NATIONAL POSTGRADUATE MEDICAL COLLEGE OF NIGERIA

RESIDENCY TRAINING PROGRAMME

FACULTY OF PUBLIC HEALTH & COMMUNITY MEDICINE

APPROVED BY THE SENATE ON 3RD JUNE, 2021

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COLLEGE REGISTRAR

FACULTY OF PUBLIC HEALTH AND COMMUNITY MEDICINE

NATIONAL POSTGRADUATE MEDICAL COLLEGE OF NIGERIA (NPMCN)

TRAINING CURRICULUM FOR POSTGRADUATE FELLOWSHIP

IN

PUBLIC HEALTH AND COMMUNITY MEDICINE

2020

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MISSION STATEMENT

The mission of the Faculty of Public Health and Community Medicine, National Postgraduate Medical College is to promote the highest level of academic and professional training for Public Health and Community Medicine Physicians in line with the best global standards

EDUCATIONAL OBJECTIVES OF THE FACULTY OF PUBLIC HEALTH AND COMMUNITY MEDICINE

Our educational objectives are to:

1. Strengthen accredited training institutions to ensure that residents (trainees) are exposed to the best academic and professional training.
2. Ensure and maintain highest standards for learning and practice of Public Health and Community Medicine for continued academic development.
3. Evaluate and certify trainees using phased, reliable and valid assessment methods.
4. Promote academic excellence and professionalism through the inculcation of attitudes of honesty and accountability, with sincerity and precision in academic and professional thoughts, words and actions.

SCOPE OF CURRICULUM

This curriculum defines what is to be learned and how best it should be learned. However, formal learning revolves around four key components, learner, facilitator, curriculum and milieu. Curriculum, being only one of four distinct components, must be considered holistically, rather than in isolation. The responsibility for understanding the content, context and processes of the curriculum, accepting to learn, adapting positively to the prevailing milieu and recognizing learning opportunities is that of the resident who is the most important component of this formal education process. The Consultant's responsibility is to facilitate learning by appreciating the objectives of the curriculum, ensuring an optimum learning environment and creating learning opportunities. Residents have the challenge of managing their educational programme, while the consultants have the challenge of verifying that the learning that occurs is in the right direction (congruence with the academic and professional expectations of the Faculty). Both residents and their trainers have obligations to monitor and evaluate progress in learning, using self, peer, as well as formative and summative evaluations. In the light of advances in medical knowledge and technology and the demands for quality assurance and cost-effectiveness, as well as the increasing need for thinking and practice to be based on sound epidemiological, clinical, laboratory and reviewed documented evidence, standards in training and evaluation will necessarily change with time thus necessitating periodic review of the curriculum and assessment methods.

RESIDENCY TRAINING PHILOSOPHY

Residency training involves the residents, the community, the patient, other health professionals in the health team, the teachers, within the training institutions, the assessors (examiners), the Faculty and the College. The learning and practice approaches should be population and client centred within a community-oriented milieu. Ethical considerations demand that residents should acquire professional competence through principled practice and generation of goodwill, at the individual, institutional and community levels. A field experience logbook will be used to document exposure and or proficiency. This will ensure that a regular formative evaluation (observation of performance and specific feedback) of skills is an integral part of resident's clinical postings.

SPECIFIC PRACTICE, LEARNING AND EVALUATION DIRECTIONS

The specific practice, learning and evaluation directions are defined by group consensus and require collective compliance with the concepts below.

1. The Faculty's consensus national Community Medicine approach is the Population System Approach, that is, a health system approach to population health that entails a broad knowledge of the community in developing an approach which encompasses all components of the health system as well as stakeholders, and establishes priorities for action. This approach will require expertise in the following practice and learning areas:
2. Expertise in assessing and synthesizing information on health status and health service utilization data, in identifying desired outcomes and developing evidence based strategies to reach these outcomes..
3. Competence in making a community diagnosis, which is a quantitative and qualitative description of the health of citizens and the factors that influence their health. It identifies problems, proposes areas for improvement and stimulates action.

For Community Diagnosis, residents should learn to

a) Decide the scope or areas to be studied;
b) Take into cognizance the concerns or views of the local people;
c) Retrieve from government departments or relevant organizations population census and other demographic and statistical data;
d) Conduct surveys to obtain quantitative and qualitative data;
e) Collect and analyze data;
f) Make a community diagnosis and disseminate the report via different channels;
g) Establish and prioritize areas for improvement; and
h) Set work plans and indicators for evaluation.

4. Application of epidemiological methodology, that is, empirical, inductive, and refutable reasoning in addressing health issues. Epidemiology relies on and respects only empirical findings. Therefore, there is no room for action based on pure reasoning, rationalism, subjected to empirical verification Both inductive and deductive logic are used in epidemiological reasoning. The inductive is used more because it is more in line with empirical verification. Induction is a type of reasoning that starts from one observation and generalizes.

SCOPE OF ASSESSMENT

When assessing residents, skills and competencies to be assessed include ability to:

· diagnose cases of commonly occurring preventable diseases, in order to make an insightful community diagnosis; describe the aetiology and epidemiology of commonly occurring health-related conditions; carry out a rapid epidemiological assessment, including the investigation of a disease outbreak; design, implement, and report on the of an epidemiological study; describe the burden of a disease or group of diseases, in economic and medical terms: for the individual, the community, and society;

- formulate and prioritize appropriate public health research questions and
- interpret one's own data, as well as the data and findings of other investigators, including publications in the scientific literature;
- motivate for adequate funding and resources required to carry out these activities; and
- design and manage surveillance systems.

OUTCOME ASSESSMENT

Components of outcome assessment shall include ability to:

- critically appraise the state of current knowledge with respect to important public health issues;
- work as a team member, wherever this is important for the achievement of public health goals;
- demonstrate good leadership skills where these may be required for the candidate's future professional work situation;
- demonstrate good analytical skills;
- demonstrate an appropriate level of professional knowledge;
- make public health-related decisions in a rational way;
- solve public health-related problems effectively;
- communicate effectively using written and oral methods;
- use science and technology responsibly and ethically;
- demonstrate good interpretative skills as well as sensitivity for community values and the environment;
- plan and execute public health interventions effectively;
- assess one's own personal strengths and weaknesses;
- commit to a life of continual professional development; and
- act consistently within levels of competence and professional norms.

LEARNING OUTCOMES

A public health consultant should be able to:

- Quantitatively and qualitatively assess the population's health and health needs, including managing, analysing, interpreting, and communicating information that relates to the determinants and status of health and well-being and allows development of effective action.
- Critically assess the evidence relating to the effectiveness of health and healthcare interventions, programmes and services, apply this to practice and improve services and interventions through audit and evaluation.
- Influence the development of policies, implement strategies to put the policies into effect and assess the impact of policies on health.
- Lead teams and individuals, build alliances, develop capacity, work in partnership with other practitioners and agencies and effectively use the media to improve health and well-being.
- Promote the health of populations by influencing lifestyle and socio-economic, physical and cultural environment through methods of health promotion and health education, directed towards populations, communities and individuals.
- Protect the public's health from communicable and environmental hazards by application of a range of methods including hazard identification, risk assessment and the promotion and implementation of appropriate interventions.
- Support clinical governance, quality improvement, patient safety, equity of service provision and

prioritization of health and social care services.

