithms and Flowcharts	flowcharts using a flowcharting tool such as MS Vision Write Algorithm using Pseudocode Write Algorithm using Flowcharts Write a simple program logic using algorithms and Flowcharts	- Flowcharts Describe a Program using Algorithms Describe a Program using Algorithms and Flowcharts
General Objective 4.0: Know Internal Representation of Data					
	4.1 Explain Number System 4.2 State types of Number System - Decimal	Explain 4.1 – 4.5			Explain Number System State types of Number System Convert the following:

	- Binary - Octal - Hexadecimal 4.3 Convert the following: - Decimal to binary - Decimal to Octal - Decimal to Hexadecimal - Binary to decimal - Binary to Octal - Binary to hexadecimal 4.4 Explain the importance of binary system to computers 4.5 Relate Binary to bytes as computer storage unit.					- Decimal to binary - Decimal to Octal - Decimal to Hexadecimal - Binary to decimal - Binary to Octal - Binary to hexadecimal Explain the importance of binary system to computers Relate Binary to bytes as computer storage unit.
General Objective 5.0: Know Programming Techniques						
	5.1 Describe the Framing Methods 5.2 Explain Caching 5.3 Explain Buffering 5.4 Explain Logical Layering 5.5 Explain the Centralized Resource Management 5.6 Explain the Object-Oriented Programming (OOP) 5.7 Explain the Lookup Tables	Explain 5.1 – 5.7				Describe the Framing Methods Explain Caching Explain Buffering Explain Logical Layering Explain the Centralized Resource Management Explain the Object-Oriented Programming (OOP)

						Explain the Lookup Tables
General Objective 6.0: Understand the use of Visual Basic in Interface design, writing and debugging codes.						
	6.1 Explain Visual BASIC programs 6.2 Explain the following terms: - Variables - Constants - Expressions - Conditional statement - Iterations - Sub Programs 6.3 Explain the uses of each feature listed in 6.2 above.	Lecture	Classroom resources media projector -Computer Systems -Visual Basic 6.0 software or higher version	Use each feature of Visual BASIC programs Design an interface using Visual BASIC Use Visual Basic to write and debug Codes.	Demonstrate how to use each feature of Visual BASIC programs Design an interface using Visual BASIC Use Visual Basic to write and debug Codes.	Explain Visual BASIC programs Explain the following terms: - Variables - Constants - Expressions - Conditional statement - Iterations - Sub Programs Explain the uses of each feature listed in 6.2 above.
General Objective 7.0: Understand the application of visual basic in Health Information Management						
			Computer Systems -Visual Basic 6.0 software or higher	Use Visual BASIC to design data entry form	Guide the student to perform the tasks	Describe how to: Use Visual BASIC to design data entry form Use Visual BASIC to to write

			version	Use Visual BASIC to write codes that can connect to a Microsoft access database Use of Visual BASIC to generate reports for the software developed as stated in 7.1 to 7.3 above. Use Visual BASIC to compile your program for installation.	codes that can connect to a Microsoft access database Use of Visual BASIC to generate reports for the software developed Use Visual BASIC to compile your program for installation.
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PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: COMPUTER PACKGAGES I			
CODE: HIS 124			
DURATION (Hours/Week) Lecture: 1hrs	Tutorial: 0	Practical: - 1	Total: 2(30hrs/semester)
UNITS: 2			
GOAL: This course is designed to enable students to know how to use computer packages in Health Information Management.			
GENERAL OBJECTIVES: On completion of this course, the student should be able to:			
1.0 Know the existing computer packages used in Health Information Management. 2.0 Know how to use word processing packages. 3.0 Know how to use electronic spread sheets. 4.0 Know how to use District Health Information System (DHIS) 5.0 Know how to use presentation packages.			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: COMPUTER PACKGAGES I				Course Code: HIS 124		Total: 2(30hrs/semester)	
COURSE SPECIFICATION: Theoretical Content: 0				Practical Content: 1			
General Objective 1.0: Know the existing computer packages used in Health Information Management.							
Week	Specific Learning Outcomes		Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation
	1.1	Define Application Packages	Explain 1.1 – 1.4	-White board/ marker			Define Application Packages
	1.2	State various application packages with examples.					State various application packages with examples.
	1.3	Explain mode of acquisition of application packages		- Multimedia projector			Explain mode of acquisition of application packages
	-	In-house					
	-	Software bureau					
	-	Computer hardware manufacturers					
	-	Personal development					
	-	Lease					
	-	Open sourcee.t.c.					
	1.4	Explain the criteria for Application packages acceptability.					Explain the criteria for Application packages acceptability.
	-	Good documentation					
	-	User-friendliness					
	-	Efficiency					
	-	Appropriatenesse.t.c.					

General Objective 2.0: Know how to use word processing packages.							
	2.1	Define Text editor, Word Processor and Word processing packages	Explain 2.1 – 2.3	-White board/ marker - Multimedia projector	Demonstrate how to Format Text Manipulate Text Demonstrate Paragraph Formatting Format Page Insert Tables Insert graphics in Word processing. Use multiple documents Design styles Templates and Mail merge Proofread and print documents	Demonstrate how to Format Text Manipulate Text Demonstrate Paragraph Formatting Format Page Insert Tables Insert graphics in Word processing. Use multiple documents Design styles Templates and Mail merge	Define Text editor, Word Processor and Word processing packages State the uses of word processing Explain the features of Microsoft Word Screen

					Proofread and print documents	
General Objective 3.0: Know how to use electronic spread sheets.						
	3.1 Define spreadsheet 3.2 Describe different types of Spreadsheet packages 3.3 Describe the features of MS Excel - Active Cell - The Excel cell referencing system - Entering numbers and text - Default text and number alignment - Adding a column of numbers - Worksheets and Workbooks - Saving a workbook - Closing a workbook - Creating a new workbook - Opening a workbook - Switching between workbooks	Explain 3.1 – 3.4 - White board/ marker - Multimedia projector	Demonstrate how to start and operate Excel programme	Demonstrate how to start and operate Excel programme	Define spreadsheet Describe different types of Spreadsheet packages Describe the features of MS Excel	

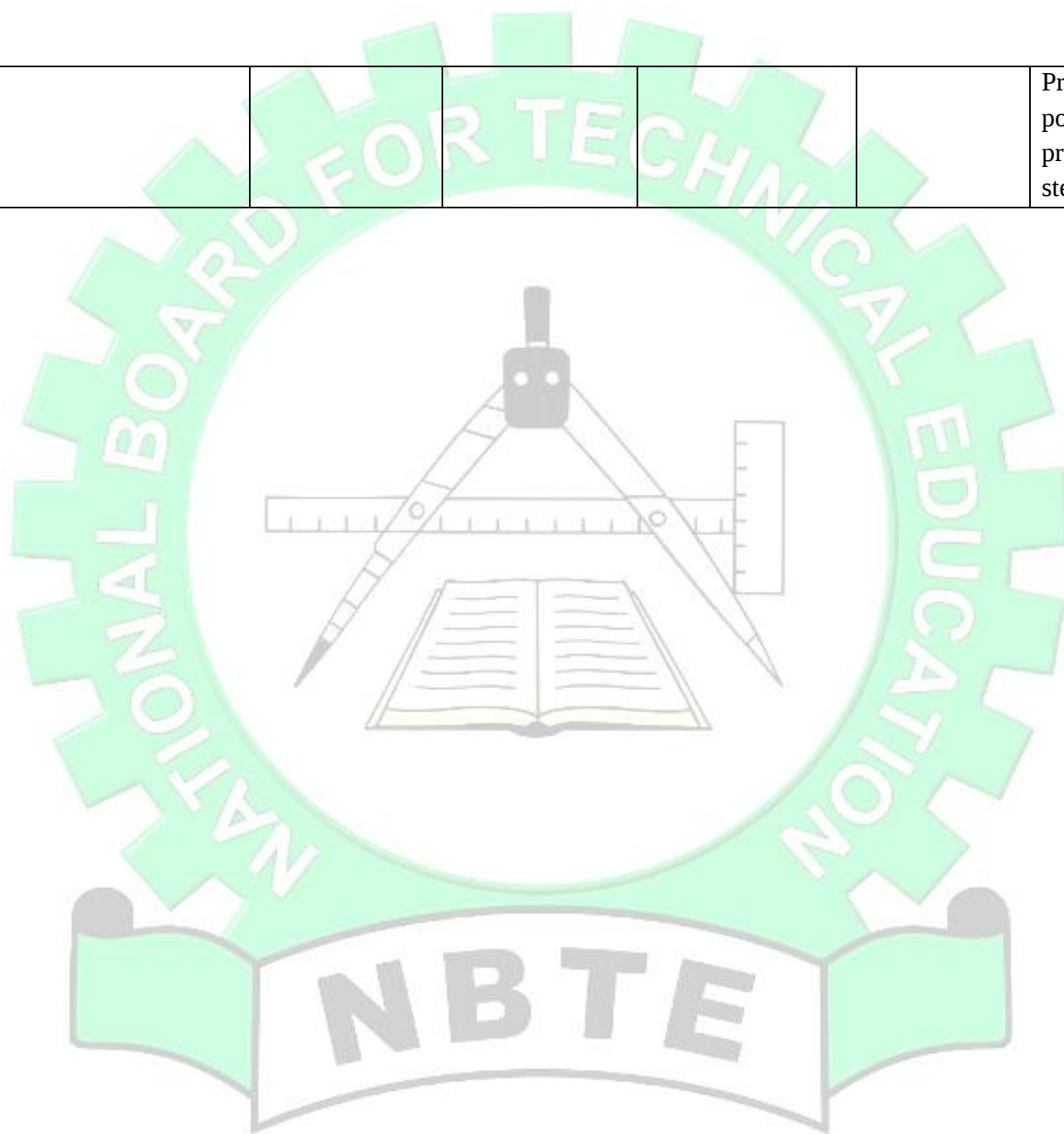
	3.4 Describe the following techniques involved in starting Excel program a) Selection techniques - Selecting a cell - Selecting a range of connecting cells - Selecting a range of non-connecting cells - Selecting the entire worksheet - Selecting a row - Selecting a range of connecting rows - Selecting a range of non-connected rows - Selecting a column - Selecting a range of connecting columns - Selecting a range of non-connecting columns b) Manipulating rows and columns - Inserting rows into a worksheet - Inserting columns into a worksheet - Deleting rows within a					
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	worksheet - Deleting columns within a worksheet - Modifying column widths - Modifying column widths using 'drag and drop - Automatically resizing the column width to fit contents - Modifying row heights c) Freezing row and column titles d) Formulas and functions - Creating formulas - Copying formulas - Operators - Formula error messages - Common functions - Sum function - Average function - Max function - Min function - Count function - What are 'IF functions'? - Using the IF function					
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	e) Insertion, editing and formatting charts f) Describe how to use Excel for descriptive statistics. a. Starting the Excel program					
General Objective 4.0: Know how to use District Health Information System (DHIS)						
	4.1 Describe the District Health Information System (DHIS) 4.2 Explain the need for DHIS 4.3 Describe the attributes of DHIS 4.4 Outline the purposes of DHIS 4.5 State the benefits of DHIS	Explain 4.1 – 4.5	-White board/ marker - Multimedia projector Computers Internet DHIS Manual	Apply DHIS in: - Data entry - Data analysis processing - Preparing reports and other information products.	Guide student to use the software	Describe the District Health Information System (DHIS) Explain the need for DHIS Describe the attributes of DHIS Outline the purposes of DHIS State the benefits of DHIS
General Objective 5.0: Know how to use presentation packages.						
	5.1 Explain Presentation packages 5.2 List different presentation packages	-Lecture	-White board/ marker	Prepare a document for power point presentation.	Guide student to prepare a document for power point	Explain Presentation packages List different

	5.3 Describe how to start a new Presentation 5.4 Explain the features of MS Powerpoint 5.5 Describe the following techniques involved in MS power point presentation: ➤ To work with slide text ➤ The layout and Look of slides ➤ To insert tables, charts and diagrams ➤ Enhancing slides with graphics ➤ The delivery of a presentation electronically ➤ Customizing Power point. 5.6 Prepare a document for power point presentation adopting steps in 5.5		- Multimedia projector		presentation.	presentation packages Describe how to start a new Presentation Explain the features of MS Powerpoint Describe the following techniques involved in MS power point presentation: ➤ To work with slide text ➤ The layout and look of slides ➤ To insert tables, charts, and diagrams ➤ Enhancing slides with graphics ➤ The delivery of a presentation electronically ➤ Customizing Power point.	
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						Prepare a document for power point presentation adopting steps in 5.5	
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PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)		
COURSE:	DESCRIPTIVE STATISTICS II		
CODE:	HIS 126 (Pre-Requisite – HIS 114)		
DURATION (Hours/Week) Lecture:	2hrs	Tutorial: 0	Practical: - 1
UNITS:	3	Total: 3 (45hrs/semester)	
GOAL:	The course is designed to enable the student to acquire enhanced knowledge in descriptive statistics		
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:		
1.0 Understand measures of central tendency.			
2.0 Understand the measure of positional values.			
3.0 Understand the measure of variability.			
4.0 Understand the concepts of skewness and kurtosis.			
5.0 Understand the concept of time series.			
6.0 Understand the concept of index numbers.			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE TITLE: DESCRIPTIVE STATISTICS II					Course Code: HIS 114		Total: 3 (45hrs/semester)	
COURSE SPECIFICATION: Theoretical content : 0					Practical Content: 1			
General Objective 1.0: Understand measures of central tendency.								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 Explain central tendency 1.2 Define the various measures of central tendency: mean, median, mode 1.3 State and prove the properties of the arithmetic mean.		Explain 1.1 – 1.3	Textbooks Lecture Notes Real life data from data producers	Compute mean, median and mode for ungrouped and grouped data Compute the mean using change of origin (assumed mean) and coding methods Apply Harmonic and Geometric means to simple problems Estimate median and mode using graphs Compute central tendency using live data Interpret the result in 1.9		Demonstrate computations of mean, median and mode for ungrouped data. Demonstrate how to compute mean using change of origin and coding methods. Demonstrate how to apply Harmonic and Geometric means to	Explain central tendency Define the various measures of central tendency: mean, median, mode State and prove the properties of the arithmetic mean.

					simple problems Demonstrate how to estimate median and mode using graphs Demonstrate how to compute central tendency using live data Demonstrate how to Interpret the result	
General Objective 2.0: Understand the measure of positional values.						
	2.1 Define the various positional measures, quartiles, deciles, percentiles etc.	Explain 2.1	Textbooks Lecture Notes Real life data	Compute the measure in 2.1 above using appropriate formulae. Interpret the results in the	Demonstrate how to compute the various positional	Explain the various positional measures, quartiles, deciles, percentiles etc

			from data producers	computation above	measures, quartiles, deciles, percentiles etc	
General Objective 3.0: Understand the measure of variability.						
	3.1 Explain variability 3.2 Define the various measures of variability (range, quartile deviation, percentile range, mean deviation, variance and standard deviation). 3.3 State and prove the properties of variance 3.4 Compare and contrast the various relative measures of variability 3.5 Define, compute and interpret various relative measures of variability: variation and quartile deviation.	Explain 3.1 – 3.5	Textbooks Lecture Notes Real life data from data producers	Compute and interpret the measures in 3.2 above for ungrouped and grouped data Compute the variance and standard deviation applying the properties in 3.4 above. Compute measures of variability using live data Interpret the results of the computations above	Demonstrate how to compute and interpret the measures in 3.2 above for ungrouped and grouped data Compute the variance and standard deviation applying the properties in 3.4 above. Compute measures of variability using live data	Explain variability Define the various measures of variability (range, quartile deviation, percentile range, mean deviation, variance and standard deviation). State and prove the properties of variance Compare and contrast the various relative measures of variability Define, compute and interpret various relative

					Interpret the results of the computations above	measures of variability: variation and quartile deviation.
General Objective 4.0: Understand the concepts of skewness and kurtosis.						
	4.1 Define moments of various degrees (up to the 4th moment) about the mean. 4.2 Define skewness 4.3 Define kurtosis 4.4 Identify the various types of kurtosis 4.5 State, compute and interpret the measures of kurtosis 4.6 Define concentration ratio.	Explain 4.1 – 4.6	Textbooks Lecture Notes Real life data from data producers	Compute moments of various degrees (up to 4 th) about the mean. Compute and interpret the various measures of skewness Compute and interpret the measures of Kurtosis Compute and interpret concentration ratio.	Demonstrate how to compute moments of various degrees (up to 4 th) about the mean. Compute and interpret the various measures of skewness Compute and interpret the measures of Kurtosis Compute and interpret concentration ratio.	Define moments of various degrees (up to the 4th moment) about the mean. Define skewness Define kurtosis Identify the various types of kurtosis State, compute and interpret the measures of kurtosis Define concentration ratio.

General Objective 5.0: Understand the concept of time series.						
5.1	Define and give examples of time series	Explain 5.1 – 5.6	Textbooks Lecture Notes	Compute the parameters involved in 5.2 - 5.6	Demonstrate how to compute graph time series data	Define and give examples of time series
5.2	Describe graph time series data			Interpret the results in 5.7		Describe graph time series data
5.3	Identify the four basic components of time series: trend, seasonal, cyclical and irregular movements		Real life data from data producers		Interpret the linear trend of the type $Y = a + bx$	Identify the four basic components of time series: trend, seasonal, cyclical and irregular movements
5.4	Interpret the linear trend of the type $Y = a + bx$				Remove seasonal variation and obtain seasonal index using moving averages	Interpret the linear trend of the type $Y = a + bx$
5.5	Define moving averages					Define moving averages
5.6	Remove seasonal variation and obtain seasonal index using moving averages.					Remove seasonal variation and obtain seasonal index using moving averages.