- Collect, generate, synthesize, appraise, analyze, interpret and communicate epidemiologic intelligence that measures the health status, risks, needs and health outcomes of defined populations.
- Teach and research in public health

THE STEERING EFFECT OF EVALUATION

This 'steering effect' of valid and reliable examinations is part of the spirit of this curriculum. A valid professional examination is one that assesses the performance abilities which the learner should acquire on completion of the programme, ensures that those who have acquired ability to perform pass, while those without the ability fail. Majority of learners tend to 'study to the test'. Because of the foregoing, valid and reliable examinations do exert a powerful steering effect on learning.

TRAINING GUIDELINES

Postgraduate medical training takes place in accredited institutions. Accredited training institutions are health facilities that have met the minimum standards in staffing, facilities and curriculum implementation, as prescribed by the College. Each trainee should be indexed with the College, by the training Institution at the commencement of training. Both the trainee and the Institution shall be monitored by the College. There are three phases of the training programme, namely, the Primary, Junior and Senior Residency phases.

a) The Primary phase, which is largely self-directed, may take place outside the training institution. Its successful completion will qualify the trainee for entry into the junior residency phase.

b) The junior residency phase, which encompasses academic, clinical and epidemiological skills acquisition, must take place in accredited institutions. Its successful completion (success in the Part I examination) will qualify the trainee for entry into the Senior Residency phase. The duration of the Junior Residency phase is a minimum of 24 months in accredited institution except for candidates with Master of Public Health (MPH) or equivalent degree who have been granted exemption from the Primary examination. Such trainees must spend a minimum of 24 months of Junior Residency training in an accredited training institution before they are eligible to sit the Part I examination.

c) The Senior Residency, which comprises training in academic, field epidemiology, research, management and leadership skills, should last for a minimum of 36 months, the first 24 months of which must be in an accredited training institution. At the end of training trainees would sit the final fellowship examinations at which they will need to demonstrate an acceptable level of performance where knowledge, understanding, skills and competences are integrated.

MONITORING OF TRAINING INSTITUTIONS

The National Postgraduate Medical College monitors compliance with minimum standards prescribed for staffing, infrastructure, training facilities and curriculum implementation by regular accreditation visitation as well as spot checks of training institutions.

EVALUATION/ASSESSMENT

Evaluation and assessment will be formative and summative. The formative assessment will be done in the training institutions with the use of logbook. The log book should be periodically by a

training coordinator in each institution. The summative evaluation will be done as three professional examinations corresponding to each phase of the training. The examinations are conducted twice yearly. Each phase of the examinations is based on a log-frame that details the course content and examination format. The logbook is included as an Appendix.

THE PRIMARY EXAMINATION

Introduction: The aim of the Primary Examination program is to upgrade the knowledge of the candidate in the basic sciences relevant to the practice of Public Health and Community Medicine. Though the program is largely self-directed, it is expected that candidate preparing for the Primary examination should attend update courses organized by the Faculty or other accredited Institutions. Although candidate does not require a formal position in a Residency Training Institution such must be endorsed by Fellows of the Faculty to qualify for the Primary Examination.

Eligibility: MBBS. Degree or its equivalent that must be registered with Medical and Dental Council of Nigeria.

SYLLABUS

I. Knowledge, Understanding and Application of Human Ecology & Dynamics of Human Population growth
II. Knowledge, Understanding and Application of Behavioural Sciences and Public Health.
III. Knowledge, Understanding and Application of Microbiology
IV. Knowledge, Understanding and Application of Parasitology & Virology
V. Knowledge, Understanding and Application of the Principles of Immunology & Genetic aspect of preventive medicine
VI. Knowledge, Understanding and Application of Therapeutics
VII. Appreciation of the History and Evolution of Public Health
VIII. Knowledge, Understanding and Application of principles of epidemiology
IX. Knowledge, Understanding and Application of Medical statistics
X Knowledge, Understanding and Application of Environmental health Sciences

EXAMINATION FORMAT:

Primary Fellowship examination shall be best of four options Multiple Choice Questions (MCQ) to test all levels of cognition.

Note. Pass Scores are determined by College approved Modified Angoff Standard Setting process set by Court of Judges ahead of examination.

CREDIT UNIT: 32

Course Code/Broad Topics	Credit Units	Specific Topics	No. of Questions	Taxonomy Level		
				I	II	III
PUB 901 Human Ecology & Human Population	3	Concept of Ecosystem	3	2	1	0
		Interaction of Populations, Resources, the Environment and man	3	2	1	0
		Ecological homeostasis	3	2	1	0
		Human ecology and health.	3	2	1	0
		Population structure, global and national trends and its influences on health	3	2	1	0
		Population census, demographic data, sample survey	3	2	1	0
		Population dynamics, effects on population	3	2	1	0
		Population growth, problems and policies	3	2	1	0
PUB 902 Behavioural Science & Public Health	3	Nature of the behavioural Sciences	3	2	1	0
		Concept of culture and society: process of socialization, personality formation, symbolic inter - actionism and structure of social action	3	2	1	0
		The structure and function of society	3	2	1	0
		The family, community, social stratification including concept of class and ethnic subcultures	3	2	1	0
		Community structure, culture and health.	3	2	1	0
PUB 903 The Environment Health Sciences	3 Al	History, science and practice of environmental sanitation and environmental control	3	2	1	0
		Air pollution, its sources, effects and control.	3	2	1	0
		Radiation and health	3	2	1	0

Course Code/Broad Topics	Credit Units	Specific Topics	No. of Questions	Taxonomy Level		
				I	II	III
		Radiation and health	3	2	1	0
		Water supply and health	3	2	1	0
		Waste (sewage and refuse) disposal.	3	2	1	0
		Housing and health: concept of zoning and town planning	3	2	1	0
		Vector control	3	2	1	0
		Noise in relation to health; sources, effects, measurement and control.	3	2	1	0
		Food hygiene.	3	2	1	0
		Industrial environment and health	3	2	1	0
		Work physiology and health	3	2	1	0
PUB 904 Microbiology	3	Nature and classification of bacteria, including Their bionomics.	3	2	1	0
		Ecology of Major Pathogenic micro-organisms of the following groups – mycobacteria corynebateria, vibro, streptococci, staphylococci . enterobacteria, haemophilus and spirochaetes	3	2	1	0
		Dynamic processes of host/ agent interactions and resistance of bacteria to physical and chemical agents; disinfection and sterilization	3	2	1	0
		Theory and practice of current methods and techniques applicable to medical microbiolog y; fluorescent antibody techniques, preparative and analytical electrophoresis, Immune electrophoresis, etc.	3	2	1	0
PUB 905 Parasitology & Virology	3	Nature, life cycles and Control of the following and their associated parasitic Diseases Parasites of medical importance in Nigeria (helminths, protozoa, etc)	3	2	1	0