General Objective 6.0: Understand the concept of index numbers.							
	6.1	Explain index numbers	Explain 6.1 - 6.3	Textbooks	Construct and interpret various types of index numbers: simple and weighted averages, simple aggregative (Paasche and Laspeyre indexes), and fisher's ideal index.	Demonstrate how to	Explain index numbers
	6.2	State the various types of index numbers		Lecture Notes		Construct and interpret various types of index numbers	State the various types of index numbers
	6.3	State the uses of index numbers		Real life data from producers	Compute and interpret the weighted average using life data	Compute and interpret the weighted average using life data	State the uses of index numbers

PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)		
COURSE:	ENTREPRENEURSHIP		
CODE:	EED 126		
DURATION (Hours/Week)	Lecture: 1hrs	Tutorial: 0	Practical: - 2
UNITS:	3		
GOAL:	This course is designed to create an entrepreneurial mindset and awareness to the student.		
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:		
1.0 Understand the meaning and scope of Enterprise and Entrepreneurship			
2.0 Understand the history and Government Policy measures at promoting Entrepreneurship in Nigeria			
3.0 Understand the types, characteristics and rationale of Entrepreneurship			
4.0 Understand the role of Entrepreneurship in economic development			
5.0 Understand Entrepreneurial characteristics and attitude			
6.0 Understand the key competencies and determining factors for success in Entrepreneurship			
7.0 Know the motivational pattern of Entrepreneurs.			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE TITLE: INTRO. TO ENTREPRENEURSHIP					Course Code: EED 126		Total: 3 (45hrs/semester)	
COURSE SPECIFICATION: Theoretical Content :1					Practical Content: 2			
General Objective 1.0: Understand the meaning and scope of Enterprise and Entrepreneurship								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1	Define an Enterprise in its narrower and wider contexts.	I. Explain the terms: Enterprise, Entrepreneur	Text Books	1.5	Identify features of the types of enterprises identified	Guide students to research into different forms of enterprises.	Explain different forms of Enterprises
	1.2	Explain different forms of Enterprises	II. List the different types of enterprises and group them into small, medium and large enterprise	Successful Entrepreneur to speak on the role and importance of Entrepreneursh ip.	1.6	Identify the facilities and opportunities available for self-employment.	Guide students to research and identify criteria for successful entrepreneurship.	Classify the different forms of Enterprises into small, medium and large enterprises
	1.3	Classify the different forms of Enterprises into small, medium and large enterprises		Use of internet and relevant video clips.	1.7	Identify successful entrepreneurs in Nigeria.	Establish competitive groups.	
	1.4	Explain the terms: Entrepreneur, Entrepreneurship, Wage Employment, and self-employment, explain clearly the business terrain in Nigeria.	III. Compare and contrast wage employment and self-employment. IV. Explain clearly the business terrain in Nigeria.		1.8	Evaluate the role of entrepreneurship in wealth creation.	Students to make formal presentations of their findings.	
							Students to undertake	

					enquiry learning on selected entrepreneur and enterprise.	
General Objective 2.0: Understand the history and Government Policy measures at promoting Entrepreneurship in Nigeria						
2.1 Trace the evolution of entrepreneurship development.	I. Explain the historical development and role of entrepreneurship in the development of enterprises in Nigeria.	Text Books	Obtain the required information from the net.	Guide students to search the web for historical evolution of entrepreneurship in other parts of the world.		
2.2 Compare Entrepreneurship in Nigeria with Japan, India, China, Malaysia, South Korea, etc	II. Compare Entrepreneurship in Nigeria with other countries of the world. Japan, India, China, Malaysia, South Korea.	Journals				
2.3 Explain Nigeria's values in relation to Entrepreneurship.	III. Show students video film on Entrepreneurship development in any of the	Publications		Research and list various Government Measures on SME's and Industrial Development from 1960 to date.		
2.4 Describe the role of Entrepreneurship In the development of enterprises.		Video Film				
		TV & VCR				

		countries mentioned above. IV. Explain Nigeria's values and Entrepreneurship.				
General Objective 3.0: Understand the types, characteristics and rationale of Entrepreneurship						
	3.1 Explain types of Entrepreneurs and their characteristics. 3.2 Compare and contrast Technological and Social Entrepreneurship. 3.3 Identify the different types of Entrepreneurs: self-employed, opportunistic, Inventors, Pattern multipliers etc. 3.4 Identify the role of Entrepreneurship in business, society and in self-employment.	I. Explain types of Entrepreneurs. II. Explain types of Entrepreneurship. III. Explain features of Entrepreneurship in business. IV. Explain the rewards and efforts Entrepreneurship in business. V. Describe the different types of Entrepreneurs VI. Describe the role of entrepreneurship	Text Books. K.A.B. Journals Publications Video Film TV & VCR	3.5 Analyze life situations people may find themselves in. 3.6 Enumerate the benefits to be derived from the above situation.	Guide students to identify opportunities from the environment.	

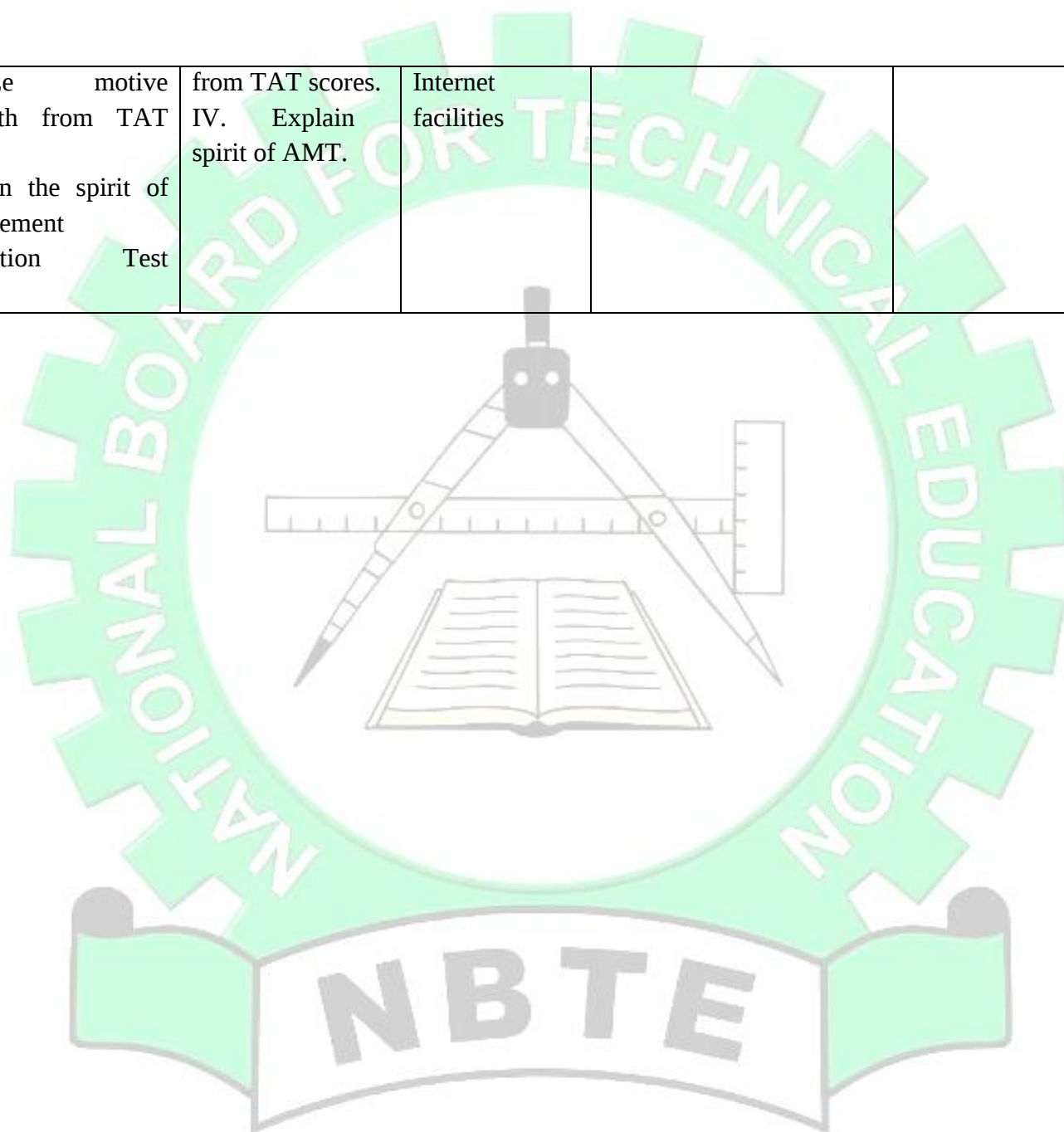
		in business, society employment generation and wealth creation. VII. Explain the benefits of self employment.				
General Objective 4.0: Understand the role of Entrepreneurship in economic development						
4.1 Identify resources and constraints of Entrepreneurship. 4.2 Explain how Entrepreneurship leads to import substitution and utilization of local resources. 4.3 Explain how Entrepreneurship leads to socio-economic development. 4.4 Explain the role of an entrepreneur in grassroot/local economic development.	I. Explain resources and constraints of Entrepreneur. II. Relate import substitution to utilization of local resources. III. Explain equitable distribution of industries and the role of entrepreneurship. IV. Explain how entrepreneurship leads to job	Text Books. Journals Publications Video Film TV & VCR Computer or Overhead Projector SME's	4.5 Classify the resources into economic, human, knowledge and time. 4.6 Distinguish between economic development and growth.	Show transparency of resources needed by an entrepreneur. Guide students to visit selected enterprise/community projects. Guide students on the use of local raw materials for value addition.	Quiz Tests Assignment Examination	

		creation.				
General Objective 5.0: Understand Entrepreneurial characteristics and attitude						
	5.1 Explain the philosophy, values, scope, need and characteristic of Entrepreneurship.	I. Using slide or PowerPoint or explain personal characteristics and attitude of an Entrepreneur	Textbooks Journals Computer Projector	5.9 Evaluate the opportunities identifying corresponding self-employment opportunities.	Guide students to identify as many job/employment opportunities as possible.	Explain the philosophy, values, scope, need and characteristic of Entrepreneurship.
	5.2 Explain the profiles of local Entrepreneurs.	II. List Entrepreneurial traits citing relevant cases.	Guest Speakers (Female/Male) Internet search.	5.10 Evaluate a project considering its resources: management of time, personnel, equipment and money.	Guide students to visit a successful enterprise, and evaluate its resources to identify its contribution to economy, its internal and external constraints and available problem solving techniques.	Explain the profiles of local Entrepreneurs
	5.3 Demonstrate high sense of innovation, creativity and independence.	III. Explain the aspiration, determination and efficiency of an Entrepreneur.		5.11 Explain constraints and problem solving techniques.		
	5.4 Explain the process of acquiring high sense of information seeking and ability in operating an enterprise.	IV. Explain how to demonstrate high sense of innovation creativity and independence.				
	5.5 Identify various risks and remedies involved in operating an enterprise.	V. Describe how to evaluate a private project.			Group students to survey and interview	
	5.6 Evaluate pilot project considering resources, time, personnel, equipment,					

	money, materials etc. 5.7 Demonstrate leadership and leadership skills by mobilizing resources for establishing an enterprise. 5.8 Demonstrate high level problem solving techniques in overcoming internal and external constraints.	VI. Describe how to mobilize resources for establishing an enterprise. VII. Describe how to solve problems involving internal and external constraints.			Entrepreneurs. Evaluate a sample project with the students, then give them assignment to assess one.	
General Objective 6.0: Understand the key competencies and determining factors for success in Entrepreneurship						
6.1 Identify the key competencies required in setting up a successful small business; knowledge, skill and Traits. 6.2 Identify key success factors in setting a small business: Resources, Ability, Motivation and Determination, Idea and Market etc. 6.3 Define individual life	I. Explain major competencies required for successful Entrepreneurship II. Explain key success factors in setting up small business. III. Explain individual life	Text Books. Journals Publications Video Film TV & VCR Computer and	6.7 Describe: Data collection about self, who am I (personal efficacy). Rating of concept, self-knowledge. 6.8 Play a relevant business game and observe the behavioral pattern in relation to moderate risk taking, goal setting etc. 6.9 Identify core skills,	Guide students to demonstrate knowledge of themselves, goals, Entrepreneurship strengths and weaknesses. Give practical assignment to students on personal	Explain the key competencies required in setting up a successful small business; knowledge, skill and Traits.	

	goal and link it to Entrepreneurship. 6.4 Identify the strengths and weaknesses in 6.3 above. 6.5 Explain business games. 6.6 Explain the behavioral pattern observed in 6.5 above on: Moderate risk taking, goal setting, Learning from feedback. Taking personal responsibility. Confidence and self reliance.	goal of an Entrepreneur IV. Explain relevant business games and their behavioral patterns.	accessories, internet and visitations. Blocks Rings Papers	competencies, and success factors for entrepreneurship.	efficacy, goal and link to Entrepreneurship strength and weaknesses. Demonstrate how to play business game. Visit a small business enterprise.	
General Objective 7.0: Know the motivational pattern of Entrepreneurs.						
	7.1 Define motivation. 7.2 List the objectives of motivation. 7.3 Identify barriers to motivation and achievement. 7.4 Explain Thematic Appreciation Test (TAT) scores. 7.5 Explain how to	I. Explain motivation, objectives, merit and demerit. II. Explain TAT scores. III. Explain how to carryout analysis on motive strength	Text Books Journals Publications Computer And	7.7 Analyze motive strength from TAT score using a given case.	Illustrate how to carryout analysis on motive strength from TAT scores using related case studies.	Explain how to analyze motive strength from TAT score

	analyze motive strength from TAT score 7.6 Explain the spirit of Achievement Motivation Test (AMT)	from TAT scores. IV. Explain spirit of AMT.	Internet facilities		
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PROGRAMME:		HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE:		CITIZENSHIP EDUCATION II			
CODE:		GNS 121			
DURATION	(Hours/Week)	Lecture:	Tutorial: 0	Practical: - 0	Total: 2 (30hrs/semester)
2hrs					
UNITS:		2			
GOAL:		The goal of this course is to create awareness and consciousness of Nigerian political institutions and structures, democratic principles and social values in the mind of the student.			
GENERAL OBJECTIVES:		On completion of this course, the student should be able to:			
1.0 Understand government, political parties and elections.					
2.0 Know the arms of government.					
3.0 Understand constituted authority.					
4.0 Understand national identity					
5.0 Understand national ethics and discipline in nation life					
6.0 Know some methods of environmental protection					

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: CITIZENSHIP EDUCATION II				Course Code: GNS 121		Total: 2 (30hrs/semester)	
COURSE SPECIFICATION: Theoretical content : 0				Practical Content: 2			
General Objective 1.0: Understand government, political parties and elections.							
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation	
	1.1 Explain the need for government. 1.2 Describe the various systems of government. 1.3 Examine the various forms of government. 1.4 Outline the functions of government. 1.5 Examine the various processes of an election. 1.6 Assess the role and importance of political parties in an election. 1.7 Evaluate the functions of other agencies in an election. 1.8 Discuss the need for a free and fair	Explain 1.1 -1.8	Textbooks			Explain the need for government. Explain the various systems of government.	

	election.					
General Objective 2.0: Know the arms of government.						
	2.1 Analyse the functions of the Legislature, the Executive and the Judiciary at Federal, State and Local Government levels. 2.2 Examine the relationships among the three arms of government 2.3 Explain the principles of "Separation of Power' and "checks and balance" in government. 2.4 Explain the processes of election/appointment and removal of the Executive at the three levels of government. 2.5 Examine the main components of the Nigerian judicial system and its independence.	Explain 2.1 -2.8				Explain the principles of "Separation of Power' and "checks and balance" in government. Explain the processes of election/appointment and removal of the Executive at the three levels of government.

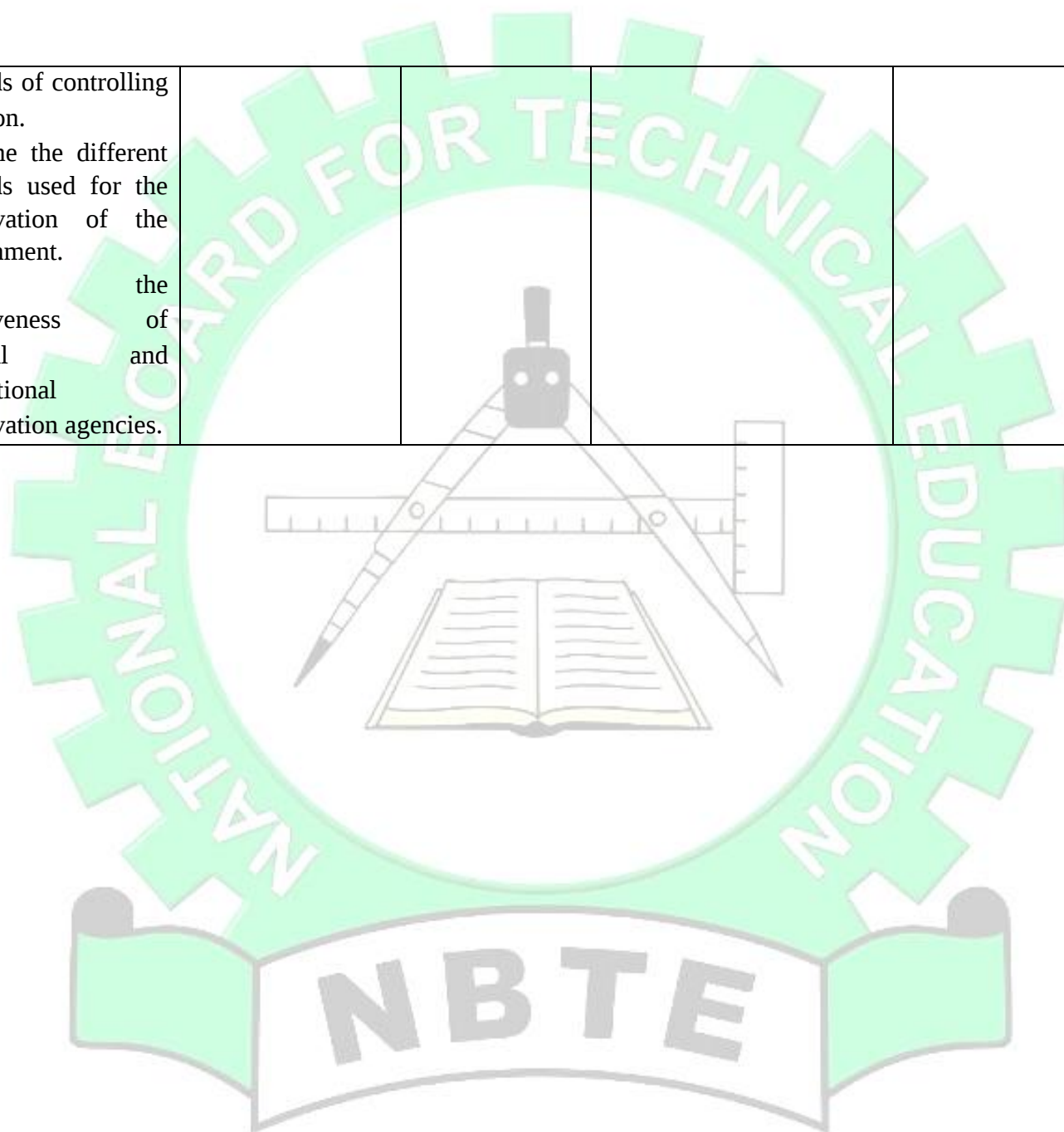
	2.6 Evaluate the components of the code of conduct for public officers. 2.7 Assess the effectiveness of the Executive in the management of public funds. 2.8 Assess the performance of the mass media in Nigeria					
General Objective 3.0: Understand constituted authority						
	3.1 Explain the term Constituted Authority. 3.2 Distinguish between the types of constituted authority 3.3 Examine bureaucracy, its characteristics, advantages and disadvantages. 3.4 Examine different forms of delegated	Explain 3.1 -3.10				3.11 Explain the term Constituted Authority. Differentiate between the types of constituted authority

	authority in a modern state. 3.5 Distinguish between the terms "Power" and Authority. 3.6 State the forms and effects of abuse of power. 3.7 Prescribe remedies for abuse of power. 3.8 Distinguish between "Leadership" and "Followership". 3.9 Evaluate the roles of leaders and followers in nation building, 3.10 Examine the qualities of good leaders and followers.					
General Objective 4.0: Understand national identity						
	4.1 Explain the need for and ways of preserving national	Explain 4.1 – 4.5	Textbooks			State similarities and differences of

	identity. 4.2 Examine the role and significance of national sym-bols. 4.3 Discuss the contributions of selected heroes and heroines towards the development of Nigeria. 4.4 State similarities and differences of various aspects of culture in Nigeria 4.5 Examine the role of culture in national integration					various aspects of culture in Nigeria
General Objective 5.0: Understand national ethics and discipline in nation life						
	5.1 Explain the need for national ethics 5.2 Relate various aspects of national ethics to national development. 5.3 Discuss the causes and consequences of indiscipline in the nation. 5.4 Evaluate the methods	Explain 5.1 -5.6	Textbooks			Explain the need for national ethics Relate various aspects of national ethics to national development

	used by public agencies in the control of indiscipline. 5.5 Discuss how citizens can participate in the control of indiscipline. 5.6 Discuss the need to maintain the right attitudes towards public property.					
General Objective 6.0: Know some methods of environmental protection						
	6.1 Explain the concept of environment. 6.2 Analyse the components of the Nigerian environment. 6.3 Explain the impact of the environment on human development. 6.4 Suggest ways of reducing over exploitation of the environment. 6.5 Discuss the different forms, causes and effects of pollution on the environment. 6.6 Evaluate the different	Explain 6.1 – 6.8	Textbooks Marker Markerboard			Explain the concept of environment.

	methods of controlling pollution. 6.7 Examine the different methods used for the conservation of the environment. 6.8 Assess the effectiveness of national and international conservation agencies.					
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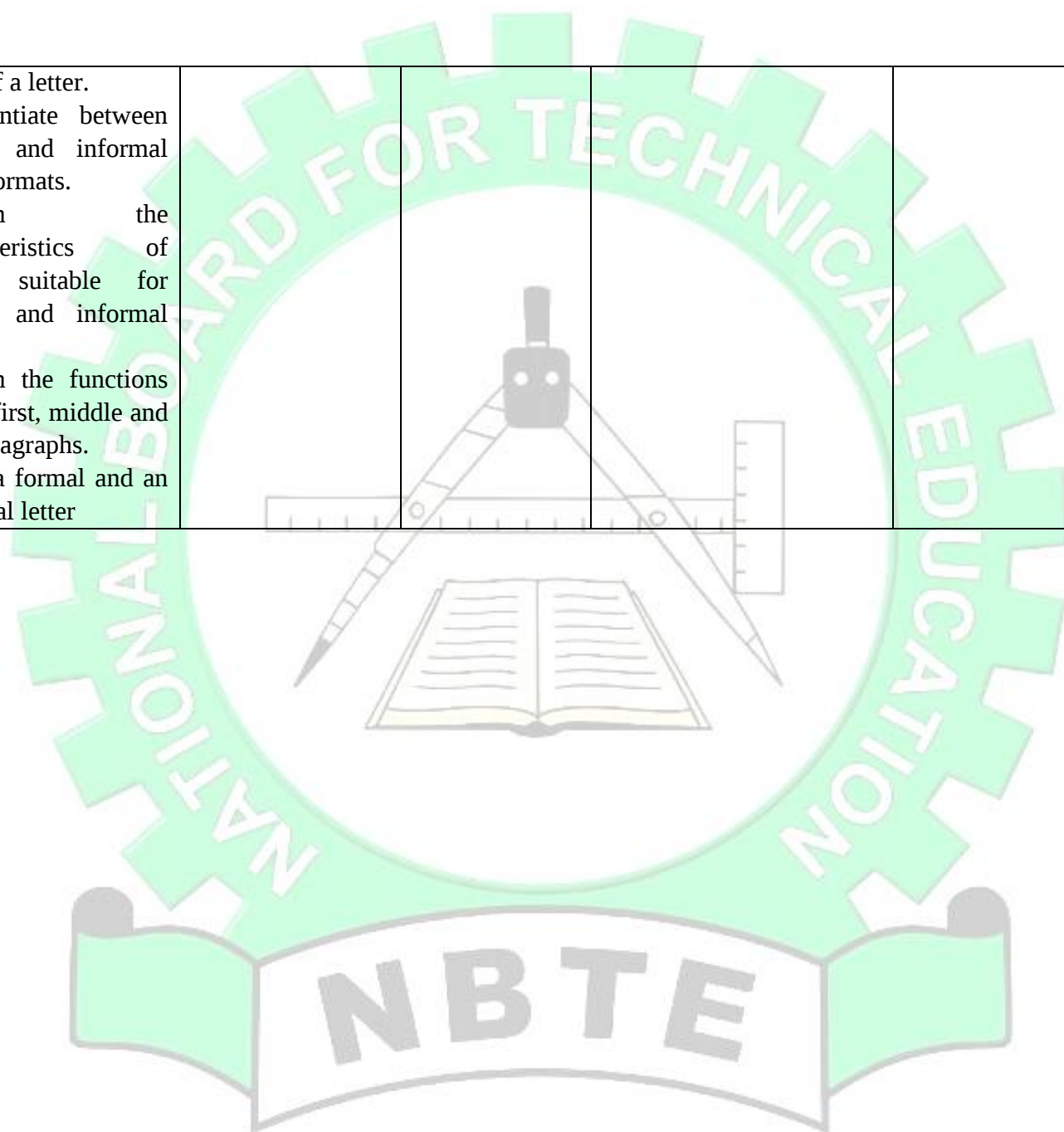


PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: COMMUNICATION IN ENGLISH I			
CODE: GNS 102			
DURATION (Hours/Week) Lecture: 2hrs	Tutorial: 0	Practical: - 0	Total: 2 (30hrs/semester)
UNITS: 2			
GOAL: This course is designed to enable students acquire the necessary communication skills, know the techniques of correspondence and comprehend written materials.			
GENERAL OBJECTIVES: On completion of this course, the student should be able to:			
1.0 Understand the concept of communication 2.0 Know how to make oral presentations. 3.0 Know the essential elements of correspondence. 4.0 Know the rules of comprehension and interpretation.			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE TITLE: COMMUNICATION IN ENGLISH I				Course Code: GNS 102		Total: 2 (30hrs/semester)		
COURSE SPECIFICATION: Theoretical content : 0				Practical Content: 2				
General Objective 1.0: Understand the concept of communication								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 Define communication. 1.2 Analyse the process of Communication. 1.3 Analyse the purposes of communication. 1.4 Explain the relationship between communication and language. 1.5 Explain impact of interference on communication at various levels, e.g. phonological, 1.6 Explain code-mixing, code-switching and dissonance in communication.							
General Objective 2.0: Know how to make oral presentations.								
	2.1 Label a diagram of the organs of speech.							

	2.2 Describe the functions of the organs in 2.1 above in speech production. 2.3 List the phonemes of English. 2.4 Produce correctly each of the phonemes listed in 2.3 above 2.5 Pronounce correctly by making distinctions between the different sound contrasts in the consonantal and vowel systems of English. 2.6 Explain the principles of effective speaking, viz., correct use of stress, rhythm, and intonation patterns. 2.7 Read fluently.					
General Objective 3.0: Know the essential elements of correspondence.						
	3.1 List the various type of correspondence, e.g., Letter, memo, circular, etc. 3.2 Explain the various					Quiz Test Assignment

	parts of a letter.					
	3.3 Differentiate between formal and informal letter formats.					
	3.4 Explain the characteristics of styles suitable for formal and informal letters					
	3.5 Explain the functions of the first, middle and last paragraphs.					
	3.6 Write a formal and an informal letter					



PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE:	HEALTH INFORMATION MANAGEMENT II			
CODE:	HIM 211			
DURATION (Hours/Week) Lecture:	2hrs	Tutorial: 0	Practical: - 1	Total: 3 (45hrs/semester)
UNITS:	3			
GOAL:	This course is designed to enable the student design common register and basic health records.			
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:			
1.0 Understand the design of common registers and basic records				
2.0 Know outpatient appointment procedures				
3.0 Know waiting list procedure				
4.0 Understand management of short and long term care facilities				
5.0 Know role of committees in health records management				
6.0 Know the functions of medical audit				
7.0 Understand role of health records in ambulatory care				
8.0 Know primary health care records				
9.0 Know other health care record keeping				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE TITLE: HEALTH INFORMATION MANAGEMENT II				Course Code: HIM 211		Total: 3 (45hrs/semester)		
COURSE SPECIFICATION: Theoretical Content:2				Practical Content: 1				
General Objective 1.0: Understand the design of common registers and basic records								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 List types of Registers used in Health Records Management 1.2 Describe registration procedures.		Explaia 1.1-1.2	Classroom resources Samples of printed registers.	Design common registers used for health recordsmanagement in the hospital e.g. ➤ Out-patient registers ➤ In-patient admission and discharge register ➤ Birth, and death register ➤ Accident and emergency register and others.		Direct Students to design registers and supervise them	List types of Registers used in Health Records Management Describe registration procedures.
General Objective 2.0: Know outpatient appointment procedures								
	2.1 Explain the objectives of out-patient appointment system 2.2 Describe methods		Explain 2.1 -2.4	Out-patient department of a hospital clinic	Visitout-patient department to identify equipmentused for out-patient appointment procedures		Guide student to identify the equipment used for out-patient appointment procedures	Explain the objectives of out-patient appointment system

	of appointment system 2.3 List the sources of patients for the out-patient appointment system 2.4 Identify the equipment used for out-patient appointment procedures					List the sources of patients for the out-patient appointment system List the equipment used for out-patient appointment procedures
General Objective 3.0: Know waiting list procedure						
	3.1 Outline the objectives of waiting lists in the hospital 3.2 Describe methods of waiting-list e.g. vertical card and strip index 3.3 List the sources of patients for waiting list	Explain 3.1 – 3.3	Samples of printed health records forms	Apply the method in 3.2 using samples of forms. Identify the equipment used for waiting list procedures	Organize Visit to the waiting list center to identify equipment. Guide and supervise the student to carry out the activities	Outline the objectives of waiting lists in the hospital Describe methods of waiting-list e.g. vertical card and strip index List the sources of patients for waiting list

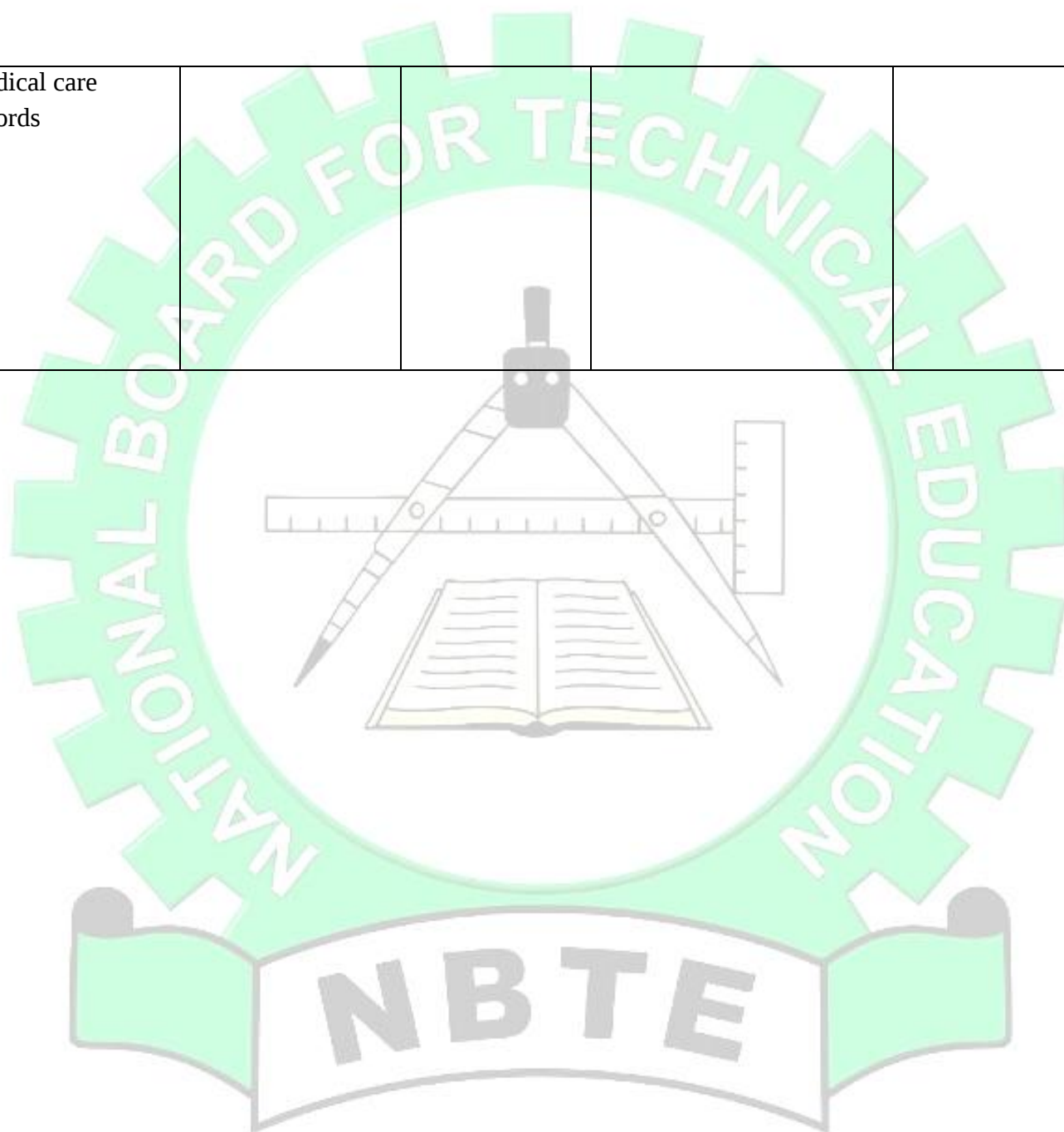
General Objective 4.0: Understand management of short- and long-term care facilities						
	4.1	Describe types of records kept in long term care facilities	Explain 4.1 – 4.6	Samples of printed health records forms	Arrange health records in long term facilities Design health records forms in long term care facilities e.g. ➤ Mental health care ➤ Diabetic care ➤ Tuberculosis ➤ HIV/Aids ➤ Cancer ➤ Leprosarium File records in long term care facilities Compile the statistics of the long term care facilities	Supervise student's design health record forms and arrange them in long term care facilities as required Describe types of records kept in long term care facilities Differentiate between long term and short term care records Describe recording techniques Describe the rent ion methods of the long term care records Describe the utilization review of the long term care Classify the long-term care diseases

General Objective 5.0: Know role of committees in health records management					
	5.1 Describe the use of committees on health records department 5.2 Explain functions of the health records officer on a health records committee 5.3 List the terms of reference of the committee 5.4 Explain the roles of the health records officer on the patient care evaluation committee. 5.5 Explain hospital utilization review committee and other committees.	Explain 5.1 – 5.5	Samples of printed health records forms		Describe the use of committees on health records department Explain functions of the health records officer on a health records committee List the terms of reference of the committee Explain the roles of the health records officer on the patient care evaluation committee. Explain hospital

						utilization review committee and other committees.
General Objective 6.0: Know the functions of medical audit						
	6.1 Explain medical Audit 6.2 List participants in medical audit 6.3 Explain types of audit topics 6.4 Explain Audit cycle	Explain 6.1 – 6.4	Drawing materials	Draw audit cycle . Suggest audit topics Serve as secretary to an Audit committee	Supervise students to draw audit cycle Guide students to choose Audit topics Demonstrate role of secretary to Audit Committee	Explain medical Audit List participants in medical audit Explain types of audit topics Explain Audit cycle
General Objective 7.0: Understand role of health records in ambulatory care						
	7.1 Explain the general objective of health records in ambulatory care 7.2 Explain the concept of ambulatory care	Explain 7.1 and 7.2	Classroom resources Ambulatory data	Design the format for ambulatory care records Collect ambulatory data/care Compile statistics on ambulatory patient care	Supervise the design of format and collection of ambulatory data by students. Guide students to compile and	Explain the general objective of health records in ambulatory care Explain the concept of

				Analyse ambulatory care data	analyse ambulatory care data	ambulatory care
General Objective 8.0 Know primary health care records						
	8.1 Define home health care 8.2 Distinguish between clinic-based records and home based health records. 8.3 Describe patient held health records system	Explain 8.1 – 8.3	Clinic records of home based records Classroom resources			Define home health care Distinguish between clinic based records and home based health records. Describe patient held health records system
General Objective 9.0 Know other health care record keeping						
	9.1 Describe family records 9.2 Describe the concept of school health care records 9.3 Define referral system and follow-up care system 9.4 Explain traditional	Explain 9.1 – 9.4	Classroom resources			Describe family records Describe the concept of school health care records Define referral

	medical care records					system and follow-up care system
						Explain traditional medical care records



PROGRAMME:		HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)		
COURSE:		DISEASE CLASSIFICATION AND CLINICAL CODING II		
CODE:		HIM 212		
DURATION (Hours/Week)	Tutorial: 0	Practical: - 2	Total: 3 (45hrs/semester)	
Lecture: 1hr				
UNITS:		3		
GOAL:		This course is designed to enable the students analyse health data using ICD 9 or 10 along the mortality and morbidity parameters.		
GENERAL OBJECTIVES:		On completion of this course, the student should be able to:		
1.0 Know disease classification.				
2.0 Know coding convention in disease classification.				
3.0 Know classification of death.				
4.0 Know coding of diseases.				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE TITLE: DISEASE CLASSIFICATION AND CLINICAL CODING II				Course Code: HIM 212		Total: 3 (45hrs/semester)		
COURSE SPECIFICATION: Theoretical Content:1				Practical Content: 2				
General Objective 1.0: Know disease classification.								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 Explain the following: Classification and nomenclature of diseases 1.2 Outline the history of classification and nomenclature of diseases 1.3 Compare and contrast classification and nomenclatures of diseases 1.4 Explain the general principles of Classification and nomenclatures of diseases 1.5 List the criteria for disease classification in health care delivery system. 1.6 Explain the following classifications: ➤ International		Explain 1.1 – 1.6	Samples of classifications				Explain Classification and nomenclature of diseases Outline the history of classification and nomenclature of diseases Compare and contrast classification and nomenclatures of diseases Explain the general