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Course Code/Broad Topics	Credit Units	Specific Topics	No. of Questions	Taxonomy Level		
				I	II	III
		Nature, life cycles and control of the following and their associated parasitic diseases Parasites of medical importance in Nigeria (helminths, protozoa, etc)	3	2	1	0
		Nature, life cycles and control of the following and their associated parasitic diseases Vectors and other insects of medical importance in Nigeria.	3	2	1	0
		Nature, life cycles and control of the following and their associated parasitic diseases Common fungal diseases	3	2	1	0
		Classification of viruses	3	2	1	0
		Structure of life cycle of common viruses of public health importance in Nigeria	3	2	1	0
PUB 906 Principles of Immunology	2	Immunologic basis underlying diagnostic procedures	3	2	1	0
		Active and passive immunization	3	2	1	0
		Pathogenesis and immunity in bacteria, viral and other microbial Infections	3	2	1	0
		Vaccine types, production, storage including the cold chain and associated problems	3	2	1	0
		Auto immune diseases	3	2	1	0
PUB 907 Genetics & Preventive Medicine	3	Elementary human genetics and classification of genetic diseases.	3	2	1	0
		Chromosome pathology	3	2	1	0
		Mendelising diseases of man	3	2	1	0
		Behaviour of genes in Population	3	2	1	0
		Multifactorial conditions	3	2	1	0
		Application of genetic Principles	3	2	1	0

	Genetic counselling	3	2	1	0

Course Code/Broad Topics	Credit Units	Specific Topics	No. of Questions	Taxonomy Level		
				I	II	III
PUB 908 Therapeutics	3	Basic pharmacokinetics: transport, metabolism and excretion of drugs.	3	2	1	0
		Antibiotics – their uses and misuses. Drug resistance	2	1	1	0
		Basic mechanisms of drug action	2	1	1	0
		Drug classification	2	1	1	0
		Drugs used in the management of endo- *and* ecto-parasites	2	1	1	0
		Management of common poisons including pesticides	3	2	1	0
		Communicable diseases. Leprosy and other endemic diseases	3	2	1	0
		Antibacterial substances used in the treatment of infections	3	2	1	0
PUB 909 History & Evolution of Public Health	3	The evolution of health through the ages. Review of public health activities.	3	2	1	0
		Important names and landmarks in public health in Nigeria	2	1	1	0
		International health agencies and their developments including the U.N.O	2	2	0	0
		The W.H.O. constitution, structure and scope	2	2	0	0
PUB 910 Epidemiology: Principles of Epidemiology	3	History, definition and basic principles of epidemiology	2	1	1	0
		Measurements of disease frequency, sources and limitations	2	1	1	0
		International classification of diseases, injuries and causes of Death	2	1	1	0
		Screening for diseases	2	1	1	0
		Evaluation of diagnostic and screening tests	2	1	0	1
		Epidemiological study methods: – descriptive, hypothetical, analytical and experimental studies	2	1	0	1
		Design of clinical and experimental trials	2	0	1	1
		Levels of disease prevention	2	0	1	1

Course Code/Broad Topics	Credit Units	Specific Topics	No. of Questions	Taxonomy Level		
				I	II	III
PUB 911 Medical Statistics	3	Basic medical statistics (Role of statistics in human biology and medicine), Descriptive statistics, Data summary and presentation, Sampling techniques	2	0	1	1
		Health and vital statistics: Sources of information relating to vital events: mortality and Morbidity	2	1	1	0
		Measurement of health and disease: rates, crude and specific	2	0	1	1
		Standardization of rates and their applications	2	0	0	2
		Probability theory and tests of Hypotheses	2	0	0	2
		Normal distribution	2	0	1	1
		Statistical inferences and tests of hypotheses, significance Levels	2	0	1	1

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KEY:

Level I = Recall (facts),
Level II = Comprehension and application,
Level III = Analysis, synthesis and evaluation

PRIMARY FELLOWSHIP EXAMINATION LOG FRAME

Objective: To conduct a body system-based, valid and reliable assessment, at all levels of cognition, of the learning outcomes using the Objective Broad Theoretical Evaluation

	Assessment type	**What will be assessed**	**How will it be assessed**	**Resources Required**	**Time Required**
THEORY	Objective Questions	A. Human Ecology & Human Population	One paper of *Two hundred stem objective Questions* MCQs of best of four options Type	2-day meeting of the Court of Examiners to standardize and moderate questions. Three day meeting of Court of Judges to set Angoff score Stationery	180 Minutes
		B. Behavioral sciences and Public Health			
		C. Enviromental Health Sciences			
		D. Microbiology			
		E. Parastilogy and Virology			
		F. Principles of Immunology and Genetic aspect of preventive medicine			
		G. Therapeutics			
		H. History and Evolution of Public Health			
		I. Principles of Epidemiology			
		J. Medical statistics			

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JUNIOR RESIDENCY TRAINING

Specific Objectives

At the end of the junior residency-training period, the resident should have acquired enough scientific knowledge, skills and practical experience to be able to:

I. Function as Medical Officer of Health or a senior registrar.

II. Demonstrate adequate knowledge on all subspecialties of public health with the view of pursuing in-depth learning and further research in any of the key subspecialties.

III. Identify and proffer solutions having applied appropriate measures of primary, secondary and tertiary prevention to health problems of public health importance.

IV. Carry out the steps needed in public health planning, initiate, organize, execute and evaluate public health programmes.

Admission into Junior Residency Training

To be eligible for Junior Residency training, the resident must have either passed the primary examination of the National Postgraduate Medical College of Nigeria or obtained an exemption from this examination through possession of an acceptable Master in Public Health (MPH) degree or an equivalent primary examination certificate from institutions recognized by the Faculty and the National Postgraduate Medical College of Nigeria.

Period of Training

The period of training shall be a minimum of 24 months, after passing the primary examination. Trainees who have undertaken an acceptable MPH degree are however expected to spend a minimum of 12months in accredited training Institution to be eligible for Part 1 examination. They will spend a month in each of the departments of Accidents and Emergency, Paediatrics and Obstetrics & Gynaecology for their rotational clinical postings. They shall also do rural postings to complete the curriculum for the junior residency training. All other residents must be in an accredited training institution for at least 24 months, at the end of which they will be eligible to take the Part I FMCPH examination.

Format of Training

On admission to the junior residency position, all residents must do a month rotation in each of Accidents and Emergency, Paediatrics and Obstetrics and Gynaecology departments. Subsequently, the resident shall rotate through the identified core subspecialties of public health. The rotational postings may be intradepartmental or interdepartmental within other accredited teaching hospitals, government (local, state or federal) health departments or agencies, industrial health establishments, etc., that are identified as acceptable facilities for the various subspecialties. The resident is expected to spend a specified minimum period in each sub-specialty and the Rural Health posting which shall be for 2 months. Details of the rotations are as contained in the faculty Log book.

In addition, trainees shall be exposed to didactic learning in the form of lectures, seminars and tutorials as well as practical, laboratory and clinical postings. Evidence of adequate and supervised training duly confirmed by the supervising consultant and the Head of Department in the institution must be tendered while registering for the Part I FMCPH examination. Only residents who trained in institutions accredited by the National Postgraduate Medical College of Nigeria are eligible to sit for the Part I FMCPH examination.

DURATION: 24months

Credit Unit: 72 This covers Lectures, Seminars, Tutorials, Practicals, Postings, Field activities .

COURSE CREDIT UNITS FOR JUNIOR RESIDENCY TRAINING

1. One hour Lecture/Tutorial weekly for each Semester (15wks) is 15hrs equals 1 credit unit
2. Three hours Seminar weekly for each Semester (15 wks) is 45hrs equals 1 credit unit
3. Three hours Seminar weekly for each Semester (15 wks) is 45hrs equals 1 credit unit
4. Daily postings to a minimum of 8hrs exposure for skills/competencies acquisition within maximum of 5 days a week for 4 weeks in each semester = 8 credit units.