	classification of diseases injuries and causes of death (ICD) ➤ Standard nomenclature of diseases and operations of the American Medical Association ➤ Systematized nomenclature of diseases in medicine ➤ International classification of health problems in primary health care ➤ International classification of diseases 9th revision, clinical modification ICD 9 – CM ➤ International classification of impairments, disabilities and handicaps ➤ International				principles of Classification and nomenclatures of diseases List the criteria for disease classification in health care delivery system. Explain the following classifications: -International classification of diseases injuries and causes of death (ICD) -Standard nomenclature of diseases and operations of the American Medical Association
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	classification of diseases for oncology ICD-O				-Systematized nomenclature of diseases in medicine -International classification of health problems in primary health care -International classification of diseases 9th revision, clinical modification ICD 9 – CM -International classification of impairments, disabilities and handicaps - International classification of diseases for oncology ICD-O
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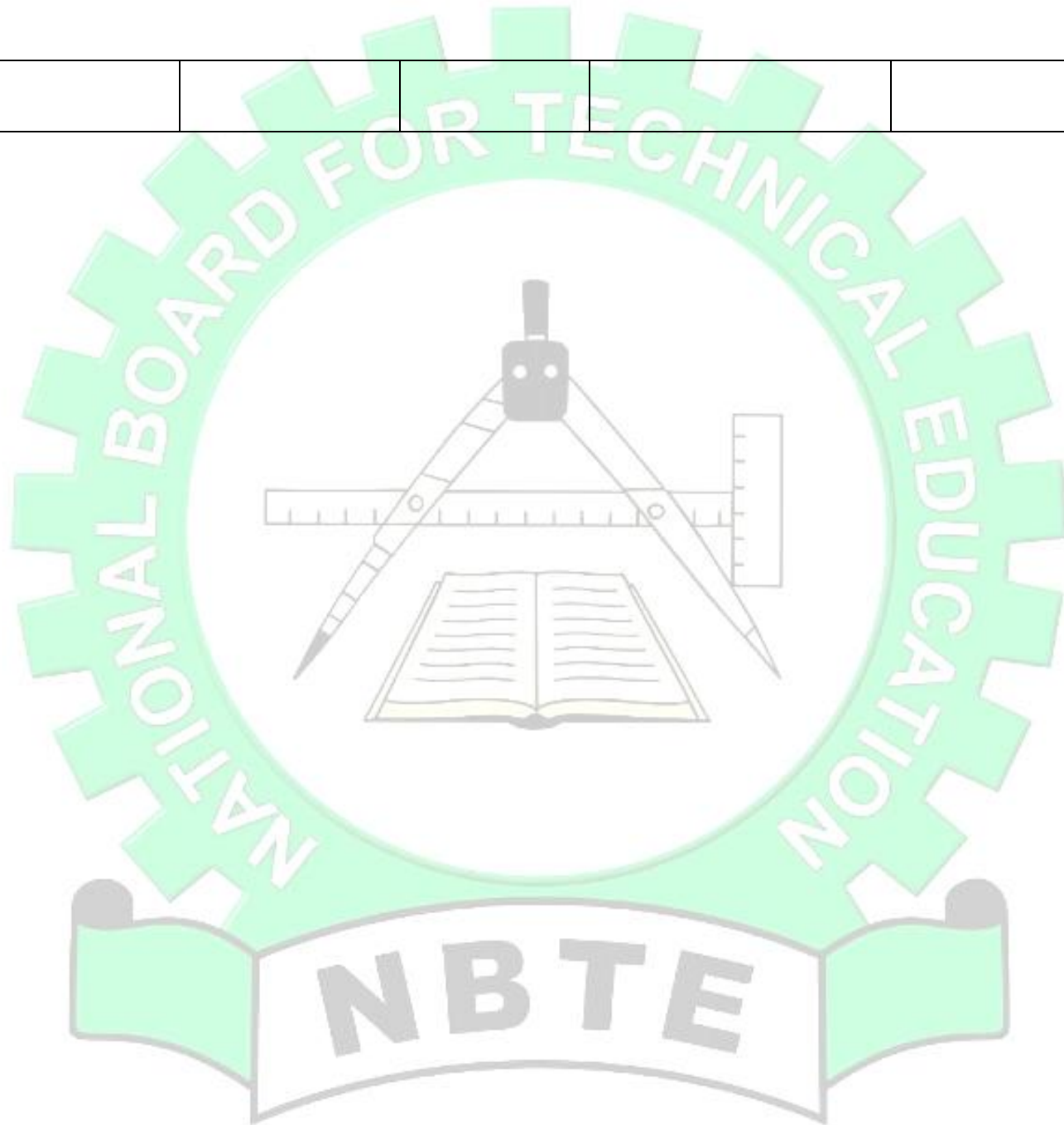
General Objective 2.0: Know coding convention in disease classification.					
	2.1 Describe the structure of the ICD-9 (volumes I and II) and ICD – 10 (volumes I, II and III) 2.2 Outline the general principles and historical review of ICD-9 and ICD-10 2.3 Explain coding conventions and their uses in diseases classification 2.4 Explain dual classification of certain diagnostic statements 2.5 Explain the numbering system (3rd, 4th and 5th digit system, ICD-9, Alphanumeric coding ICD-10) and Other practical points on the use of ICD 2.6 Explain the structure of ICD-9 (list of three and four ➤ Digit categories	Explain 2.1 – 2.8	Samples of classifications		Describe the structure of the ICD-9 (volumes I and II) and ICD – 10 (volumes I, II and III) Outline the general principles and historical review of ICD-9 and ICD-10 Explain coding conventions and their uses in diseases classification Explain dual classification of certain diagnostic statements

	➤ List of the twenty – one chapters of the ICD-10 2.7 Explain special tabular list of the ICD-9 2.8 Explain the structure of each chapter vis-avis: ➤ Description of the purpose of each chapter and supplementary classification ICD-9 ➤ Description of the purpose of each chapter of the ICD-10, 21 chapters.				Explain the numbering system (3rd, 4th and 5th digit system, ICD-9, Alphanumeric coding ICD-10) and Other practical points on the use of ICD Explain the structure of ICD-9 (list of three and four -Digit categories -List of the twenty – one chapters of the ICD-10 Explain special tabular list of the ICD-9 Explain the structure of
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					each chapter vis-avis: -Description of the purpose of each chapter and supplementary classification ICD-9 -Description of the purpose of each chapter of the ICD-10, 21 chapters.
General Objective 3.0: Know classification of death.					
3.1 List the causes of death; predisposing cause of death; medical certificate of cause of death	3.2 Describe the rules for classification of diseases/death as recommended by the World Health Organization	Explain 3.1 and 3.2 with examples	Death Certificates		List the causes of death; predisposing cause of death; medical certificate of cause of death Describe the rules for classification of diseases/death as

						recommended by the World Health Organization
General Objective 4.0: Know coding of diseases.						
4.1 Describe the procedure for coding of diseases 4.2 Define coding and the aims and objectives of coding of diseases 4.3 Describe coding procedure and the coding tools 4.4 Explain the ICD coding system 4.5 Explain the coding system of other classification systems	Explain 4.1 – 4.5	Various codes	Record code(s) onto statistical abstract (summary sheet)	Supervise students to record codes onto statistical abstract	Describe the procedure for coding of diseases Define coding and the aims and objectives of coding of diseases Describe coding procedure and the coding tools Explain the ICD coding system Explain the coding system of other	

						classification systems
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PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE:	RECORD DOCUMENTATION SYSTEMS			
CODE:	HIM 213			
DURATION (Hours/Week) Lecture:	2hrs	Tutorial: 0	Practical: - 0	Total: 2 (30hrs/semester)
UNITS:	2			
GOAL:	This course is designed to enable the Students acquire basic knowledge and skills in record documentation systems			
GENERAL OBJECTIVES:	On completion of this course, the student should be able to:			
1.0 Understand the concept of documentation and record keeping				
2.0 Understand documentation systems and standard				
3.0 Know the generation and control of documentation				
4.0 Know legal implication of documentation, errors and management of medical correspondence				
5.0 Know the guidelines and principles for record keeping and documentation				
6.0 Understand updating and evaluation of documented materials.				
7.0 Understand information transmission				
8.0 Understand record maintenance and destruction				
9.0 Understand e-documentation in healthcare services				
10.0 Understand how to review records for service improvement				
11.0 Know the type of documentation to keep about sources and recordkeeping requirements.				
12.0 Understand preservation and conservation of records				
13.0 Understand record management issues, specific to health records				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE TITLE: RECORD DOCUMENTATION SYSTEMS				Course Code: HIM 213		Total: 2 (30hrs/semester)		
COURSE SPECIFICATION: Theoretical content: 0				Practical Content: 2				
General Objective 1.0: Understand the concept of documentation and record keeping								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 Describe the meaning, relevance and cost of documentation		Explain 1.1 – 1.5	Textbooks, classroom resources				Describe the meaning, relevance and cost of documentation
	1.2 Explain evaluation of documented material							
	1.3 List the different types of documentation systems							Explain evaluation of documented material
	1.4 Explain types of documentation							List the different types of documentation systems
	1.5 Describe the factors mitigating against effective documentation							Explain types of documentation Describe the factors

						mitigating against effective documentation
General Objective 2.0: Understand documentation systems and standard						
	2.1 Explain documentation systems 2.2 Explain documentation specifications	Explain 2.1 and 2.2	Textbooks Classroom resources			Explain documentation systems Explain documentation specifications
General Objective 3.0: Know the generation and control of documentation						
	3.1 Explain generation of documentation 3.2 Describe documentation control 3.3 Describe documentation control procedures	Explain 3.1 – 3.3	Textbooks Classroom resources			Explain generation of documentation Describe documentation control Describe documentation control procedur
General Objective 4.0: Know legal implication of documentation, errors and management of medical correspondence						
	4.1 Explain legal implications of	Explain 4.1 – 4.3	Textbooks			Explain legal implications of

	documentation 4.2 Describe the following: litigation, negligence, authentication, and errors in documentation 4.3 Explain ethical issues relating to documentation				documentation Describe the following: litigation, negligence, authentication, and errors in documentation Explain ethical issues relating to documentation
General Objective 5.0: Know the guidelines and principles for record keeping and documentation					
	5.1 Name the contents of a document 5.2 Explain utilization of documented information 5.3 Restate the principle and procedure of documentation 5.4 Explain the control of documentation 5.5 Describe good documentation	Explain 5.1 – 5.6 Give assignment	Textbook Documents White Board Markers		Name the contents of a document Explain utilization of documented information Restate the principle and procedure of documentation

	practices 5.6 Explain documentation specifications					Explain the control of documentation Describe good documentation practices Explain documentation specifications
General Objective 6.0: Understand updating and evaluation of documented materials.						
	6.1 Describe process evaluation 6.2 Explain outcome evaluation 6.3 Explain external evaluation	Explain 6.1 – 6.3	Textbook			Describe process evaluation Explain outcome evaluation Explain external evaluation
General Objective 7.0: Understand information transmission						
	7.1 Define information transmission 7.2 State methods of information	Explain 7.1 – 7.7	Textbooks Classroom Resources			Define information transmission

	transmission 7.3 Explain the methods of information transmission stated in 7.2 above 7.4 Enumerate processes of information transmission 7.5 Describe how to maintain confidentiality of documents 7.6 Explain consent 7.7 Explain release of information					State methods of information transmission Explain the methods of information transmission stated in 7.2 above Enumerate processes of information transmission Describe how to maintain confidentiality of documents Explain consent Explain release of information
General Objective 8.0: Understand record maintenance and destruction						
	8.1 Describe records	Explain 8.1 – 8.5	Textbooks			Describe

	creation 8.2 Explain records retention 8.3 Explain records disposal 8.4 Explain records management models 8.5 Explain record documentation standards		Classroom resources		records creation Explain records retention Explain records disposal Explain records management models Explain record documentation standards
General Objective 9.0: Understand e-documentation in healthcare services					
	9.1 Identify electronic records 9.2 Describe hard copy records 9.3 List electronic records management software 9.4 Describe e-	Explain 9.1 – 9.4	Textbook CD – ROM Internet Classroom resources		Identify electronic records Describe hard copy records List electronic

	documentation in healthcare services					records management software Describe e-documentation in healthcare services
General Objective 10.0: Understand how to review records for service improvement						
	10.1 Explain the purpose of record review 10.2 Describe the procedure of record review 10.3 Explain the uses of records	Lecture	Classroom resources			Explain the purpose of record review Describe the procedure of record review Explain the uses of records
General Objective 11.0: Know the type of documentation to keep about sources and recordkeeping requirements.						
	11.1 Explain document recordkeeping requirements 11.2 Explain documentation to meet disposal requirements 11.3 Explain maintaining and	Explain 11.1 – 11.3				Explain document recordkeeping requirements Explain documentation to meet disposal

	updating documentation					requirements Explain maintaining and updating documentation
General Objective 12.0: Understand preservation and conservation of records						
	12.1 Explain preservation of record 12.2 Explain conservation of record 12.3 Describe appropriate technology used for preservation and conservation of records	Explain 12.1 – 12.3	Textbooks Classroom resources Computers			Explain preservation of record Explain conservation of record Describe appropriate technology used for preservation and conservation of records
General Objective 13.0: Understand record management issues, specific to health records						
	13.1 Compare and contrast the content and formats of the	Explain 13.1 – 13.3 with examples with Health records				Compare and contrast the content and formats of the

	health record across the continuum of healthcare systems	forms and registers				health record across the continuum of healthcare systems
13.2	Explain record management ethical issues unique to the health record, record access, record retention, record security, and disaster management	Health record storage devices such as shelves, cabinet, CD ROM, etc				Explain record management ethical issues unique to the health record, record access, record retention, record security, and disaster management
13.3	Explain record storage options currently available and trends for the future					Explain record storage options currently available and trends for the future

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)				
COURSE: HEALTH INFORMATICS I				
CODE: HIS 211				
DURATION 2hrs	(Hours/Week)	Lecture:	Tutorial: 0	Practical: - 0
				Total: 2 (30hrs/semester)
UNITS: 2				
GOAL: This course is designed to enable students acquire the knowledge of the fundamental principles of computer technologies in healthcare.				
GENERAL OBJECTIVES: On completion of this course, the student should be able to:				
1.0 Understand the concepts of informatics and health informatics 2.0 Know computer science areas related to health informatics 3.0 Know health informatics tools. 4.0 Know types of health informatics 5.0 Understand legal aspect of health informatics 6.0 Know the relationship between e-health and health informatics. 7.0 Know the impacts of health informatics on Health Information Management (HIM) practice				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: HEALTH INFORMATICS I				Course Code: HIS 211		Total: 2 (30hrs/semester)	
COURSE SPECIFICATION: Theoretical Content: 0				Practical Content: 2			
General Objective 1.0: Understand the concepts of informatics and health informatics							
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation	
	1.1 Define: Informatics, Health Informatics 1.2 Explain the evolution of health informatics 1.3 Enumerate early names of health informaticssuch as medical computing, biomedical computing etc 1.4 Differentiate between general informatics and health informatics	Explain 1.1 – 1.4	White board/ marker Charts to list types Textbooks/ journals			Define: Informatics, Health Informatics Explain the evolution of health informatics Enumerate early names of health informatics Differentiate between general informatics and health informatics	

General Objective 2.0: Know computer science areas related to health informatics					
	2.1 Define computer architecture 2.2 Explain computer architecture (Specify the relations and parts of a computer system) 2.3 Explain computing algorithms 2.4 Illustrate algorithms with examples for simple problems (systematic procedure that produces solution to a problem) 2.5 Explain database concepts and file organizations 2.6 Define database 2.7 Outline its generations List its components and file organization methods. 2.9 List information presentation methods: ➤ flow diagrams ➤ decision trees	Explain 2.1 –2.13	-White board/ marker Charts to list parts Textbooks/ journals -Computer set		Define database Outline its generations List its components and file organization method

	➤ form illustrations ➤ screen illustrations ➤ technical illustrations ➤ warnings, cautions, and notes ➤ photographs ➤ graphics 2.10 Explain the concepts of Management Information System (MIS): Discuss MIS development, functions, levels and other related terms such as - Decision Support System (DSS) - EIS. - Executive Information System (EIS) - Office Automation System (OAS) 2.11 Explain: Searching, Search engines 2.12 Enumerate search techniques					
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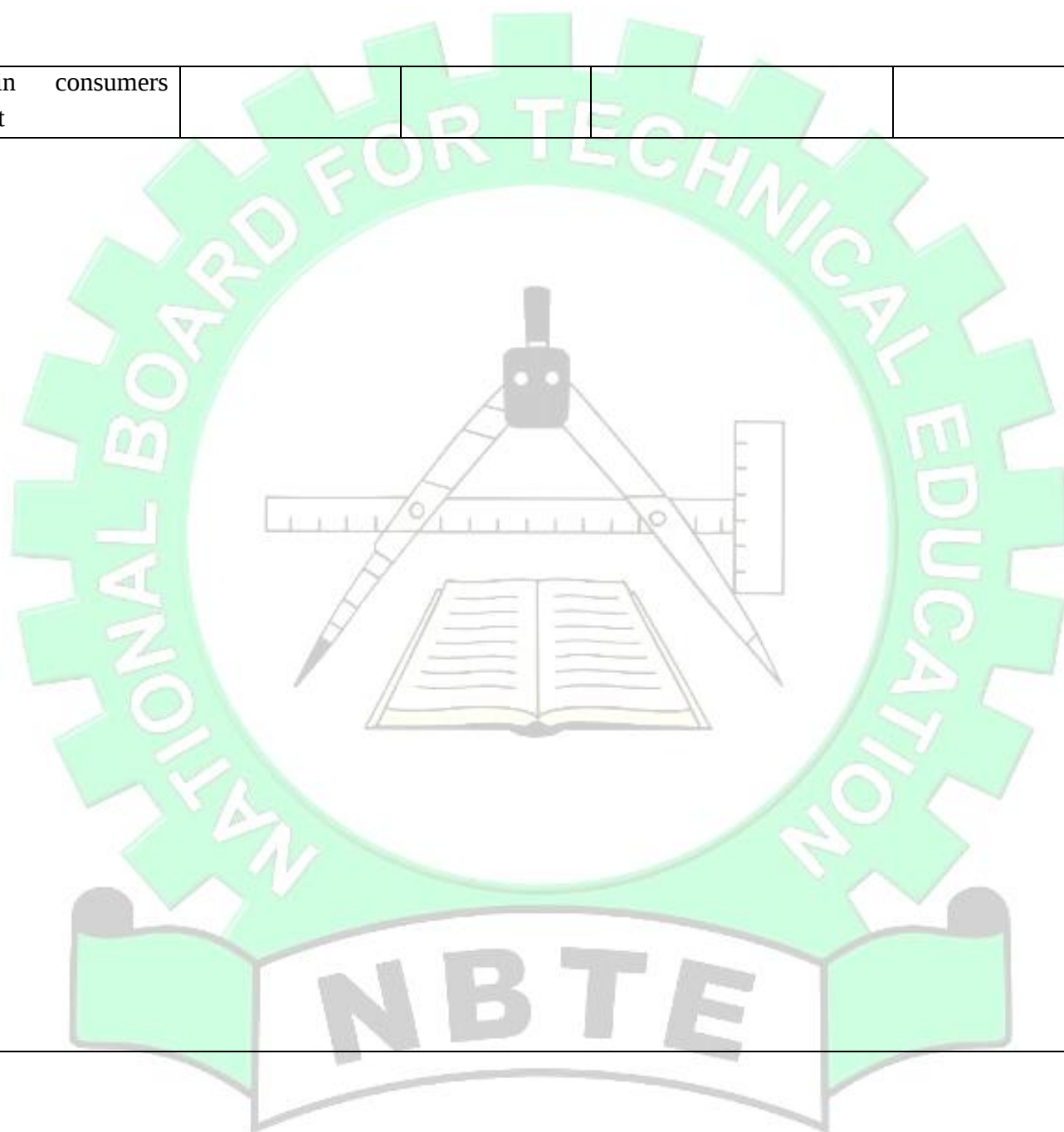
	2.13	Illustrate with different types of search engines e.g. PubMed, Google Scholar					
General Objective 3.0: Know health informatics tools							
	3.1	List health informatics tools - IT tools (computers, software, communication systems, etc) and Non IT tools	Explain 3.1 – 3.7 with examples where necessary	-White board/ marker - charts to list parts -text books/ journals			List ISO Standardization for Health informatics
	3.2	Explain non IT tools					Outline the information security standard by International Organization for Standardization (ISO)
	3.3	Give clinical guidelines that govern health informatics - Policies and procedure, clinical procedures, clinical pathways, Clinical staff schedules etc					
	3.4	Explain challenges of integrating the tools in 3.2 above					
	3.5	Enumerate challenges of					

	standardization of tools and conversion process. 3.6 List ISO Standardization for Health informatics 3.7 Outline the information security standard by International Organization for Standardization(ISO) titled information security management in health (e.g. scopetreats, symbols, tasks, benefits, etc)					
General Objective 4.0: Know types of health informatics						
	4.1 List areas of health informatics - Clinical, bioinformatics, clinical research , Nursing, Dentistry, pharmacy, Telehealth, etc. 4.2 Explain each area in	Explain 4.1 – 4.2	-White board/ marker - charts to list types -text books/ journals Overhead			List areas of health informatics Clinical, bioinformatics, clinical research , Nursing,

	4.1 above		projector			Dentistry, pharmacy, Telehealth
General Objective 5.0: Understand legal aspect of health informatics						
	5.1 State laws guiding health informatics implementation including complex legal principles as they apply to information technology in health-related fields 5.2 Explain IT security and ethical aspect of health information 5.3 Enumerate IT privacy and information protection problems 5.4 Highlight electronic tool operational issues 5.5 Explain operational issues that invariably arise when electronic tools, information and media are used in health care delivery	Explainm5.1 – 5.5	-White board/ marker - charts to list types -text books/ journals Overhead projector			State laws guiding health informatics implementation including complex legal principles as they apply to information technology in health-related fields

	- Wireless and wired online data and record sharing data transfer, data security					
General Objective 6.0: Know the relationship between e-health and health informatics.						
	6.1 Explain e-health in relation to health informatics 6.2 State interrelationship between e-health and health informatics	Explain 6.1 – 6.2	-White board/ marker - charts to list types -text books/ journals Overhead projector			Explain e-health in relation to health informatics
General Objective 7.0: Know the impacts of health informatics on Health Information Management (HIM) practice						
	7.1 Explain economic impact of health informatics 7.2 Explain how health informatics brings cost reduction, paperless office, etc. 7.3 Explain Clinicians impact ➤ Information Timeliness ➤ Ease searching ➤ Relationship-centered outcome	Explain 7.1 – 7.4	-White board/ marker - charts to list types -text books/ journals Overhead projector			Explain Clinicians impact ➤ Information Timeliness ➤ Ease searching ➤ Relationship-centered outcome

	7.4 Explain impact	consumers				
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YEAR II SEMESTER I

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: DATABASE MANAGEMENT SYSTEMS I			
CODE: HIS 212			
DURATION (Hours/Week) Lecture: 2hrs	Tutorial: 0	Practical: - 0	Total: 2 (30hrs/semester)
UNITS: 2			
GOAL: This course is designed to enable students acquire the knowledge of the fundamental principles of Database Management System.			
GENERAL OBJECTIVES: On completion of this course the student should be able to:			
1.0 Know the concept of Data, Data Management and Database Management Systems. 2.0 Know Database related Terminologies. 3.0 Know sources and types of Data and Database Management Systems. 4.0 Know Fundamentals of Database Management Systems. 5.0 Know Database Administrators and their functions. 6.0 Know Database users. 7.0 Understand data security and data recovery.			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: DATABASE MANAGEMENT SYSTEMS I				Course Code: HIS 212		Total: 2 (30hrs/semester)	
COURSE SPECIFICATION: Theoretical content:				Practical Content: 2			
General Objective 1.0: Know the concept of Data, Data Management and Database Management Systems.							
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation	
	1.1 Define the following: - Data - Data Management - Database - Databank - Database Management System 1.2 Explain the values of Data 1.3 Explain Data Constraints 1.4 Enumerate the Advantages and Disadvantages of Database Management System. 1.5 Describe user-interface in database system	Explain 2.1 – 1.5	Textbooks Overhead projector			Enumerate the Advantages and Disadvantages of Database Management System.	
General Objective 2.0: Know Database related Terminologies.							
	2.1 Explain the following:	Explain 2.1	-Textbooks			Explain	

	- Data Modeling - Physical Data Model - Data Warehouse - Data Mining - Data Fishing - Continuous Protection - Data Governance		Overhead projector			- Data Modeling - Physical Data Model - Data Warehouse - Data Mining - Data Fishing
General Objective 3.0: Know sources and types of Data and Database Management Systems.						
	3.1 Describe sources and types of Data 3.2 State types of Database Management Systems: - Hierarchical - Network - Relational - Object-oriented 3.3 Describe each type stated in 3.2 above.	Explain 3.1 – 3.3	-Textbooks -Journals -White board/Marker Overhead projector			Describe sources and types of Data
General Objective 4.0: Know Fundamentals of Database Management Systems.						
	4.1 Describe the purpose and functions of Database Management System. 4.2 Explain Elements of Database: - Character	Explain 4.1 – 4.4	-Textbooks -Journals -White board/Marker Overhead projector			Explain Elements of Database:

	- Field - Record - File - Table - Database					
	4.3 Outline types of Database Management Systems					
	4.4 Describe their Advantages and Disadvantages					
General Objective 5.0: Know Database Administrators and their functions.						
	5.1 Define Database Administrator.	Explain 5. – 5.3	-Textbooks			Outline the Responsibilities of Database Administrator
	5.2 Outline the Responsibilities of Database Administrator		-Journals			
	5.3 Outline the major functions of Database Administrator		-White board/Marker			
			Overhead projector			
General Objective 6.0: Know Database users						
	6.1 Define Database users	Explain 6.1 – 6.3	-Textbooks			Explain the roles of each Database users
	6.2 Identify various users of Database Management System:		-Journals			
	- Database designers		-White board/Marker			
			Overhead projector			

	- Database Administrators - Database End Users					
6.3	Explain the roles of each Database users stated in 6.2 above.					
General Objective 7.0: Understand data security and data recovery.						
	7.1 Explain Data Security 7.2 Explain Backup and Data Recovery/Data Salvage 7.3 Explain the strategies for Data Recovery: - Grand Father-Father-Son	Ex[plain 7.1 – 7.3	-Textbooks -Journals -White board/Marker - Overhead projector			Explain Backup and Data Recovery/Data Salvage

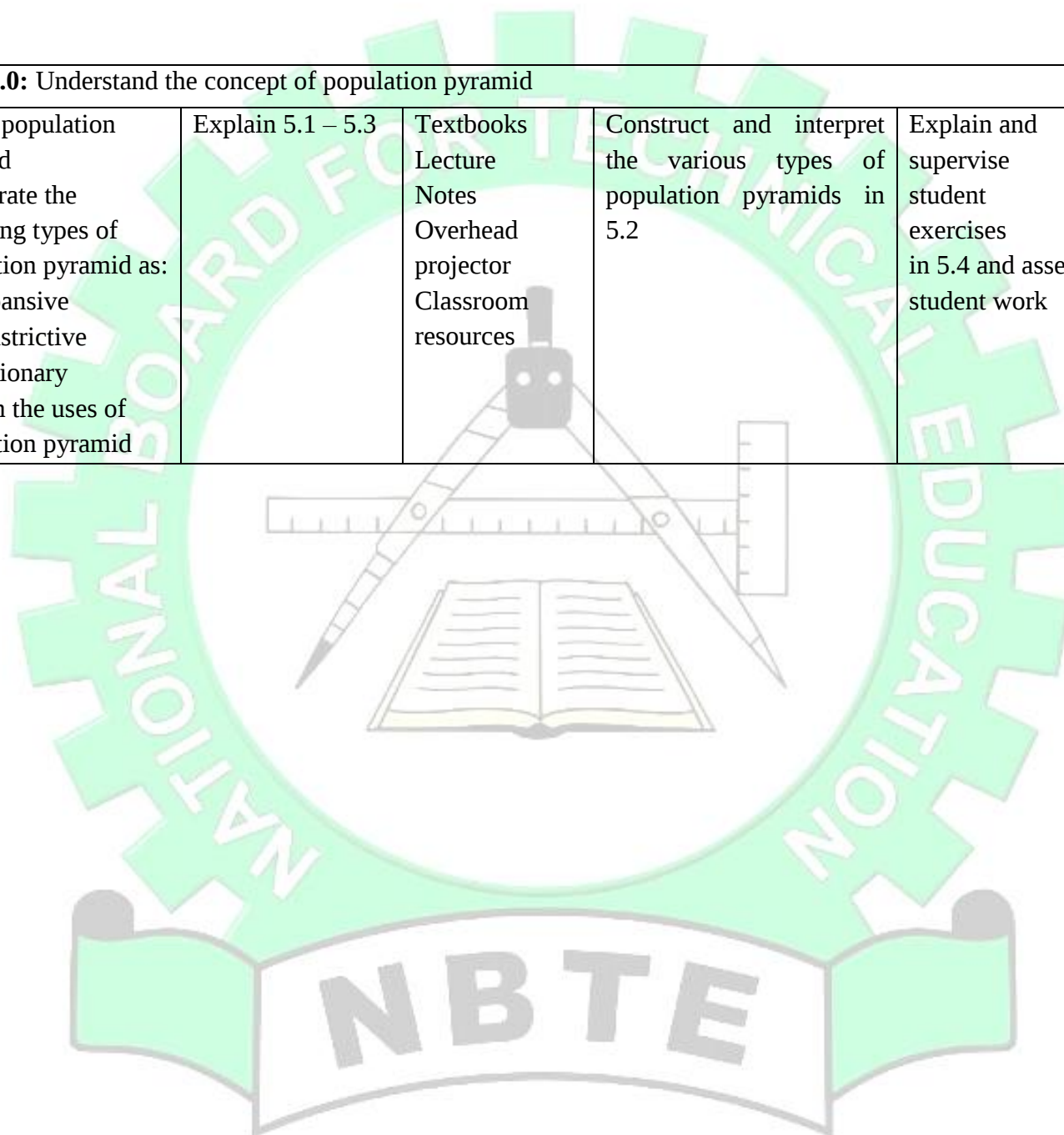
PROGRAMME:	HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE:	MEDICAL DEMOGRAPHY			
CODE:	HIS 213			
DURATION (Hours/Week) Lecture:	2hrs	Tutorial: 0	Practical: - 1	Total: 3 (45hrs/semester)
UNITS:	3			
GOAL:	This course is designed to enable students acquire knowledge and skills in medical demography			
GENERAL OBJECTIVES:On completion of this course, the student should be able to:				
1.0 Understand concepts and nature of demography.				
2.0 Understand basic measure of fertility, mortality and morbidity.				
3.0 Understand the concept of standardized rates.				
4.0 Understand the concept of life table.				
5.0 Understand the concept of population pyramid				

	1.5 Explain structure and composition of a population by i.e. - age - sex - social status - marital status - urban and rural 1.6 Explain the following: - ratios - rates - proportions - percentages					
General Objective 2.0: Understand basic measure of fertility, mortality and morbidity.						
	2.1 Differentiate between crude and specific rates. 2.2 Explain the following: - live birth - still birth - foetal deaths - mid-year population 2.3 Define the following fertility indices: - crude birth-rate - general fertility rate	Explain 2.1 – 2.5	Textbooks Lecture Notes Overhead projector			Explain: - live birth - still birth - foetal deaths - mid-year population

	- child woman ratio - age specific fertility rate - total fertility rate - cumulative fertility rate - complete fertility rate - parity rate - growth rates 2.4 Define the following mortality rates: - crude death rate - specific death rates - infant mortality rate - neonatal mortality rate - maternal mortality rate - child mortality rate - proportional mortality rate 2.5 Define the following morbidity rates - Incidence rate - Prevalence rate - Attack rate					
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	- Re- attack rate and - Case Fatality Rate					
General Objective 3.0: Understand the concept of standardized rates.						
	3.1 Define standardized rates 3.2 Differentiate between Crude rate and standardized rate 3.3 Distinguish between direct and indirect methods of standardization of rates	Explain 3.1 – 3.3	Textbooks Lecture Notes Overhead projector Secondary data from hospitals / clinics	Compute standardized rates using the methods in 3.3	supervise student exercises in 3.4 and assess student work	Explain between direct and indirect methods of standardization of rates
General Objective 4.0: Understand the concept of life table.						
	4.1 Define the mean expectation of life at birth 4.2 Outline the uses of a life table 4.3 Explain the types of life tables 4.4 Explain the basic components of a life table 4.5 Explain the limitations of a life table.	Explain 4.1 – 4.5	Textbooks Charts Overhead projector	Construct and interpret a life table	Explain and supervise student exercises in 4.6 and assess student work	Explain the basic components of a life table

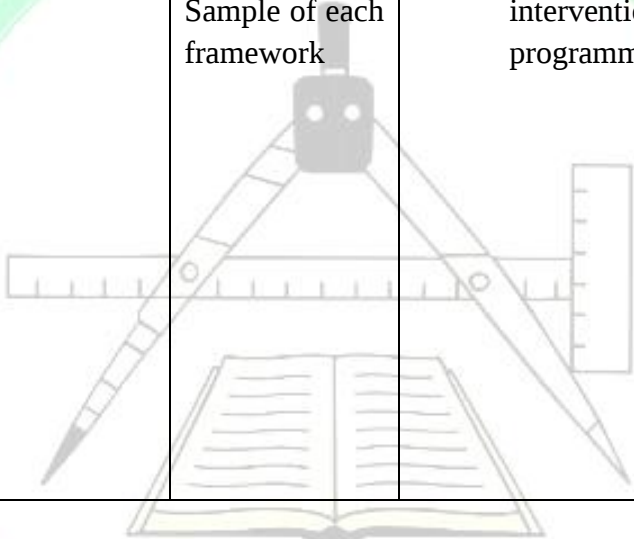
General Objective 5.0: Understand the concept of population pyramid						
	5.1 Define population pyramid 5.2 Enumerate the following types of population pyramid as: - expansive - constrictive - stationary 5.3 Explain the uses of population pyramid	Explain 5.1 – 5.3	Textbooks Lecture Notes Overhead projector Classroom resources	Construct and interpret the various types of population pyramids in 5.2	Explain and supervise student exercises in 5.4 and assess student work	Explain the uses of population pyramid



PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: MONITORING AND EVALUATION I			
CODE: HIS 214			
DURATION (Hours/Week) Lecture: 2hrs	Tutorial: 0	Practical: - 1	Total: 3 (45hrs/semester)
UNITS: 3			
GOAL: This course is designed to expose students to the knowledge of the principles and approaches of Monitoring and Evaluation (M&E) in health programmes			
GENERAL OBJECTIVES: On completion of this course, the student should be able to:			
1.0 Know the basic principles and scope of M&E 2.0 Understand monitoring and evaluation functions 3.0 Understand the rationale for an M&E plan 4.0 Know the main components of an M&E plan 5.0 Know types of M&E frameworks and their uses for programme planning			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE TITLE: MONITORING AND EVALUATION I				Course Code: HIS 214		Total: 3 (45hrs/semester)	
COURSE SPECIFICATION: Theoretical content : 0				Practical Content: 2			
General Objective 1.0: Know the basic principles and scope of M&E							
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation	
	1.1 Define: Monitoring, Evaluation, Activity, Programs 1.2 Outline the scope of M&E 1.3 Differentiate between Monitoring and Evaluation 1.4 State the importance of M&E to health programs	1.1 – 1.4	-white board/ marker -Projector -Handouts -Textbooks -charts -Sample of M&E plan			State the importance of M&E to health programs	
General Objective 2.0: Understand monitoring and evaluation functions							
	2.1 List the functions of M&E 2.2 Describe each function listed in 2.1. above 2.3 State the roles of HIM professionals in M&E activities	Explain 2.1 – 2.3	white board/ marker Projector Handouts Textbooks charts			State the roles of HIM professionals in M&E activities	
General Objective 3.0: Understand the rationale for an M&E plan							
	3.1 Describe M&E plans 3.2 State the rationale for	Explain 3.1 – 3.4	white board/ marker			Explain the rationale for an	

	M&E plans 3.3 State the functions of M&E plan by level of Health system 3.4 Explain the rationale for an M&E plan		Projector Handouts Textbooks Charts			M&E plan
General Objective 4.0: Know the main components of an M&E plan						
	4.1 List the components of an M&E plan 4.2 Describe each component listed in 4.1. above 4.3 Describe the structure of programs/projects 4.4 Outline steps for the construction of an M&E plan 4.5 Identify criteria for a good objective i.e. "SMART" 4.6 Differentiate between goal and objectives	Explain 4.1 – 4.6	white board marker Projector Handouts Textbooks Charts Sample of M&E plan Sample of SMART written	4.7 Design an M&E plan	Guide students to design an M&E plan	Explain steps for the construction of an M&E plan
General Objective 5.0: Know types of M&E frameworks and their uses for programme planning						
	5.1 Define frameworks	Explain 5.1 – 5.5	white board marker	5.6 Design goals and objectives for	Guide students to design goals,	Explain how frameworks are

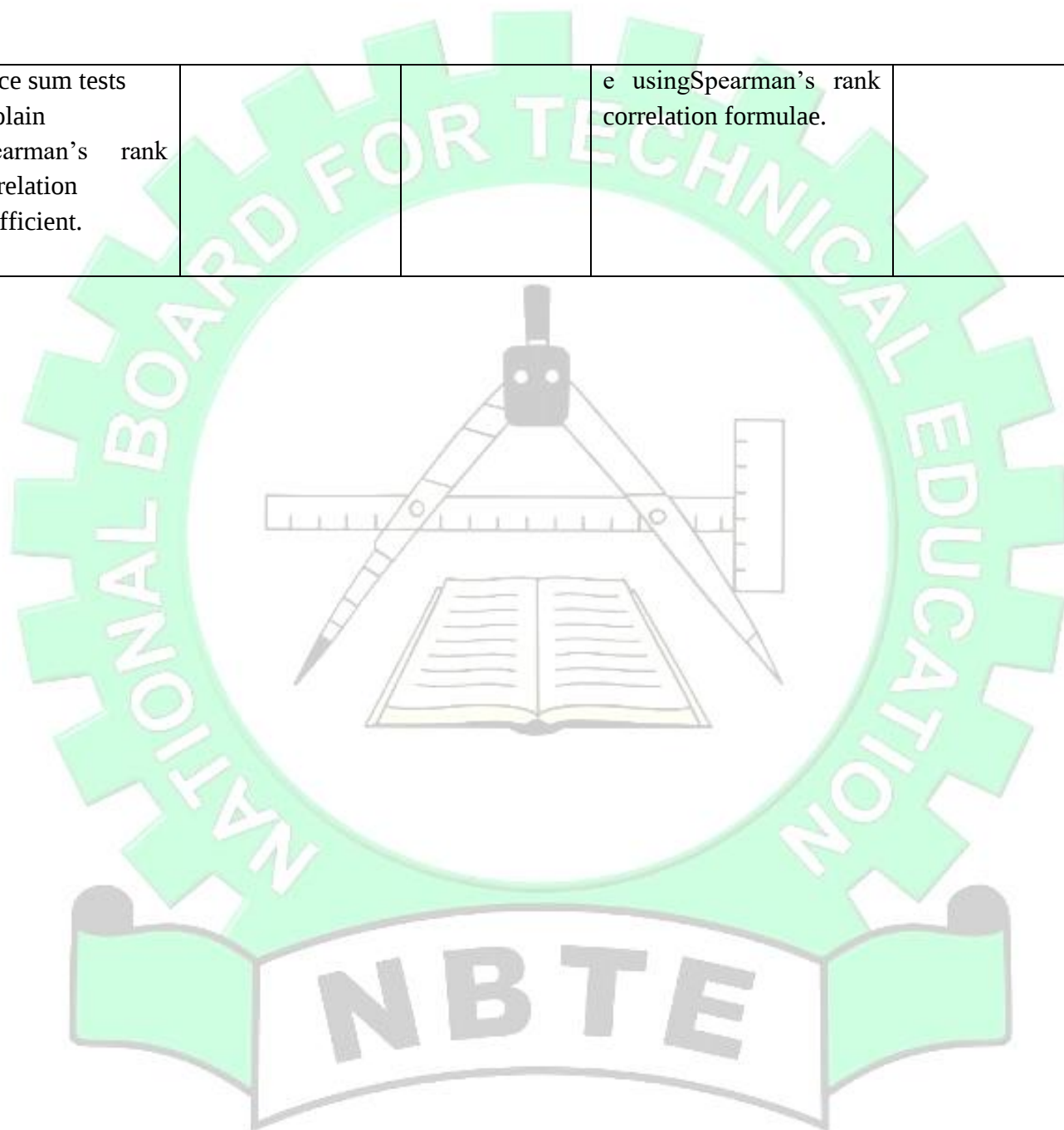
5.2	Identify the different types of frameworks: conceptual frameworks, results or logical frameworks, logic models etc.	Projector Handouts Textbooks Charts	5.7	specific intervention programs Design frameworks for specific intervention programmes	objective and frameworks	used for M&E planning
5.3	Differentiate between the frameworks listed in 5.2 above	 Sample of each framework				
5.4	State the functions of frameworks					
5.5	Explain how frameworks are used for M&E planning					