CORE PROFESSIONAL COMPETENCIES FOR JUNIOR RESIDENCY TRAINING PHASE

1. PUB 912 Principles of Epidemiology (*Credit Units = 8*)

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
A. Introduction 1	Definition, Meanings and Purpose of Epidemiology	10
	Scope of Epidemiology	
B. Introduction 2	Sequence & Methods of Epidemiological Reasoning	10
	Decision making in Epidemiology	
C. Inductive and deductive reasoning	Epidemiological Methods	10
D. Descriptive Epidemiology	Incidence and Prevalence Studies	20
	Case Studies and Case Series	
	Descriptive Cross -sectional Studies; issues of time, place and persons, secular and cyclical trends in disease occurrences	
	Descriptive mortality studies; death notification and mortality statistics	
E. Analytical studies	Introduction to Analytic cross -sectional studies	25
	Before and after studies	
	Proportional mortality studies;	
	Case -control studies	
	Historical cohort studies; prospective cohort studies; the issue of "prospective" and "retrospective" studies	
	Odds ratios; relative risk/risk ratio; attributable risk; proportional mortality ratios; standardized mortality ratios	
F. Experimental epidemiology	Introduction to clinical trials	25
	Blinding, matching and other methods of bias control; Randomization	
	Ethical issues in human/experimental studies;	
	Community trials	
	Survival/actuarial studies	

2. PUB 913 Epidemiology and Communicable Disease Control (*Credit Units = 8*)

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
A. Introduction	Terms & Concepts used in Communicable Disease Epidemiology	4
B. The natural History of Diseases	The cycle of Health & Disease	3

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
C. Human Immunity	Factors affecting Human Immunity against Diseases Herd Immunity etc	3
D. Diseases Transmitted Through the Respiratory Tract	Viral: chicken pox, influenza, acute respiratory infections, measles, rubella, mumps, infectious mononucleosis	20
	Bacteria: diphtheria, meningococcal infections, streptococcal infections, tuberculosis, Leprosy	
	Fungal: psittacosis, histoplasmosis, Legionnaires disease	
	Acute gastroenteritis, staphylococcal diseases, typhoid, shigellosis, cholera, E. coli infections, infective diarrhoeas, hepatitis	
	Amoebasis, entrobiasis, taeniasis, hydatid disease, paragonimiasis, guinea worm,	
E. Vector-borne Diseases	Trypanosomiasis, leishmaniasis, onchocersiasis	10
	Blood filariasis, Plague, dengue	
F. Diseases of Contact or active penetration:	Hookworm, schistosomiasis, strongyloidiasis	25
	Tetanus, rabies, leptospirosis, lice, scabies	
	Sexually transmitted diseases: gonorrhoea, syphilis, chancroid, trichomoniasis, candidiasis	
	Non-gonococcal urethritis/vaginitis, chlamydia urethritis/ cervicitis, herpes genitalis	
	Condylomata acuminata, molluscum contagiosum, pubic lice, scabies	
	Hepatitis B, Reiters disease;	
	Epidemiology of HIV, aetiology, natural history, transmission, treatment and prevention,	
	Care and support for persons living with HIV/AIDS, HIV/AIDS in developing countries, national response.	
G Nosocomial Infections	Definition, agents, site, sources and predispositions;	5
	Principle of infection control and Disease Exposure Control, Prevention and control (surveillance) of nosocomial infections.	
H. Surveillance and notification of diseases in General	Locally and Nationally Notifiable Diseases Internationally notifiable diseases and mechanisms. Integrated Disease Surveillance and Response Epidemiology and control of National Priority Diseases	5
	Arthropods of medical importance and their control	
I. Arthropods of medical importance and their control	Roll back malaria, Onchocerciasis control programme	5
J. National control Programmes	STI/HIV control programme	20
	Guinea worm eradication programme, Poliomyelitis eradication initiative	
	Yellow fever control programme, Lassa fever control programme	

PUB 914 Epidemiology and Non-Communicable Disease Control

3. **(***Credit Units = 8***)**

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
Non Communicable Diseases	Multi-factorial causation of diseases, Epidemiology & Control of Cancers	15
	Epidemiology & Control of hypertension and common cardiovascular diseases, cardiovascular risk assessment	15
	Epidemiology & Control of glomerulonephritis and other renal diseases,	10
	Epidemiology & Control of chronic lung diseases,	15
	Epidemiology & Control of Parkinson`s disease and other hereditary neurological diseases	7
	Epidemiology & Control of disorders of vision and hearing	8
	Epidemiology & Control of prevention of mental retardation epidemiology of mental disorders, alcohol and drug problems	8
	Epidemiology & Control of diabetes, sickle cell anaemia;	10
	Epidemiology & Control of epidemiology of aging.	5
	Genomic applications in public health	7

4. **PUB 915 Biostatistics (***Credit Units = 6***)**

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
A. Introduction	Importance of numeracy in medicine and health care, scales of measurement and their implications for statistical methodologies	1
B. Frequency distributions and tables	Frequency distributions and tables	1
C. Graphic presentation of data	Bar charts, pie charts, histograms, frequency polygons	2
D. Summarization of data	Measures of central tendency and location; measures of spread or variation	10
	Calculations of mean, median, mode; variance, standard variation	
	Coded method of calculating the mean and standard variation with grouped data; percentiles, quartiles, inter-quartile range	

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
E. Sources of variation in data	Replicate determinations handling replicate data	3
	Variation and the interpretation of clinical measurements	
F. Vital Statistics	Vital rates, crude and specific, adjusted rates	4
	Population life tables; mortality statistics; classification of the causes of death	
G. Morbidity statistics	Sources, morbidity surveys,	5
	Measurement of morbidity, record linkage	
	Health information systems	
H. Probability Statistics	Definition and the basic laws: mutually exclusive events and the additive law of probability;	10
	Conditional probabilities and the multiplicative law of Probability	
	Independent events; properties of probability distributions	
	Permutations and combinations, Paschal`s triangle	
I. Normal distribution	Description and its equation; use of tables of areas in the normal curve	5
	Application of normal distribution to the screening of individuals	
J. Statistical Inferences	Sample distribution of means – its definition, properties,	10
	Statistical test of significance of a mean	
	Statistical errors (type I & II) in tests of significance	
K. Inference of Means	Critical ratios; confidence limits on a population mean;	6
	Comparison of means, paired and unpaired (independent) samples	
	Sample size determination for analytical studies, t-tests	
L. Inference on Proportions	Binomial distribution, comparison of two proportions;	10
	Independent samples; confidence limits, paired chi-square test	
	Comparison of proportions in independent and paired samples	
	McNemar tests, Mantel Haenzel, Chi-Square statistics	
	Sample size determination for survey estimation of proportions or for analytical comparison of proportions in paired and independent study populations.	

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
M. Regression and correlation	Difference between regression & Correlation, Linear	5
	Correlation.	
N. Longitudinal studies and the use of life-tables	Estimates of mortality: mortality rate per persons; years of	4
	Requirements for life table calculation: life table Calculation	
O. Statistics in medical research	Review of statistical methodologies for analytical and experimental study designs	10
	Review of concepts of bias and its minimization in clinical trials and other study designs, controls, randomization, blinding, placebos, cross-over designs and wash-out periods in	
	Beta and meta-analysis of paddled study data; ethical issues;	
	Confounders and effect modifications	
P. Critical appraisal of medical literature	Structured abstract, study justification and objective setting	8
	Analysis, presentation, discussion and conclusion/recommendation; referencing	
Q. Computer Programmes for Epidemiological & Statistical Analysis	Softwares: Epi Info, SPSS, Microsoft Excel, Winpepi, etc	4
R. Health Informatics	Introduction to computer application in health care, theory and methods in biomedical informatics, evaluation methods in biomedical informatics, economics of informatics, public health informatics	2
S. Population Studies	Population structure, global and national trends and its influences on health	35
	Population census, demographic data, sample survey,	30
	Population dynamics, problems and policies.	35

5. PUB 916 Environmental Health (*Credit Units = 6*)

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
A. The human environment	The composition of the human environment and its contribution to health and disease Components of environmental health practice	5
B. Water supply and health	The natural importance of water, distribution and sources of water, properties of potable water; water standards, tests for potability Water treatment at home and for public supply Water-borne diseases and other water related diseases	8
C. Refuse Collection and Disposal	The nature of human wastes, and refuse as part thereof, measurement of quantities produced Collection and disposal of refuse; components of refuse Seasonal geographical and social class variation in refuse generation; garbage, rubbish, ashes, street refuse, dead animals, abandoned vehicles, industrial refuse, construction and demolition refuse, hazardous and special refuse Problems from poor refuse disposal; methods of disposal; Sanitary landfill, incineration, composting, grinding, waste recovery/recycling, feeding of animals, sea laws and refuse disposal; refuse disposal organisation and management as medical officers of health.	10
D. Sewage and waste water collection and disposal	Nature of non -solid wastes; sewage and sullage Collection and disposal of sewage; on site disposal – privies and their types, sanitary and unsanitary sewage collection and disposal; latrines; composting; water carriage systems: sewage, sewer and sewage system Quantity and composition of waste water, waste-water treatment – preliminary treatment: sedimentation, chemical coagulation and flocculation, biologic treatment, sludge management: waste water reclamation; oxidation ponds Drainage of buildings: drainage of towns/roads: disinfection of waste waters (including from sewage treatment plants) On-site disposal of domestic waste waters; waste-water reclamation	10
E. Housing and health	Housing/shelter as a basic biological need: basic principles of healthful housing: physiological needs; safety needs; protection from contagion Established housing standards; distance from crown of the road; occupancy, structure, location and fire safety; minimum standards for basic equipment –viz; lighting, ventilation, heat, access, plumbing and sanitary fixtures, special housing needs; social provision Town and regional/country planning including the principle of zoning	

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
F. Food hygiene	Definition and scope of food and its hygiene: public health objective of food hygiene and safety	2
	Legislation of food hygiene; elements of a standard food hygiene and safety programme	2
	Food poisoning and other food-borne diseases; role of food in communicable diseases; investigation of outbreaks of food Poisoning	2
	Handling, storage and preservation of food; problems of food hygiene and safety in Nigeria; food premises – their types and food hygiene control	2
	Abattoirs and their services; meat inspection and hygiene, canned food hygiene and inspection, common local affections of raw food items in Nigeria,	2
	Hazard Analysis, Critical Control Point (HACCP)	2
G. Air pollution and control	The physiological importance of clean air, health problems from contaminated air	2
	Sources of air pollution – dusts, gases, noise, radiation pollution; regulations in relation to air pollution	2
	Control of air pollution; natural, domestic and industrial air pollution. Environmental law: pollution control	3
	Health effects of indoor and outdoor air pollution	3
H. Vector control	Vectors of public health importance in Nigeria	5
	Chemical, biological and mechanical/physical control of vectors	5
I. Environmental impact assessment (EIA) of developmental projects	Policy, programmes and impact management strategies	4
J. Management of disasters	Definition and nature of disasters, public health aspects of disaster Management	3
	Disaster preparedness, relief and surveillance, evaluation	4
	Bio-terrorism - public health preparedness and response	3
	Control of epidemic diseases, among displaced populations, public health care for displaced populations and refugees, role of agencies.	5
K. Public health laws	Public health laws	3

6. PUB 917 Occupational Health (*Credit Units = 6*)

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
A. Principles of occupational health	History and landmarks in occupational health, functions of an occupational health service, discipline and areas of practice in occupational health	3
	The work environment, the interaction between work and health	3
	Principles of disease prevention and hazard control in the industry	3
B. Diseases due to physical factors	Heat and cold effects; ionizing and non-ionizing radiation: noise as a health hazard: pressure: vibration and mechanical stress; light and darkness problems	5
C. Mechanical environment and its problems	Work ergonomics, the man-machine interface	3
	Occupational accidents; epidemiology and control of work Accidents	5
D. Diseases due to biological agents	Anthrax, bagassosis, farmers` hands; bird fancies diseases	4
	Hookworm, brucellosis, leptospirosis, rabies.	4
E. Diseases due to chemical agents	Diseases due to metals; lead, mercury, arsenic, beryllium, cadmium, chromium, tin, manganese, iron, copper, zinc	4
	Diseases due to chemical compounds, organic compounds: halogenated hydrocarbons; bis (chloromethyl) esters; pesticides; benzidine; the naphthylamines; toxic gases and fumes, irritant gases and fumes	5
	Occupational lung diseases: silicosis, coal workers pneumoconiosis, asbestosis, extrinsic allergic alveolitis; byssinosis; other obstructive occupational lung diseases; granulomatous lung diseases; simple occupational pneumonitis; occupational chronic bronchitis, benign pneumoconiosis	5
F. Diseases due to psychosocial factors	Industrial neurosis, stress, depression, peptic ulcer.	3
G. Occupational Cancers	Occupational Cancers	5

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
H. Regulation and Control of Occupational Health Problems.	Occupational legislation: factory laws; workman compensation laws; labour laws' miscellaneous occupational legislations	4
	Organisation of occupational health internationally and in Nigeria	4
	Health education in the industry; role of the labour union in occupational health services; ethics in occupational health	4
I. Special issues in Occupational Health	Special groups in occupational health: women, the disabled; special screening programmes in occupational health	4
	Occupational psychology and services	4
	Occupational health in agriculture, mining, petroleum, road and air transportation and migrant workers	5
J. Occupational hygiene	Introduction to occupational hygiene practice	3
	Recognition, evaluation and control of hazards: instruments and methods	3
	Environmental monitoring, atmospheric pollution industrial waste management	4
	Personal protective clothing and equipment	2
	Health risk assessment for different occupational groups	3
K. Occupational toxicology and pathology	Principles of occupational toxicology, dose-effect responses and sensitization	3
	Biological monitoring, analytical methods, standard setting, carcinogenesis, mutagenesis, teratogenesis, toxicity testing, acute poisoning and emergency treatments.	5