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)				
COURSE: APPLIED GENERAL STATISTICS				
CODE:		HIS 223		
DURATION (Hours/Week) Lecture: 2hrs	Tutorial: 0		Practical: - 1	Total: 3(45hrs/semester)
UNITS:		3		
GOAL: This course is designed to enable students to acquire knowledge of applied of statistics				
GENERAL OBJECTIVES: On completion of this course, the student should be able to: 1.0 Understand the theory of linear regression. 2.0 Understand association and correlation between two variables. 3.0 Understand simple contingency table (m x n). 4.0 Understand simple non-parametric tests.				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE: APPLIED GENERAL STATISTICS				Course Code: HIS 223		Total: 3 (45hrs/semester)	
COURSE SPECIFICATION: Theoretical content : 0				Practical Content: 1			
General Objective 1.0: Understand the theory of linear regression.							
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation	
	1.1 Explain the meaning of linear regression. 1.2 State and interpret a simple linear regression model. 1.3 Estimate the parameters of a regression equation using the free-hand methods and centroid method. 1.4 State the limitation of 1.3 above. 1.5 State the distribution of estimates of linear regression coefficients.	Explain 1.1 – 1.5	Textbooks Lecture Notes Statistical kit statistical table	Estimate the parameters of a regression equation by the methods of least square. Interpret the coefficients of linear regression. Construct confidence intervals for regression coefficients. Carry out tests of significance for regression coefficients.	supervise student exercises and assess student work	Estimate the parameters of a regression equation using the free-hand methods and centroid method.	
General Objective 2.0: Understand association and correlation between two variables.							
	2.1 Explain association between two variables. 2.2 Define and interpret correlation	Explain 2.1 – 2.4	Textbooks Lecture Notes	2.5 Test hypothesis for correlation coefficient. 2.6 Construct	Supervise student exercises in 2.5 and 2.6 and assess	Explain association between two variables	

	2.3 Distinguish between sample correlation coefficient (r) and population correlation coefficient ($\tilde{r}$). 2.4 Derive a formula for computing correlation coefficient (r).		Statistical kit statistical table	confidence intervals for $\tilde{n}$	student work	
General Objective 3.0:. Understand simple contingency table ($m \times n$)						
	3.1 Explain $m \times n$ contingency table. 3.2 State the assumptions underlining the use of the chi-square	Explain 3.1 – 3.2	Textbooks Lecture Notes Statistical kit statistical table	Prepare simple contingency table Compute expected values from contingency tables. Carry out tests for independence using chi-squared statistic.	Supervise student exercises in 3.3 – 3.5 and assess student work	State the assumptions underlining the use of the chi-square
General Objective 4.0:. Understand simple non-parametric tests.						
	4.1 Define non-parametric statistics 4.2 Distinguish between parametric and non-parametric statistics 4.3 Define the rank	Explain 4.1 – 4.4	Textbooks Lecture Notes	Apply the median test for solving simple problems Apply the Wilcoxon sign test for solving sample problems Apply rank space sum tests for solving one sample problems Compute the estimate of	Supervise student exercises in 4.5 – 4.8 and assess student work	Explain Spearman's rank correlation coefficient.

	4.4	space sum tests Explain Spearman's rank correlation coefficient.		e usingSpearman's rank correlation formulae.		
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PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: HUMAN ANATOMY AND PHYSIOLOGY II (INTERNAL ORGANS AND SYSTEMS)			
CODE: HIS 216			
DURATION (Hours/Week) Lecture: 1hrs	Tutorial: 0	Practical: - 2	Total: 3 (45hrs/semester)
UNITS: 3			
GOAL: This course is designed to enable the student acquire the knowledge of human internal organs and systems.			
GENERAL OBJECTIVES: On completion of this course, the student should be able to:			
1.0 Know the functions of the Internal Organs of man 2.0 Know the structure of the abdomen 3.0 Know the urinary system 4.0 Know the structure of the skin 5.0 Know the endocrine system 6.0 Know hormones and their actions			

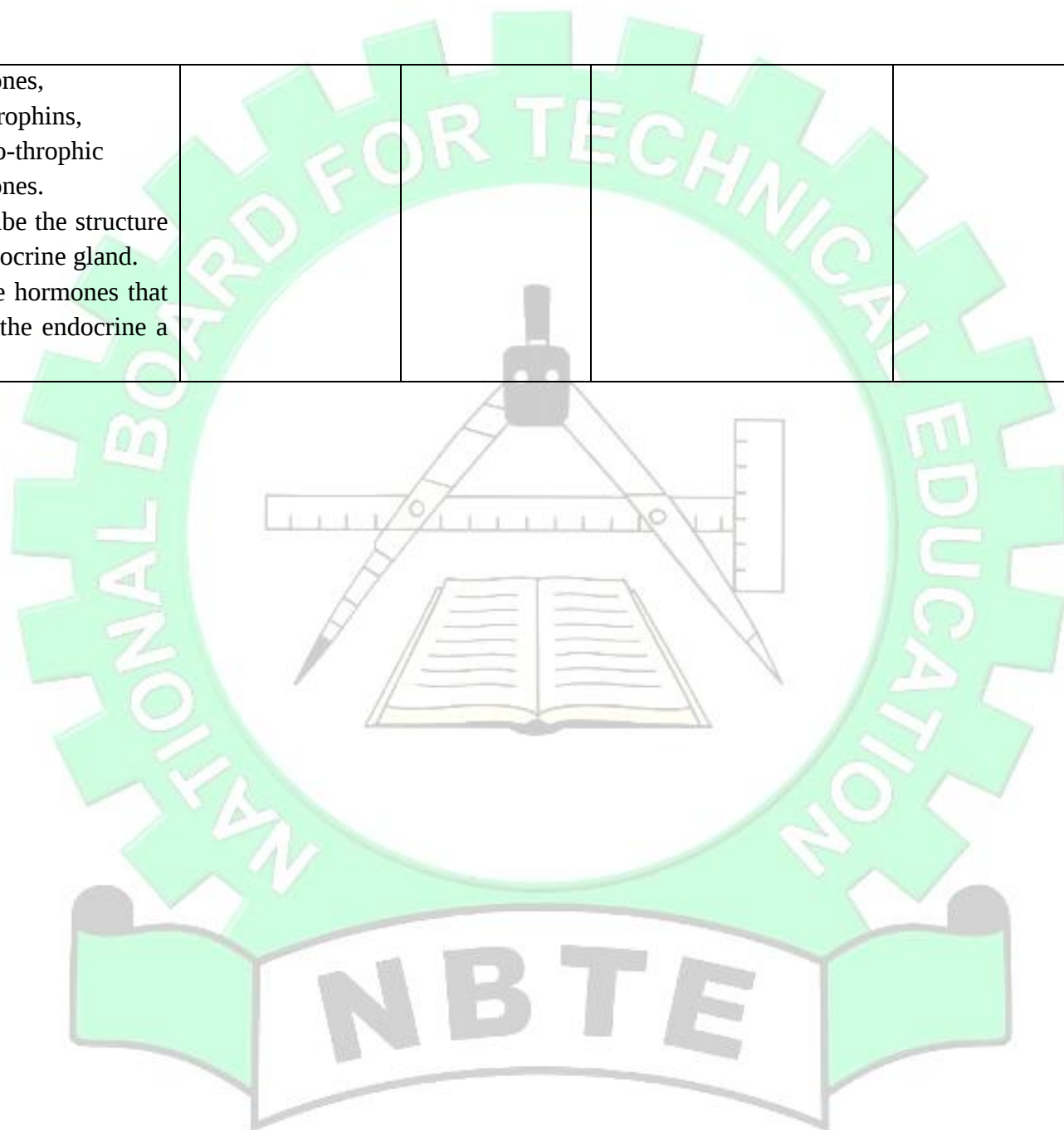
PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE: HUMAN ANATOMY AND PHYSIOLOGY II (INTERNAL ORGANS AND SYSTEMS)				Course Code: HIS 216		Total: 3 (45hrs/semester)		
COURSE SPECIFICATION: Theoretical content : 0				Practical Content: 2				
General Objective 1.0: Know the functions of the Internal Organs of man								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 Define digestive system		Explain 1.1 – 1.10	[Chart/Picture	Use model to identify various parts of the digestive system		Guide and supervise students to carry out the activities in 1.11 and 1.12	Explain the process of digestion and absorption of foods: fats, proteins and carbohydrates in the intestine.
	1.2 Describe the structure of digestive system i.e. Alimentary canal i.e. mouth, Oesophagus, stomach, intestines, anus.			Simulators and models	Locate areas of possible disorder.			
	1.3 Identify the enzymes present in the digestive system.							
	1.4 Explain the process of digestion and absorption of foods: fats, proteins and carbohydrates in							

	the intestine.					
1.5	List the basic principles of gastro-intestinal absorption.					
1.6	Explain nutrition to the body metabolism.					
1.7	Explain basic metabolic rate, diet and calorific values.					
1.8	List gastrointestinal disorder e.g. disorders of swallowing and of the oesophogys, disorders of the stomach e.g. peptic ulcer, etc.					
1.9	List the disorders of the small and large intestine e.g. diarrhea, constipation, etc.					
1.10	List the general					

	disorders of the gastrointestinal tract i.e. vomiting nausea					
General Objective 2.0: Know the structure of the abdomen						
2.1	Describe the abdominal and pelvic regions.	Explain 2.1 – 2.3	Models	Use model or preserved specimen to locate the various parts of the stomach.	Guide and supervise student to perform the task in 2.4	Describe the structure and functions of the liver and pancreas
2.2	Describe the structure of the abdomen i.e. peritoneum, stomach and intestine.					
2.3	Describe the structure and functions of the liver and pancreas					
General Objective 3.0: Know the urinary system						
3.1	Define the urinary system.	Explain 3.1 – 3.3	Models	3.4 Use model to identify parts and explain functioning of the urinary system.	Guide and supervise student to perform the task in 3.4	Describe the general disposition of the organs of excretion
3.2	Describe the general disposition of the organs of excretion e.g. kidneys, urethras, urinary bladder.					
3.3	Describe process of excretion by the					

	urinary system.					
General Objective 4.0: Know the structure of the skin						
	4.1 Describe the structure of the skin. 4.2 List the functions of the skin. 4.3 Explain the process of absorption on the skin. 4.4 Explain excretion through the skin.	Explain 4.1 – 4.4	Models	Identify the various parts of the skin using models.	Guide and supervise student to perform the task in 4.5	Explain the process of absorption on the skin
General Objective 5.0: Know the endocrine system						
	5.1 Explain the endocrine system structure. 5.2 Describe the structure of the endocrine system with emphasis on pituitary gland, pineal body, thymus, parathyroid glands etc. 5.3 Explain the function of the endocrine system.	Explain 5.1 – 5.3	Models	Locate the glands mentioned in 5.2 on a model	Guide students to locate the glands on a model	Explain the endocrine system structure
General Objective 6.0: Know hormones and their actions						
	6.1 Define hormones 6.2 List some hormones in the body system e.g. growth	Explain 6.1 – 6.4		Locate the glands that produce the hormones listed in 6.2 on a model.	Guide students to locate hormones on a model	Describe the structure of endocrine

	hormones, thyrotrophins, cortico-throphic hormones. 6.3 Describe the structure of endocrine gland. 6.4 List the hormones that act on the endocrine a glands					gland
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PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: INTRODUCTION TO MEDICAL SOCIOLOGY			
CODE: GNS 213			
DURATION (Hours/Week) Lecture: 3hrs	Tutorial: 0	Practical: - 0	Total: 3 (45hrs/semester)
UNITS: 3			
GOAL: This course is designed to introduce students to the relationship between Sociology and Medicine and the application of the general concepts of Sociology in the health care delivery system in Nigeria and enable the students to understand the societal response to illness			
GENERAL OBJECTIVES: On completion of this course, the student should be able to: 1.0 Understand the social and cultural aspects of medicine. 2.0 Understand the causes and family/societal response to illness. 3.0 Understand the relationship between societal class and illness. 4.0 Understand the complementary nature of the practice of modern and traditional medicine. 5.0 Understand the roles and relationship between health practitioners and their clients. 6.0 Understand the general principles of social planning as it affects health care delivery system in Nigeria. 7.0 Understand causes and effects of mental disorder. 8.0 Identify the societal effects of high infant mortality. 9.0 Understand the societal effects of maternal mortality. 10.0 Understand the present socio-cultural medical problems in Nigeria today.			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)							
COURSE: INTRODUCTION TO MEDICAL SOCIOLOGY				Course Code: GNS 213		Total: 3 (45hrs/semester)	
COURSE SPECIFICATION: Theoretical content : 0				Practical Content: 2			
General Objective 1.0: Understand the social and cultural aspects of medicine.							
Week	Specific Learning Outcomes	Teachers Activities	Learning Resources	Specific Learning Outcomes	Teachers Activities	Evaluation	
	1.1 Define the nature and scope of medical sociology. 1.2 Define the concepts of "health" and "ill-health" 1.3 Analyse the social and cultural implication of ill-health.	Explain 1.1 – 1.3	Chart/Picture Simulators and models			Explain the concepts of "health" and "ill-health"	
General Objective 2.0: Understand the causes and family/societal response to illness.							
	2.1 Identify the causes for the following tropical diseases. E.g. bilharzias, chronic malaria, sleeping sickness, river blindness, poliomyelitis,	Explain 2.1 – 2.2	Chart/Picture Simulators and models			Explain the causes of the following tropical diseases. E.g. bilharzias, chronic malaria,	

	sickle cell anemia, conjunctivitis, worm infestation, kwashiorkor, hepatitis, cardiovascular diseases, diabetes, hypertension, mental illness. 2.2 Justify family/societal response to each disease in 2.1				sleeping sickness, river blindness, poliomyelitis,
General Objective 3.0: Understand the relationship between societal class and illness.					
	3.1 Categorise diseases into disease of affluence and disease of poverty. E.g. hypertension, cardiovascular disease, diabetes, stroke, obesity, kwashiorkor, hypertension, tuberculosis, kidney diseases. 3.2 Explain the relationship between social class and the	Explain 3.1 – 3.2	Models		Explain the relationship between social class and diseases

	diseases in 3.1 above					
General Objective 4.0: Understand the complementary nature of the practice of modern and traditional medicine						
	4.1 Describe the socio-cultural settings of modern health institution. 4.2 Describe characteristics unique to traditional health institution. 4.3 Evaluate the best method of health care delivery using modern hospitals, health centres, dispensaries as points of reference	Explain 4.1 – 4.3	Models			Explain characteristics unique to traditional health institution.
General Objective 5.0: Understand the roles and relationship between health practitioners and their clients.						
	5.1 Analyse the doctor-patient relationship 5.2 Evaluate the doctor-nurse relationship and nurse-patient relationship 5.3 Identify the roles of the hospital administrator and the practitioner	Explain 5.1 – 5.3	Models			Explain the roles of the hospital administrator and the practitioner

General Objective 6.0: Understand the general principles of social planning as it affects health care delivery system in Nigeria.					
6.1 Describe the pattern of health care delivery in Nigeria.	6.2 Explain the Federal Government policies on health education, family planning, housing, water supply, water disposal, preventive/curative medicine, rehabilitation.	6.3 Compare the reality with the ideal proposed	Explain 6.1 – 6.3	Models	Explain the Federal Government policies on health education
General Objective 7.0: Understand causes and effects of mental disorder.					
7.1 Define a psychiatric day hospital.	7.2 Describe the Organisation of a psychiatric hospital.	7.3 Examine the development of neuro-mental hospitals in Nigeria.	7.4 Explain the	Explain 7.1 – 7.4	Models
Examine the development of neuro-mental hospitals in Nigeria.					

	advantages and disadvantages of the psychiatric day hospital. 7.5 Analyse the social responses to mental illness in Nigeria				
General Objective 8.0: Identify the societal effects of high infant mortality.					
	8.1 Enumerate the effects of the following infant diseases on the society: cerebral malaria, ancylostomiasis, measles, pertussis, meningitis, tuberculosis, prema-turity, septicaemia poliomyelitis. 8.2 Identify the causes of these diseases in 8.1. above. 8.3 Outline the methods of eradicating the diseases.	Explain 8.1 – 8.3	Models		Explain the causes of these diseases
General Objective 9.0: Understand the societal effects of maternal mortality.					
	9.1 Analyse the 12th	Explain 9.1 – 9.4	Models		Explain the

	axiom in relation to Nigerian ante-natal care. - medical care and the local culture are closely linked. 9.2 medical care must be carefully adapted to the opportunities and limitations of the local culture. 9.3 where possible, medical services should do what they can to improve the non-medical aspects of a culture in the promotion of a “Better life” 9.4 Identify the causes of post-natal death, e.g. haemorrhage, toxemia, infection, rupture of the uterus.					causes of post-natal death
General Objective 10.0: Understand the present socio-cultural medical problems in Nigeria today.						
	10.1 Describe the present health pattern in Nigeria, utilizing	Explain 10.1 – 10.4	Models			Explain the problems associated with

	current WHO reports and newspaper articles. 10.2 Analyse the current health problems and their solutions, per available current sources. 10.3 Identify the problems associated with the over-emphasis on curative rather than preventive medicine. 10.4 Analyse the prospects of the Expanded Programme on Immunisation (EPI) and Oral Rehydration					the over-emphasis on curative rather than preventive medicine.
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GNS 228: RESEARCH METHODS

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)				
COURSE: RESEARCH METHODS				
CODE: GNS 228				
DURATION (Hours/Week)	Lecture:	Tutorial: 0	Practical: - 0	Total: 2 (30hrs/semester)
2hrs				
UNITS: 2				
GOAL:				
GENERAL OBJECTIVES: On completion of this course, the student should be able to:				
1.0 Understand the meaning and scope of a library. 2.0 Know how to use a library 3.0 Know what a research is and how to carry it out 4.0 Understand basic principles of probability 5.0 Understand the use and importance of some measures of central tendency and measures of dispersion in summarising data 6.0 Know the methodology applied in research 7.0 Know the various methods of data collection 8.0 Know the various methods of processing data 9.0 Understand the presentation of research report.				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE: RESEARCH METHODS					Course Code: GNS 228		Total: 2 (30hrs/semester)	
COURSE SPECIFICATION: Theoretical content : 0					Practical Content: 2			
General Objective 1.0: Understand the meaning and scope of a library.								
Week	Specific Outcomes	Learning Activities	Teachers Activities	Learning Resources	Specific Outcomes	Learning Activities	Teachers Activities	Evaluation
	1.1 Explain a Library 1.2 Explain the role of a library in learning and research 1.3 State the various kinds of library stock. 1.4 Identify the different sections of a typical library. 1.5 Explain the different types of libraries.							
General Objective 2.0: Know how to use a library								
	2.1 Explain classification. 2.2 Explain the different types of classification scheme (DDC and LC). 2.3 Identify reference sources. 2.4 Identify types of serials.							