7. PUB 918 Health Policy, Planning and Management

(*Credit Units* **=4)**

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
A. Health policy	The role of the health sector in national development	20
	Public policy-making processes	
	Contemporary policy issue	
	The policy environment	
	Health decision-making	
	Historical perspective of health in national development plans in Nigeria	
	The national health policy of Nigeria	
	Levels of health care - nature, general characteristics and inter-relationship; constitutional responsibilities for health care in Nigeria	
	Comparative international appraisal of health policy in developed and developing countries	
B. Fundamentals of health economics	Health economics – definition, basic concepts, scope, uses.	20
	The health sector with the macro economy	
	Microeconomic principles – demand and supply, methods of pricing; concepts of marginal analysis and opportunity cost, etc.	
	Economic evaluation of health programmes – concept of economic efficiency; types of economic evaluation; measurement and valuation of costs and consequences.	
C. Health planning and management – general principles, techniques and tools	The management process in the context of health care - 15 historical perspectives, modern management concepts, principles and functional elements.	
	Health planning –historical perspectives; uses and scope; planning approaches and processes; strategic planning techniques; action planning techniques; quantitative techniques in health planning; plan implementation and evaluation, feedback mechanisms and re-programming	
	The organisation of health services: organisation, structure and design.	
	Interpersonal and organizational communication in health management; conducting meetings, etc.	
	Evaluation of health services – basic concepts & general principles, types of evaluation :-input, process output and outcome	
	Quality assurance in health care	
	Health management information systems	
	Social marketing of health programmes	
	Health systems research as a management tool	
	Public health legislation	
	The functions of the Medical Officer of Health	
	The management of change	

	Specific Topics/Skills	Weighting (%) of Course Coverage
D.	The personnel management function	15
Management of human resources	Health manpower planning, recruitment and selection	
	Leadership. Motivation and team building-	
	Support ive supervision and control	
	Performance appraisal, health manpower development, training needs assessment; training strategies and methods.	
	Conflict resolution; industrial relations, collective bargaining and labour laws.	
E.	Problems of management of general support services, maintenance of building, vehicles, equipment, etc.	10
Management of Material Resources	Purchasing and supply procedures	
	Stores management	
	Management of drugs and consumables	
	Inventory management	
	Office management - management of work - place, patient flow, paper-work, time, etc.	
F.	The financial environment, laws and financial regulations	10
Health care financing cost-recovery and management of financial resources	Health care financing - sources of finance: short-term, long-term, relative merits and demerits, the National Health Insurance Scheme.	
	Cost-recovery mechanisms; management of funds	
	Budgeting and budgetary control – general principles of budgeting; budget preparation, budget implementation, and budget performance monitoring.	
	Basic accounting records and procedures; the appraisal of financial and cash flow statements; internal financial control procedures; auditing procedures, appraisal of audit reports	
G.	Objective, nature, content and managerial problems of various 10	
Organised national programmes of medical care	specialized health programmes organized by:-Federal, state and local governments-Voluntary and non-governmental organizations.	

H.		
Primary Health Care	Historical background	10
	Concepts and principles of primary health care	30
	Components of primary health care.	20
	Strategies for the implementation of primary health care	30
	New concepts and paradigms in achieving health for All i.e., MDG, SDG, UHC	10

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8. PUB 919 Health Promotion and Education (*Credit Units = 4*)

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
Health Education and Community Mobilization	The nature and scope of health education	10
	Concept of health promotion and its applications i.e., health promoting cities etc.,	10
	Current theories and models of health behavior	10
	Change process – theories of behavioural adaptation, change and maintenance	10
	The health communication process	15
	Mass and interpersonal communication –theories, models and methods	10
	Patient education and counseling methods	10
	Audio -visual media and technology	10
	- Community education, mobilisation and development - Community development process -Community participation and social mobilisation strategies - Communication strategies for community mobilisation	15

9. PUB 920 Reproductive and Family Health (*Credit Units = 5*)

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
A. The physiological and psycho-social disadvantage basis of maternal and child health (MCH)	Historical evolution from MCH to family health (FH)	10
	The MCH/FH cycle of service programmes and their individual objectives, contents and services	
	Family health care within the services of the MOH	
	Family health versus family medicine.	

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
B. The modern ideological concept of reproductive health	Its evolutionary background including landmark global efforts at addressing population, health and development issues	10
	The International Conference on Population and Development (Cairo 1994) and Fourth World Conference on Women in Beijing 1995 e.t.c.,	
	Definitions, rights based and life cycle approach	
C. Components of reproductive health	Family-planning counselling	15
	Information, education, communication and services	
	Education and services for prenatal care, safe delivery, and post-natal care, especially breastfeeding, infant and women's health care	
	Prevention and appropriate treatment of infertility	
	Prevention of abortion and the management of the consequences of abortion	
	Treatment of reproductive tract infections; sexually transmitted diseases and other reproductive health conditions	
	Information, education and counselling, as appropriate, on human sexuality, reproductive health and responsible parenthood.	
D. Key issues of concern in RH and global efforts / programmes for addressing them	Maternal morbidity and mortality, levels, trends, determinants in Nigeria and contemporary developing countries; interventions for reducing them and objectively verifiable indicators for measuring progress and evaluating reduction programmes; Roll back malaria (RBM) and malaria in pregnancy. Management of the complications of abortion and post abortion care. Maternal mortality audit. Millennium Development Goals relevant to maternal mortality ratio reduction.	15
	Newborn, infants and under-fives morbidity and mortality - levels and determinants of morbidity in the newborn, infants and under-fives in general. Child-care services as offered within PHC context. Priority health problems of this group and global and national initiatives for addressing them; ie, IMCI and other child survival strategies.	
	Reproductive tract infections (RTIs) especially HIV/AIDS including prevention of mother to child transmission (PMTCT), prevention and management of RTIs; trends in national sentinel surveys for HIV, national programmes (NACA, SACA, LACA, etc) and efforts for the control of HIV/AIDS and PMTCT; global efforts to contain the disease including mother to child transmission including the 3 by 5 Initiative. Care and support and	

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
D. Key issues of concern in RH and global efforts / programmes for addressing them *continued*	Gender based violence-elimination of harmful traditional practices, violence against women and men, spouse abuse and battering etc.	
	Adolescent RH needs and services -developmental processes, patterns of adolescent behaviour, parental influences socialisation and factors influencing adolescent developmental outcomes. Major causes of morbidity and mortality during adolescence. Identifying RH needs of adolescents and programming for them. Implementation challenges and policy issues.	
	Male involvement and participation in RH -RH services for men-routine and special care including screening for prostatic enlargement and testicular malfunctions	
	Menopause, andropause and the health needs of ageing populations - identify and design programmes to meet the RH needs of this growing population. Screening for reproductive tract cancers and management of conditions associated with andropause/menopause	
E. Safe motherhood	Historical background, global efforts of support	10
	Component services - prenatal care (focused ANC) - essential obstetric care - basic and comprehensive - essential care for safe delivery by skilled birth attendant; - Perinatal & neonatal care - Post natal care and breast feeding - Family Planning information and services	
F. Adolescent reproductive health information and Services	Concept of adolescent/youth friendly services	15
	Life planning education for adolescents	
	Programming for the adolescents	
G. Gender equity	Meeting the RH rights of all -male responsiveness to family RH needs; Girl-child developmental issues; Status of women; Gender index	10
H. School health	Objectives of the school health programme	15
	Health problems of school children	
	Components of the school health programme	
	School health services School health environment	
	School health education	
	Organisation of a school health programme	
	Concept of health promoting schools	

10. PUB 921 Social and Rehabilitative Medicine (*Credit Unit*= 2)

Broad Topics	Specific Topics/Skills	Weighting (%) of Course Coverage
A. Rehabilitative & Social Medicine	Rehabilitation: definition and the need for; nature and extent of the problem; economics of the problem; programme needs and goals	35
	Health care & programmes for specified, disadvantaged population groups. Disability assessment, International adoption medicine, Internally Displaced people, refugees	35
	Social geriatrics: definition of the aged; problems of the aged, its magnitude and identification of predisposing factors. Development of relevant programmes; roles of agencies, governmental and non-governmental.	30
B. Behavioural factors affecting health	Concept of health and illness	20
	Class, culture and health	20
	Life style and health	20
	Substance use, dependency, diagnosis and treatment	15
	Barriers to good health	15
	Place, migration and health	10

11. PUB 922 International and Port Health (*Credit Units = 4*)

	Specific Topics/Skills	Weighting (%) of Course Coverage
International Health	Scope and content, changing paradigms like Global health e.t.c.,	10
	International health regulations	20
	Port health services – objectives, organization and functions	25
	Role of international and non-governmental health agencies in promoting international health	20
	International aspect of communicable disease control, global response to disease outbreaks and disasters. disaster diplomacy, travel medicine	25

12. PUB 923 Public Health Nutrition (*Credit Units = 4*)

	Specific Topics/Skills	Weighting (%) of Course Coverage

Public Health Nutrition	Principles of nutrition	10
	Food, culture and nutrition	10
	Nutrition problems of developing countries	5
	Nutritional problems in different stages of life	10
	Basic concept of maternal nutrition	5
	Food security	10
	Household, national nutritional values of local foods	10
	Role of the health sector in nutritional programme	10
	Diets and chronic non-communicable diseases.	15
	Methods of clinical and epidemiological nutritional assessment	15

1. Field Training Report

During the Junior Residency Phase, residents shall develop and submit for assessment as part of Part I examination, a Field Training Report that documents experiences acquired during the course of three compulsory and one elective field postings. The compulsory postings are

- Rural Posting
- Medical Officer of Health Posting
- International/Port Health

An elective posting may be in any area the resident elects including Occupational Health, posting with Non-Governmental Organisations or even in other sub-specialties of Medicine or Surgery provided the community/public health context is evident. For example, a field posting in a community-based blindness prevention or cancer prevention initiative could be suitable.

Format and Structure of the Report

The Field report shall have the following format and structure.

Title page: The title is to be written as **"TRAINING CASE-BOOK OF THE JUNIOR RESIDENCY PROGRAMME FOR THE PART 1 FMCPH EXAMINATION."** This is then followed by the name of the candidate, his/her training institution's address; followed by statement: **"SUBMITTED TO THE FACULTY OF PUBLIC HEALTH AND COMMUNITY MEDICINE, NATIONAL POSTGRADUATE MEDICAL COLLEGE OF NIGERIA IN PARTIAL FULFILMENT FOR THE REQUIREMENTS FOR THE PART 1 EXAMINATION IN FACULTY OF PUBLIC HEALTH AND COMMUNITY MEDICINE OF THE COLLEGE.** Finally, the month and year of the exam at which the book is presented, e.g., "November 2020".
The report shall consist of the following opening pages and chapters

- **Certification page** *(by residency training coordinator and Head of Department)*
- **Dedication (optional)**
- **Acknowledgements (optional)**
- **Table of contents**

Chapter 1. Introduction – should review the entire residency training in Public Health as articulated at the given time and contained in the institutions and faculty's training curriculum. It should also review the resident's junior residency training experience. Some preliminary conclusions on these may be reached and used to conclude this chapter.
Chapter 2. Rural Health Posting
Chapter 3. Medical Officer of Health
Chapter 4. International and Port Health Posting
Chapter 5. The Elected Community-based Project or Initiative in which the Candidate participated as described above.
Chapter 6. Discussion, Conclusions and Recommendations *(including personal assessment of the training exposure the candidate acquired for the junior residency)*
Chapters 2 – 5 should be structured as short opening introductory remarks followed by the main body of the posting written in prose or constructed as a diary of daily activities for the entire period. The resident is expected to document his/her expectations of the posting, the lessons and competences acquired, the challenges and how they were tackled or overcome. The closing sections should articulate some conclusions and recommendations. *Further details of these chapters are as below:*

- Introduction: candidate shall explain the importance, objectives and methods of this posting and previous

training and preparation for the posting;

- The main body of the posting report: shall be a full and detailed documentary of the entire posting including the exact dates, the activities carried out and their outcomes.
- Challenges/obstacles of the institution visited and recommendations made by the candidate for mitigating them.;
- Skills and competences gained from the posting;
- A discussion of the entire posting in regard of all the above; and then
- The conclusions and recommendations for all stakeholders including the Faculty, the training institution, the department, as well as, for colleagues and future residents;
- References may be provided at the end of each of the chapter of the report or as bibliography or reference listing at the end of the report.

DURATION: 24 months

Lectures, Seminars, Tutorials, postings, practicals, Field activities……65 Credit Units

Clinical Postings (A& E, Paed and O & G)……..7 Credit Units

TOTAL CREDIT UNIT:……. 72

Part I Examination

Part I examination is held as a 2-stage examination. This was devised to ensure quality of examination as the number of candidates increased. In the first stage, all candidates take a 200-question-MCQ (best of four answer) screening examination on theory and practice of Public Health. Only candidates who obtain a minimum Modified Angoff pass score obtained by Panel of Judges are allowed to proceed with the remaining components of the examination as detailed in the table below:

Components	Assessment type	How will it be assessed	Resources required	Time Required
Theory	**Screening** : **Paper I** –Theory and practice of public health (Multiple choice questions) **Post-Screening** **Paper II –** Epidemiology, biostatistics, environmental and occupational health **Paper III –** Rehabilitative medicine, health management and health care	**Paper I: 200** Multiple Choice Questions (Best of four Options) **Paper II & III:** Theory questions, Five questions in which candidates are to attempt all the questions.	2-day meeting of the court of Examiners Three day meeting of Court of Judges to determine Modified Angoff pass score. The Examination to standardize questions. Stationery	120 minutes 180 minutes
Practical Examination	Made up of:	a. Objective Structured Practical Examination (OSPE) : 40% b. Picture Test that consists of		

power point projections of specimens or other pictures of public health importance (Covering all aspects of Public Health).	a. There will be a 4 - 5 stations in which candidates would have opportunities to prepare laboratory slides and identify specimens of Public/Community Health importance mounted on a slide. scenarios, projected slides b. This will consist of 20 -25 power-point projections of practical field scenarios or pictorial scenarios of Public/Community Health	Patients/ clients, pictures, items of Public Health Importance LCD projector Dedicated Laptop Digital Camera Backup power	20 minutes 60 minutes

Components	Assessment type	How will it be assessed	Resources required	Time required
Clinical Examination	Objective Structured Clinical Examinations (OSCE) with at least 20 stations including rest stations.	Each candidate will rotate through at least 20 station with 2 - 4 rest stations. The stations will provide opportunities for the candidates to be examined in the following areas: - History taking - Clinical examinations - Case presentation - Performance of clinical procedures of Public Health importance - Interpretation of clinical findings in the context of Public /Community Health - Interpretation of laboratory reports or other Public	Patients, clinical instruments, stationery	180 minutes 120 minutes
Viva voce	For the oral examination, each candidate will be examined by two panels of examiners on: a. Theory and Practice of Public/Community Health b. Oral defence of the Field Posting Report	a. Candidates to choose and answer 5-8 questions from a set of standard questions prepared for the examination (60%) b. Candidates shall have the opportunity to speak to the contents of the Field Posting Report (40%)	Stationery including index cards. HP-Photo smart scanner, printer, photocopier (with cartridge)Timer	Candidates shall spend 30 minutes Each panel.