	2.5 Explain indexing and abstracting. 2.6 Describe the use of card catalogues. 2.7 Explain back of book indexes. 2.8 Describe how the library is used in research					
General Objective 3.0: Know what a research is and how to carry it out						
	3.1 Define the following terms: Research, scientific method, theory, hypotheses. 3.2 Describe various types of research e.g. descriptive, exploratory. casual, experimental and comparative. 3.3 Explain the stages of a research 3.4 Formulation of a research problem - Hypothesis - Justification of the research - Data collection					

	and analysis Findings etc.					
General Objective 4.0: Understand basic principles of probability						
	4.1 Define random variable 4.2 Explain the concept of randomness 4.3 Define probability 4.4 State the laws of probability 4.5 Define conditional probability 4.6 Solve simple problems involving the laws of probability as they relate to their disciplines.					
General Objective 5.0: Understand the use and importance of some measures of central tendency and measures of dispersion in summarising data						
	5.1 Define arithmetic mean, geometric mean, median mode and harmonic mean. 5.2 Compute the measures in 5.1 above given: - (a) ungrouped data - (b) grouped data 5.3 Explain the uses of					

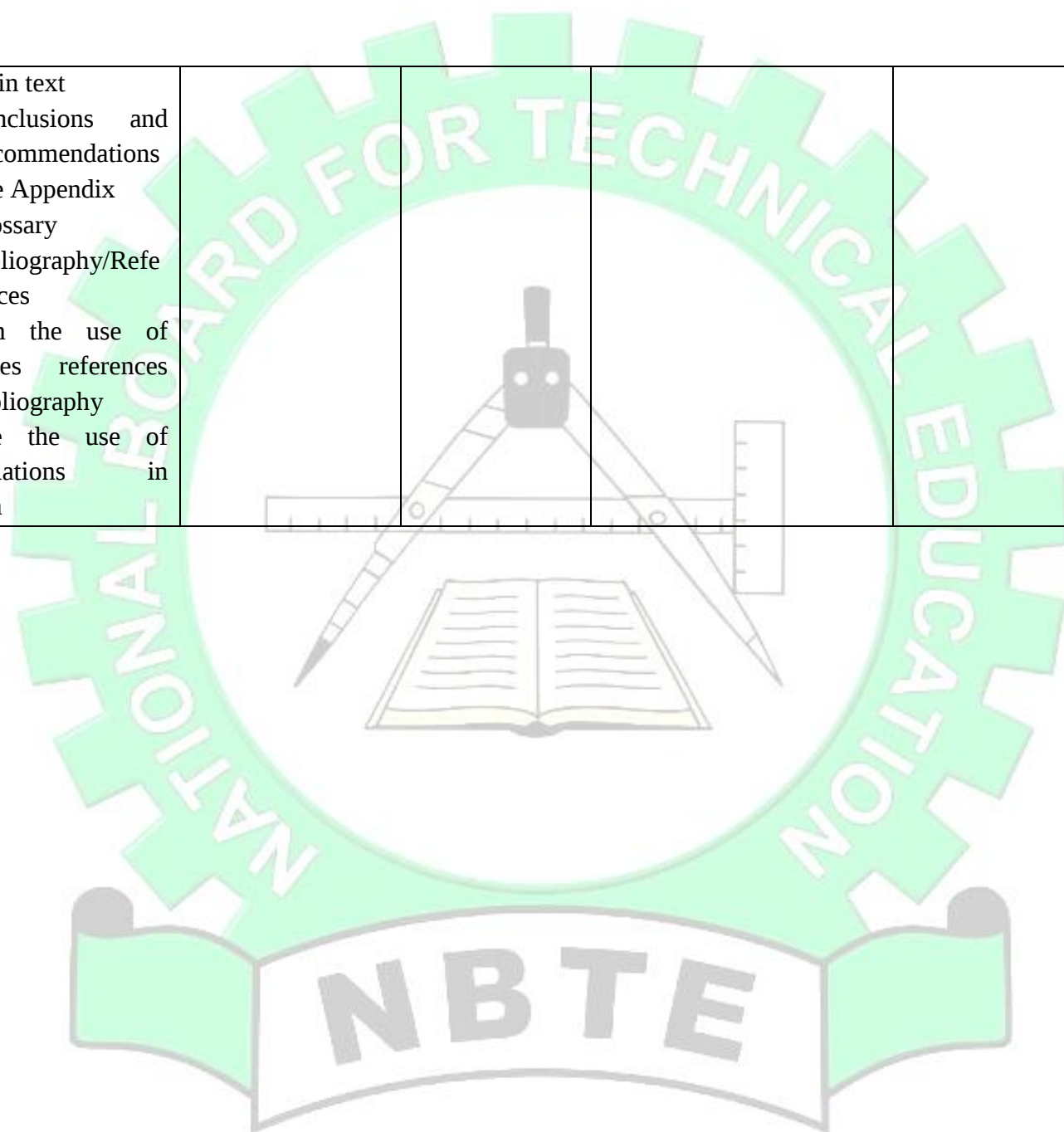
	geometric and harmonic mean Calculate the following, given a set of data: - quartiles - deciles - percentiles 5.5 List the merits and demerits of the above measures of central tendency 5.6 Define measures of dispersion 5.7 State the importance of the measures of dispersion 5.8 Calculate - The mean deviation - Semi Interquartile range - Variance and standard deviation 5.9 Explain the application of the measures of deviation defined in 5.6 above					
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	5.10 Calculate the measures of the dispersion listed in 5.8 given sets of data in their disciplines.					
General Objective 6.0: Know the methodology applied in research						
	6.1 Explain the two major types of sampling - probability sampling e.g. random, systematic, stratified and clusters - Non-probability sampling, e.g. accidental, quotas and purposive. 6.2 Explain the uses of sampling in their disciplines 6.3 State the advantages and disadvantages of 6.2 (a) and 6.2 (b) above.					
General Objective 7.0: Know the various methods of data collection						
	7.1 Define data 7.2 State the types of data:					

	- primary, and - secondary data 7.3 Explain the methods of collecting data e.g. observation, questionnaire, interview 7.4 Describe how to design questionnaires for research in their disciplines 7.5 Explain how to administer questionnaires and interview. 7.6 Design sample questionnaires for research in their disciplines 7.7 Administer the questionnaires in 7.6 above					
General Objective 8.0: Know the various methods of processing data						
	8.1 Explain organization of data. 8.2 Explain the grouping of data 8.3 Explain tabulation of					

	data 8.4 Analyse the data result obtained in 7.6 above 8.5 Present the result of the analysis in 8.4 above					
General Objective 9.0: Understand the presentation of research report.						
	9.1 Explain the general format of a research report, e.g. - Preliminaries e.g. preface and foreword - Approval page - Title page - Dedication - Acknowledgement - Table of contents - List of illustrations e.g. maps/pictures, diagrams, figures and tables - Introduction - Aims and Objectives - Limitations and Delineations					

	- Main text - Conclusions and Recommendations - The Appendix - Glossary - Bibliography/References					
	9.2 Explain the use of footnotes references and bibliography					
	9.3 Outline the use of abbreviations in citation					



YEAR II SEMESTER II

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: ELECTRONIC HEALTH RECORDS I			
CODE: HIM 221			
DURATION (Hours/Week) Lecture: 1hrs	Tutorial: 0	Practical: - 1	Total: 2 (30hrs/semester)
UNITS: 2			
GOAL: This course is designed to enable students acquire basic knowledge and skills for the application of Electronic Health Records			
GENERAL OBJECTIVES: On completion of this course, the student should be able to: 1.0 Understand the concepts of Electronic Health Records 2.0 Know the basic components/modules of Electronic Health Records 3.0 Know how to determine the right hardware for Electronic Health Records 4.0 Understand the various ICT techniques required for implementing Electronic Health Records 5.0 Know how to apply Entity Relationship model for design of health records/documents 6.0 Know how to use Electronic Health Records in Health Information Management processes /activities			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE: ELECTRONIC HEALTH RECORDS I				Course Code: HIM 221		Total: 2 (30hrs/semester)		
COURSE SPECIFICATION: Theoretical content: 0				Practical Content: 1				
General Objective 1.0: Understand the concepts of Electronic Health Records								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 Define Electronic Health Records		Explain 1.1 – 1.8	white board/ marker				\Explain the following terminologies: - Patient Medical Records
	1.2 Outline an overview of the solution of Electronic Health Records			Projector Handouts Textbooks charts				
	1.3 List the various examples of Electronic Health Records:							
	- Careware							
	- Open MRS							
	- OpenEHR							
	- Vista							
	- Meditec							
	- Epic e.t.c.							
	1.4 Explain the following terminologies:							
	- Patient Medical							

	- Records - Electronic Medical Record (EMR) - Integrated Electronic Health Record - Clinical Decision support system - Artificial Intelligence - Neural Networks					
1.5	List the functions of an Electronic Health Record					
1.6	State factors that may hinder the implementation of an Electronic Health Records					
1.7	Explain the Basic Features of some selected Electronic Health Records					
1.8	Identify Potential Benefits of Electronic Health Records					

General Objective 2.0: Know the basic components/modules of Electronic Health Records						
	2.1 List the basic components of an Electronic Health Record: - Health Records - Diagnoses - E-Prescriptions - Dispensary - Laboratory - Radiology - Account/Billing - Health Resources Management - Store and Procurement, Etc 2.2 Explain how Electronic Health Records can be applied in each of the components listed in 2.1 above	Explain 2.1 -2.2	Sample of indicators	Give Graphical representation of how information flows between the various components listed in 2.2 above	Guide students to design indicators	Explain how Electronic Health Records can be applied in each of the components listed in 2.1 above
General Objective 3.0: Know how to determine the right hardware for Electronic Health Records						
	3.1 Define Hardware 3.2 List hardware devices that can be used as workstations/	Explain 3.1 – 3.7	white board/ marker Projector Handouts Textbooks	Identify the various hardware listed in the 3.2 and 3.6	Guide students Samples of hardware devices listed in 3.2 and 3.6	Explain the purpose and functions of workstation in Electronic

	client in an EHR 3.3 Enumerate the factors to be considered when selecting an EHR 3.4 Explain the purpose and functions of workstation in Electronic Health Records 3.5 Define Servers 3.6 List the common server platforms: - Window Servers - Linux Servers - Unix Servers etc 3.7 Define the concept of Backup in an Electronic Health Record System		charts			Health Records
General Objective 4.0: Understand the various ICT techniques required for implementing Electronic Health Records						
	4.1 Explain the concept of portals, web services, cloud computing, client/ server techniques, centralized and decentralized	Explain 4.1	white board marker Projector Handouts Textbooks Charts	4.2 Surf the internet with reference	Guide student on the activity in 4.2	Explain the concept of portals, web services, cloud computing, client/ server

	systems					techniques, centralized and decentralized systems
General Objective 5.0: Know how to apply Entity Relationship model for design of health records/documents						
5.1	Define entity relationship models	Explain 5.1 – 5.4	white board marker Projector Handouts Textbooks Charts Internet	Use Entity Relationship to model the various NHMIS forms and other forms in hospitals Use Microsoft Access to design forms and reports for the Entity Relationship model in 5.5 above Use Microsoft Access or MYSQL to - Insert Record - Select Record - Update Record - Delete Record - Search/Sort Record	Guide student in installation of MYSQL Database Management System.	Explain the fundamentals of Relational Database Management System:
5.2	Explain the concept of entity relationship model					
5.3	Explain the fundamentals of Relational Database Management System: - MYSQL - PostGre - Oracle - SQL Server etc					
5.4	Explain the following concepts: - Primary keys - Secondary keys - Foreign keys - Tables					

	- Records - Views - Stored procedures					
General Objective 6.0: Know how to use Electronic Health Records in Health Information Management processes /activities						
6.1	Define Electronic health records software	Explain 6.1 – 6.4	Classroom resources	Demonstrate the DEMO version of OpenEMR online	Guide student to carry out the tasks in 6.5 and 6.6	Explain Ethical / Legal issues as it relates to Open Source / Commercial Software
6.2	List examples of electronic health records softwares		Computer Lab	Download and setup any of the available open source Electronic Health Records on a local computer		
6.3	Explain the concept of Open source / Commercial Software		Internet MYSQL APACHE PHP Interpreter			
6.4	Explain Ethical / Legal issues as it relates to Open Source / Commercial Software					

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: HOSPITAL STATISTICS			
CODE: HIM 222			
DURATION (Hours/Week) Lecture: 1hrs	Tutorial: 0	Practical: - 1	Total: 2 (30hrs/semester)
UNITS: 2			
GOAL: This course is designed to enable the student acquire the knowledge of some elements of hospital statistics.			
GENERAL OBJECTIVES: On completion of this course, the student should be able to:			
1.0 Understand concept of Hospital Statistics 2.0 Know types of Hospital Statistics 3.0 Understand terms used for reporting hospital bed utilization activities. 4.0 Know procedure for obtaining data on hospital bed utilization 5.0 Understand concept of hospital bed utilization statistics 6.0 Understand the computation of hospital bed utilization rates 7.0 Understand other events and units for measuring hospital bed utilization activities 8.0 Understand hospital activity analysis 9.0 Understand other common hospital percentages and rates			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE: HOSPITAL STATISTICS				Course Code: HIM 222		Total: 2 (30hrs/semester)		
COURSE SPECIFICATION: Theoretical content : 0				Practical Content: 1				
General Objective 1.0: Understand concept of Hospital Statistics								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 Define hospital statistics 1.2 Outline the history of hospital statistics 1.3 Explain the importance of hospital care data. 1.4 List components of hospital statistics. 1.5 Define the following: - Inpatient - Inpatient hospitalization - Outpatient - Emergency/casualty patient - Ambulatory patient. - Admitted patient - Inpatient		Explain 1.1 – 1.7	Data collection forms, registers				Explain the importance of hospital care data.

	- discharged - Death - Separation - Referred - Transferred - Birth. - Hospital catchment area					
	1.6 List various types of events e.g. Treatment, counseling, advice, operation, ancillary care					
	1.7 1.6 Explain episode of care.					
General Objective 2.0: Know types of Hospital Statistics						
	2.1 Outline the types of data available at the following units: - General Out-Patient Department (GOPD) - Consultative Out-Patient Department	Explain 2.1 – 2.7	Classroom resources			Explain the use of outpatient and inpatient statistics

	(COPD) - Auxiliary Clinics/ Services 2.2 Distinguish between Out and In-patient statistics 2.3 Enumerate the sources of outpatient statistics 2.4 Explain the use of outpatient statistics 2.5 Outline the types of Inpatient data 2.6 Explain the use of Inpatient statistics 2.7 Enumerate the sources of Inpatient statistics					
General Objective 3.0: Understand terms used for reporting hospital bed utilization activities.						
	3.1 Explain the following bed utilization terms: - Bed - Inpatient bed - Patient day - Day patient - Day case - Inpatient day	Explain 3.1 – 3.4	Classroom resources			Explain the distinction between occupied bed- days and discharged patient days

	- Daily Bed census - Bed counts - hospital capacity - bed compliment 3.2 Describe the following types of beds: - emergency service department bed - labour bed - newborn bed (bassinets) 3.3 Explain reasons for not regarding beds in 3.2 as beds compliments 3.4 Explain the distinction between occupied bed-days and discharged patient days.					
General Objective 4.0: Know procedure for obtaining data on hospital bed utilization						
4.1	Explain bed capacity as determinant of an hospital size	Explain 4.1 – 4.12	Classroom resources	Complete the daily bed statement and other reporting forms	Take students through the process of completing the daily bed	Explain procedures for completing the daily bed statement
4.2	Explain bed as unit		Inpatient data			

	for measuring utility of hospital resources		Bed statement and other reporting forms		statement and other reporting forms	
4.3	Define hospital bed count					
4.4	Explain the concept of hospital daily bed census					
4.5	Describe the daily bed statement					
4.6	Explain the components of the daily bed statement.					
4.7	Explain procedures for completing the daily bed statement.					
4.8	Outline reasons for taking bed census at 12 mid-night					
4.9	Define a ward clerk					
4.10	Describe the functions of a ward clerk					
4.11	Explain the					

	relationship between the health record department and the ward nursing sister				
4.12	4.12 Explain the procedure for analysing bed summary sheet				
General Objective 5.0: Understand concept of hospital bed utilization statistics					
	5.1 Explain the concept of measuring hospital bed utilization 5.2 List the units for computation of hospital bed utilization as follows: - Available bed - Bed complement - Bed capacity - Occupied bed - Vacant bed - Bed days - Available bed-days - Occupied bed-days - Vacant bed-days - Temporary bed	Explain 5.1 – 5.7	Classroom resources		List the units for computation of hospital bed utilization as follows: - Available bed - Bed complement - Bed capacity - Occupied bed - Vacant bed - Bed

	- Temporary bed-days - Discharged patient days - Closed beds and closed bed-days 5.3 Explain how to derive the units in 5.2 above 5.4 List the following basic hospital bed utilization rates: - percentage of occupancy - turn over interval - mean length of stay - turnover per bed - vacancy rate 5.5 Define the bed utilization rates in 5.4 above 5.6 Explain the alternative names for the following rates: - percentage of occupancy also as "bed occupancy					- days - Available bed-days - Occupied bed-days - Vacant bed-days - Temporary bed - Temporary bed-days - Discharged patient days - Closed beds and closed bed-days
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	rate” - mean length of stay also as “average length of stay” - turnover per bed also as “throughput” 5.7 Describe the use of the rates in 5.4 above					
General Objective 6.0: Understand the computation of hospital bed utilization rates						
6.1 Explain the concept of a rate, ratio and percentages 6.2 Describe the formulae for computing the following bed utilization rates: - percentage of occupancy - turn over interval - mean length of stay - turnover per bed 6.3 List the data required for computing the rates in 6.1 above	Explain 6.1 – 6.7	Classroom resources Raw data from wards	6.9 Compute rates and percentages	Assist students in the computation of bed rates and percentages	Explain why a variation in one rate may cause variation in the other rates	

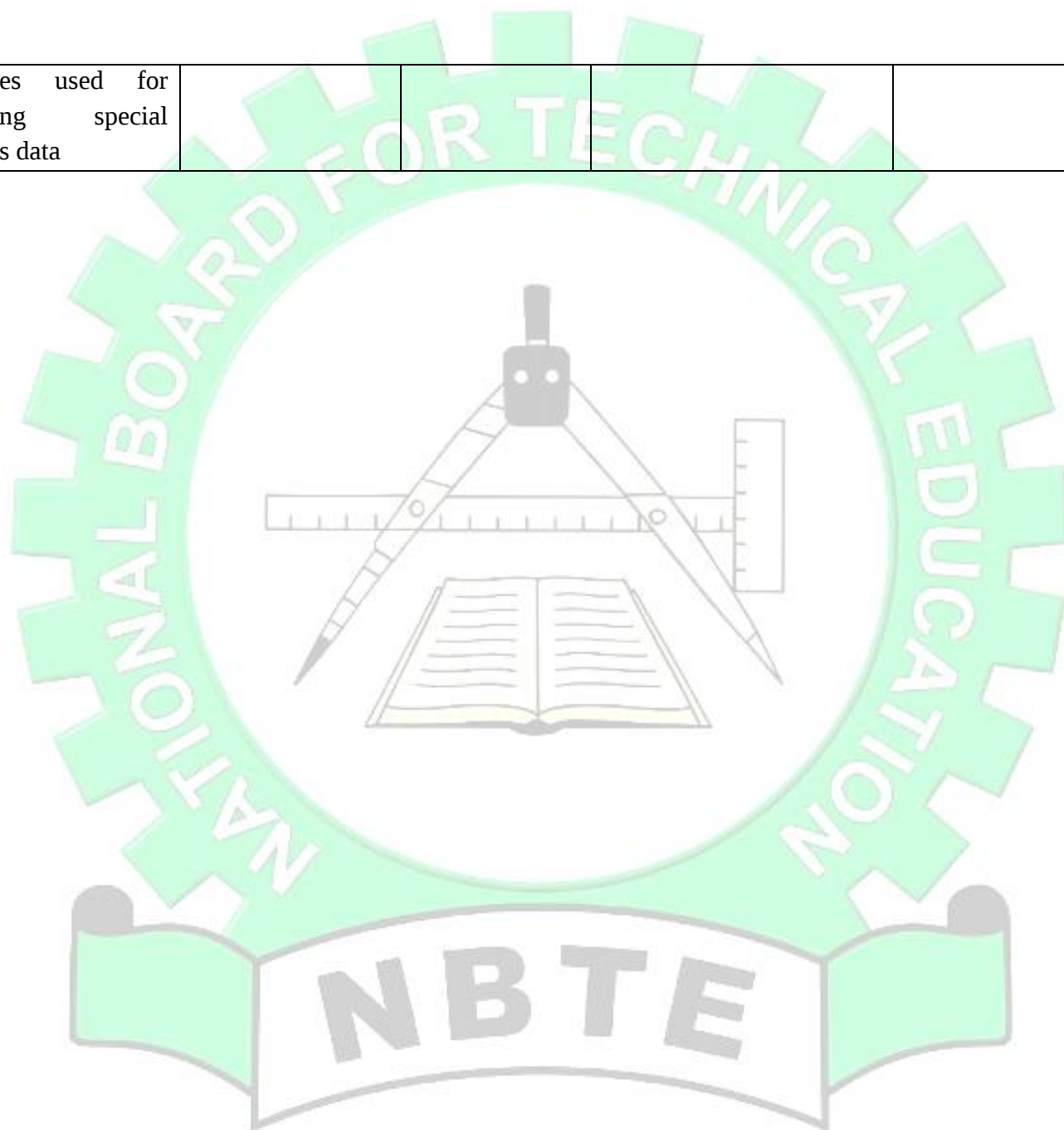
	4 Describe the procedure for computing the rates in 6.1 above 6.5 Explain the inter-relationship between the rates in 6.1 above 6.6 Describe the process of computing the rates in 6.1 above based on the interrelationship of 6.5 6.7 Explain why a variation in one rate may cause variation in the other rates in 6.2 above 8 Explain the determining factors of the rates listed in 6.2 above					
General Objective 7.0: Understand other events and units for measuring hospital bed utilization activities						
	7.1 Define hospital utilization 7.2 Describe the following measures of	Explain 7.1 – 7.7	Classroom resources	Compute bed rates and percentages for each of the measures in 7.2	Assist students in the computation of rates and percentages as	Explain methods of reducing bed wastage

	hospital utilization: - volume of hospital utilization - Characteristics of individual utilizing hospital - Efficiency of hospital utilization - Effectiveness of hospital utilization 7.3 Describe rates computed for each of the measures in 7.2 7.4 Define waste in hospital bed usage 7.5 Explain factors responsible for wastage in use of beds 7.6 Explain methods of reducing bed wastage 7.7 Explain hospital capacity planning		Raw data from wards		required in 7.8	
General Objective 8.0: Understand hospital activity analysis						
8.1	Define hospital	Explain 8.1 – 8.8	Classroom	8.9	Analysis hospital	Guide Students Explain uses of

	discharge analysis	resources	activity data	on the task	hospital
8.2	Explain types of hospital discharge analysis for daily, weekly, monthly, annually, etc.	Data from clinics and wards		required in 8.9	activity analysis.
8.3	Describe cost-efficiency analysis of hospital beds				
8.4	List types of discharge analysis				
8.5	Outline the contents of discharge analysis				
8.6	Explain hospital activity analysis				
8.7	Describe the procedure for presenting reports of hospital activities analysis by specialties, clinics, units and services departments				
8.8	Explain uses of hospital activity analysis.				

General Objective 9.0: Understand other common hospital percentages and rates						
9.1 Enumerate the following hospital rates: - Hospital death rate - Autopsy rate - Morbidity (infection) rate - Post-operative death rate - Cesarean-section rate - Consultation rate 9.2 Explain the rates under each of the rate in 9.1 above 9.3 Describe the procedure for computing the rates enumerated in 9.2 above 9.4 Explain the uses of the rates in 9.1 above 9.5 Explain the concept of special disease registry eg Cancer registry, TB registry etc. 9.6 Describe statistical	Explain 9.1 – 9.6	Data from clinics and wards	Compute bed rates and percentages enumerated in 9.2	Assist students to carry out the task in 9.7	Explain the concept of special disease registry	

	measures used for analyzing special diseases data					
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PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: MONITORING AND EVALUATION II			
CODE: HIS 221			
DURATION (Hours/Week) Lecture: 1hrs	Tutorial: 0	Practical: - 1	Total: 1 (30hrs/semester)
UNITS: 2			
GOAL: This course is designed to expose the students to the understanding of the principles and processes of developing, calculating and interpreting indicators and their uses for decision making			
GENERAL OBJECTIVES: On completion of this course, the student should be able to: 1.0 Know the criteria for selection of indicators 2.0 Understand how indicators are linked to M&E frameworks 3.0 Know the different types of data sources for calculating indicators 4.0 Understanding the principles and implementation of data quality 5.0 Know how information can be used for decision-making 6.0 Understanding basic concepts in Knowledge Management.			

	2.2 Explain each characteristic listed in 2.1. above 2.3 show how indicators are linked to M&E framework i.e. Results framework, logic model or logframe, logical framework 2.4 State the challenges in selecting indicators 2.5 Outline guidelines for selecting indicators	Illustrate with samples of indicators	Handouts Textbooks Charts Sample of indicators			Examination
General Objective 3.0: Know the different types of data sources for calculating indicators						
	3.1 List types of data sources: routine, non-routine 3.2 Identify sources for each type of data in 3.1 above - Vital registration - Clinic service statistics	Explain 3.1 – 3.5	white board/ marker Projector Handouts Textbooks charts	Develop a data collection plan	Guide students to complete the data collection plan	State the relationship between indicator and data sources

	- Demographic Surveillance - Non-routine - Household surveys: - Demographic and Health Survey - National Censuses - Facility surveys					
3.3	State the relationship between indicator and data sources					
3.4	Describe data collection plan					
3.5	Illustrate data collection anatomy					
General Objective 4.0: Understanding the principles and implementation of data quality						
4.1	Explain data quality, data quality assurance, data quality improvement	Explain 4.1 – 4.5	white board marker Projector Handouts Textbooks Charts	Conduct data quality assessment using the Routine Data Quality Assessment (RDQA) tool Design action plan to improve data quality	Guide students to use data quality assessment tools to carry out the activities in 4.6 and 4.7	Explain common errors or biases in data collection
4.2	Explain common errors or biases in data collection					
4.3	Describe data quality issues		Sample of data quality assessment			

	4.4 Outline dimension of data quality		checklist			
	4.5 Outline steps for improving data quality		Sample of M&E plan Sample of SMART written			
General Objective 5.0: Know how information can be used for decision-making						
	5.1 Define data and information 5.2 Enumerate the objectives of data demand and use 5.3 Explain the concept of data demand 5.4 Explain the concept of data use 5.5 Explain data demand and use framework 5.6 List the importance of data demand and use 5.7 Explain the constraints of data demand and use and how to address them 5.8 Enumerate the facilitating factors affecting data demand and use	Explain 5.1 – 5.8	Sample of tools for Data Demanded Use (DDU)	Apply the key tools for data demand and use	Demonstration and guides for students	Explain the constraints of data demand and use and how to address them

General Objective 6.0: Understanding basic concepts in Knowledge Management.						
6.1 Define Knowledge Management	Explain 6.1 – 6.12	white board/ marker Projector Handouts Textbooks Charts Aids Journals Articles Policy briefs Posters E-mail message Fact sheets Bulletins Etc.	Apply appropriate technology in Knowledge Management Select and organize knowledge using appropriate resources. E.g. POPLINE, Resource Description and Access (RDA), Dewey Decimal Classification Develop a strategy for knowledge management in your organization	Guide student to apply common knowledge management methods and tools	Explain knowledge as an organizational asset	Enumerate the Data Transformation process –
6.2 Enumerate the six components of knowledge – Experience, Ground Truth, Complexity, Judgement, Rules of Thumb, Values and Beliefs						
6.3 Explain knowledge as an organizational asset						
6.4 Define Data, Information and Knowledge						
6.5 Enumerate the Data Transformation process – Contextualization, categorization, Calculation, Correction and Condensation						
6.6 Explain each of the items enumerated in 6.5 above						
6.7 Define Knowledge						

	Management				
	6.8 Explain Knowledge Management				
	6.9 Enumerate the components of Knowledge Management				
	6.10 Explain the components of knowledge management				
	6.11 Explain the role of technology in Knowledge Management				
	6.12 Explain the Knowledge Management cycle				
	6.13 Explain knowledge sharing				
	6.14 Explain Knowledge assessment.				



PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)			
COURSE: LEGAL AND ETHICAL ASPECTS OF HEALTH INFORMATION MANAGEMENT			
CODE: HIS 222			
DURATION (Hours/Week) Lecture: 2hrs	Tutorial: 0	Practical: - 0	Total: 2 (30hrs/semester)
UNITS: 2			
GOAL: This course is designed to enable students acquire knowledge in Legal and Ethical issues relating to Health Information Management.			
GENERAL OBJECTIVES: On completion of this course, the student should be able to: 1.0 Understand concepts of Ethics, Law, Values, Morals, Rules and Regulations 2.0 Know the Sources of Ethics, Law, and Morals, etc 3.0 Understand the concepts of Privacy, Confidentiality and Security of Health Information Management 4.0 Understand the principles and code of ethics for Health Information Management practitioners. 5.0 Know the Nigerian Law System and Structure 6.0 Know the Health Records requirements and entries 7.0 Know the procedures for reporting and release of Health Information 8.0 Understand the concept of consent for Procedures in Medicine			

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE: LEGAL AND ETHICAL ASPECTS OF HEALTH INFORMATION MANAGEMENT					Course Code: HIS 222		Total: 2 (30hrs/semester)	
COURSE SPECIFICATION: Theoretical content: 0					Practical Content: 1			
General Objective 1.0: Understand concepts of Ethics, Law, Values, Morals, Rules and Regulations								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 Define the following: - ethics, - law, values - morals - Rules - Regulations 1.2 Outline the historical overview of: - ethics, - law - morals 1.3 Differentiate between the following: - ethics, - law, - morals 1.4 Explain the relationship		Explain 1.1 – 1.5	Models textbooks				Explain the linear, distinctive and interconnectedness conceptual models of ethics, law and morals

	1.5	between ethics, law and morals Explain the linear, distinctive and interconnectedness conceptual models of ethics, law and morals				
General Objective 2.0: Know the Sources of Ethics, Law, and Morals, etc						
	2.1	1 List the sources of ethics, laws and morals	Explain 2.1 – 2.6	Textbooks Draft of laws and acts		Explain the principles of medical ethics
	2.2	Explain the sources of ethics, laws and morals				
	2.3	Explain ethical decision making				Explain how laws affect health care providers
	2.4	Explain the principles of medical ethics				
	2.5	State the process of making laws				
	2.6	Explain how laws affect health care providers				
General Objective 3.0: Understand the concepts of Privacy, Confidentiality and Security of Health Information Management						
	3.1	Define the following as related to health	Explain 3.1 – 3-6	Textbooks		Explain the four ethical

	information: - Privacy - Confidentiality - Security 3.2 Explain the four ethical issues of (PAPA): - privacy - accuracy - property - accessibility 3.3 Explain the principles of privileged communication and confidentiality in medicine 3.4 Explain the three principles of ethics, morals and law as related to confidentiality of health information 3.5 Explain breach of patient confidentiality 3.6 Describe the general management and safeguard of patients health information		Draft of laws and acts		issues of (PAPA): Explain breach of patient confidentiality
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	3.7 Explain information security 3.8 Outline the impact of technology on the confidentiality of patient's health information					
General Objective 4.0: Understand the principles and code of ethics for Health Information Management practitioners.						
	4.1 Define code of ethics 4.2 Explain the code of ethics for Health Information practitioners in Nigeria 4.3 Explain the principles of professional ethics 4.4 State the Hippocratic oath 4.5 Explain the eight main theories of ethics	Explain 4.1 – 4.5	Textbooks Draft of laws and acts			Explain the code of ethics for Health Information practitioners in Nigeria
General Objective 5.0: Know the Nigerian Law System and Structure						
	5.1 Outline the history of law in Nigeria 5.2 Explain Nigeria legal system and the	Explain 5.1 – 5.6	Textbooks Draft of laws and acts			Explain Nigeria legal system and the structure

	structure 5.3 Identify the differences between the following: - International - Federal - State and - Local Government laws in Nigeria 5.4 Explain what happens when Federal, State and Local Government laws overlap 5.5 Differentiate between the following: - trial courts - appeal courts - supreme courts 5.6 Give examples of Administrative Agencies, describing their source of authority and how they regulate the public					
General Objective 6.0: Know the Health Records requirements and entries						
	6.1 Identify government and private entities that establish health	Explain 6.1 – 6.10	Textbooks Draft of laws and acts			Explain how inaccurate and incorrect

	information requirements 6.2 List the types of information contained in the patient record 6.3 Explain the importance of complete, accurate, updated and current patient health information 6.4 Explain how inaccurate and incorrect patient records entries can cause claims, denial and create risk exposures for facilities and providers 6.5 Define statute of limitation 6.6 Explain how statute of limitation affects records retention practices 6.7 Explain the considerations for				patient records entries can cause claims, denial and create risk exposures for facilities and providers
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	patient records destruction policy 6.8 Describe standards required for a properly completed patient record 6.9 Explain verbal, telephones and written orders as they impact the quality of patient record 6.10 Explain authentication of the patient's records.					
General Objective 7.0: Know the procedures for reporting and release of Health Information						
	7.1 Explain the concept of patient's rights to privacy 7.2 Explain the concepts of release of information with or without patient consent 7.3 Explain the concept of the following: - Justice and Autonomy, - Beneficence	Explain 7.1 – 7.10	Textbooks			Explain the concept of patient's rights to privacy

	- Nonmaleficence and non-indifference				
7.4	Explain consent for the release of information				
7.5	Explain the following: - court orders, - subpoena, - search warrant, - patient's representative				
7.6	Describe the procedure for court orders authorizing disclosure of patient information				
7.7	Give examples of mandatory reporting system laws				
7.8	Explain how privacy rule affects a provider's obligations under mandatory disclosure laws				
7.9	Give examples of cases falling under mandatory disclosure laws				

	7.10 Enumerate communicable disease reporting requirements				
General Objective 8.0: Understand the concept of consent for Procedures in Medicine					
8.1	Define the term consent for procedures in medicine	Explain 8.1 – 8.10	Textbooks Models		Explain the need for patient's consent to procedures and treatment (battery, assault)
8.2	Explain the need for patient's consent to procedures and treatment (battery, assault)				
8.3	Explain the following types of consents: - informed, - expressed, - implied, - voluntary consent, - Discharged Against Medical Advice (DAMA)				
8.4	Outline the capacity to informed consent				
8.5	Explain the				

	general requirement of patient competency to consent					
8.6	Describe the legal age and mental capacity to consent					
8.7	Describe when the consent of the patient is not needed					
8.8	Explain the concept of advanced directives					
8.9	Describe the process of obtaining consent for procedures					
8.10	Explain informed refusal to consent					



PROGRAMME:		HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)		
COURSE:		PROJECT		
CODE:		HIM 223		
DURATION (Hours/Week)	Tutorial: 0	Practical: - 6	Total: 6 (90hrs/semester)	
Lecture: hrs				
UNITS:	6			
GOAL:		This course is designed to enable the student to undertake an individual project and write a report on it.		
GENERAL OBJECTIVES: On completion of this course, the student should be able to:				
1.0 Research a chosen topic at ND level from available sources.				
2.0 Collect data on the chosen topic.				
3.0 Produce a report on the chosen topic.				

PROGRAMME: HEALTH INFORMATION MANAGEMENT (NATIONAL DIPLOMA)								
COURSE: PROJECT				Course Code: HIM 223		Total: 6 (90hrs/semester)		
COURSE SPECIFICATION: Theoretical content: 0				Practical Content: 6				
General Objective 1.0: Research a chosen topic at ND level from available sources.								
Week	Specific Outcomes	Learning	Teachers Activities	Learning Resources	Specific Outcomes	Learning	Teachers Activities	Evaluation
	1.1 Choose, under guidance, an appropriate topic of Interest. 1.2 Research a chosen topic from available sources.		Explain 1.1 – 1.2	Textbooks Lecture Notes Internet Journals	Select a topic of interest Research on the selected topic		Provide guidance in finding suitable topic.	Choose, under guidance, an appropriate topic of Interest.
General Objective 2.0: Collect data on the chosen topic.								
				Textbooks Lecture Notes Internet Journal	collect data on selected topic		Provide guidance in collecting data	collect data on selected topic
General Objective 3.0: Produce a report on the chosen topic.								
				Textbooks Lecture Notes Internet Journal	Produce report on the selected topic based on research findings and using acceptable format for project report writing		Read student project and grade it using acceptable format	Produce report on the selected topic based on research findings

LIST OF EQUIPMENT

Computer Laboratory			
S/NO	ITEM DESCRIPTION	QUANTITY	REMARK
1	Computer System	30	Net worked
2	UPS	30	
3	Printer	5 or 2	Net worked
4	Overhead Projector	1	
5	Generator (3.5 KVA)	1	
Software (1 each)			
S/No	Software		
1	JAVA		
2	EPI info		
3	SAS		
4	ICDS		
5	Visual Basic		
6	Window XP		
7	Microsoft Office 2007		
8			
9			
Statistical packages (1 each)			
1	SPSS		
2	Microsoft Excel		
3	Minitab		
4	Megastat		
5	SAS		
6	Statpad		
7	EPi Info		

8	Tora		
	Publishing		
1	Corel Draw		
2	Microsoft Publisher		
3	Ventura		
4	Quark Express		
	Graphic		
1	Paint		
2	Photoshop		
3	Gimp		
	Statistical Equipment		
1	Programmable calculator	30	
2	Table Tennis Balls (white, black, green, red)	30	
3	Indo	5	
4	Snoke and ladder	5	
5	Indo seeds (dice)	10	
6	Mathematical set	30	
7	Coin Tobber	5	
8	Drawing board and T-Square	15	
9	White cards	6 packets	
10	Thumb tag	6 packets	
11	Plastic tape	2	
12	Bathroom scale	2	
13	Weighing Barnacle Type I and II	2	
14	Photocopying Paper	2 Reams	
15	Drawing Paper	5 Reams	
16	Graphic Board	1	

LIST OF PARTICIPANTS

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