MARKING SYSTEM, SCORING AND GRADING OF PERFORMANCE

Scoring of the different components of the examination shall be as follows:

In scoring out of 100 for single-unit score per item as in Multiple Choice Questions, Picture Test, OSPE, OSCE, etc.

Scores	Level of Pass	Grade	Grade Level
70 or above	Very Good Pass	A	P+1
60 - 69	Good Pass	B	P+
50 - 59	Pass	C	P
40 - 49	Borderline	D	P -
< 39	Fail (No compensation)	E	P – 1

Note. Pass Scores will be determined by College approved Modified Angoff standard setting process set by Court of Judges for each stage ahead of each examination.

For theory, oral examination, etc.

Marking of theory and oral examination shall use the close marking system as shown in the table below.

For theory, oral examination, etc.

Obtainable Scores									
10	20	30	40	50	60	100	Level of Pass	Grade	Grade Level
7	14	21	28	35	≥ 42	≥70	Very Good Pass	A	P+1
6	12	18	24	30	36-41	60-69	Good Pass	B	P+
5	10	15	20	25	30-35	50-59	Pass	C	P
4	8	12	16	20	24-29	40-49	Borderline	D	P –
3	6	9	12	15	≤ 23	≤ 39	Fail	E	P -1

CRITERIA FOR AWARDING PASS/FAIL CLASSIFICATION

A. PRIMARY

The Pass Score is as determined by standard methods (Modified Angoff).

To pass the Examination, a candidate must obtain a score equal to or greater than the Pass score.

B. PART 1

The Part 1 examination consists of 3 sections:

(i) Written papers (ii) Clinicals / Practicals (iii) Orals

The Pass Score for each of these and the overall examination is as determined by standard methods (Modified Angoff).

To pass the Examination, a candidate must:

1. Obtain a score equal to or greater than the Pass score in each of the sections.
2. Obtain a score equal to or greater than the Overall Pass score in addition to obtaining a score equal to or greater than the Pass Score in Clinicals.

C. PART II

The minimum components of the Part 11 examinations are the Dissertation and Viva Voce (Orals).

1. The Viva Voce section is in the Principles and Practice of Public Health and community Medicine. Examinee will be examined by two independent set of panelists for 30minutes. A panelist will comprise of two examiners who will score the candidate independently out of 50. Candidate will answer questions from various domains of sub-specialty in Public Health.
2. The Dissertation Defense may be regarded as:
   - P+ Accepted
   - P Accepted with minor editorial corrections
   - P- Provisionally accepted with significant errors to be reassessed after corrections or
   - P-1 Referred, to be rewritten, represented and defended at a subsequent examination.
   - P-2 Rejected, to follow approved Proposal guidelines and represent at a subsequent examination.

To pass the overall Examination, a Candidate must have his dissertation Accepted and pass the viva voce.

However, a candidate who has his dissertation accepted P or P+ level but fails in the Viva Voce, shall be referred in viva voce only against the next Examination.

Candidates whose dissertation needs some significant correction i.e. P- level but who has passed the Viva Voce shall earn a Provisional Pass. Minor editorial/typographical errors shall not affect a candidate's full pass rating. No candidate may earn a reference in viva voce as well as a provisional pass in dissertation.

A candidate having passed the Viva Voce but whose dissertation needs a major restructuring shall be referred in the dissertation only against the next examination.

Exemption from Part I Examination: No candidate may be exempted from Part I examination.

Credit Units. 72

DOCTOR OF MEDICINE (MD) DEGREE PROGRAM

Philosophy

This postgraduate MD programme will be administered by the NPMCN in accredited training institutions. Candidates will focus on the creation of new and innovative knowledge. The MD degree is primarily for individuals with goals in public health **Research and Teaching**.

The NPMCN Senate oversees the MD degree programmes and its requirements, which entail course work and independent research. Generally, the programme is for resident doctors undergoing residency training in the Faculty of Public Health and Community Medicine, NPMCN and other sister Colleges as approved by the Senate of NPMCN. It consists of course work during residency training in accredited residency training institutions during junior residency training period and first year senior residency training period in public health and independent research during the senior residency training period in public health.

Admission criteria

Admission into this MD degree programme is only for medical doctors with MBBS or MBChB degree and are already admitted into residency training programme in Public Health and Community Medicine and registered as an associate fellow of the National Postgraduate Medical College of Nigeria and is strictly by:

i. Having passed Primary FMCPH Fellowship Examination or Exemption from Primary Examination of NPMCN
ii. Having passed Part I FMCPH Fellowship Examination of NPMCN
iii. Candidate must be registered as an Associate Fellow of NPMCN
iv. The duration of the MD is minimum of two years post Part 1 in an accredited training Institution.
v. Defense for MD dissertation will be conducted by examiners in the Faculty of Public Health and Community Medicine as appointed by the National Postgraduate Medical College of Nigeria (NPMCN)

The program to be undertaken in a nearby approved center and not necessarily the one the resident is employed. The seminars which carry 3 units each; and will be presented and graded in the local training center. Faculty courses will be examined centrally by Faculty. College based courses will be examined by College. Current Residents who may have had their proposals accepted may seamlessly migrate to the MD program if they so desire but the first defense will be at least 15 months after Senate approval of the program

Admission Criteria for Resident Doctors of other Postgraduate Medical Colleges

These Resident Doctors may be admitted provided that before starting the MD program they would have passed the compulsory College courses applicable before Part 1 and any compulsory Faculty courses at that level

DUTIES OF SUPERVISORS FOR COLLEGE MD PROGRAMME.

1. To sign application letters for Residents.

The College has developed a research compact with each MD candidate. Please ensure the candidate is working in your field or a field you qualify and are ready to supervise. You will be

required to review the candidate's concept paper and work plan and if you are satisfied, you will be expected to sign the research compact with the candidate.

2. To sign Proposals and assist with ethical approval.

To work with the candidates and help transform his / her concept paper to a workable proposal. This proposal will be handled like the Fellowship proposal- sent to assessors and if approved, you will supervise the candidate through data collection, analysis and write up for thesis defense. Please note that candidates with Part II proposals previously accepted by the College and who may wish to use such for the MD programme will only be requested to attach a letter of acceptance of proposal by the College.

3. To sign progress reports every semester.

The experience with the residency programme has shown that the residents are a bit slow in presenting their proposals. To guard against this, the supervisors will be expected to present a report each semester to help monitor the progress of residents. This report will be initiated by the MD candidate and sent to the College through the supervisor.

4. To serve as coordinator for the programme in their centers.

Each department will appoint one of the supervisors as the Departmental Coordinator. The College will appoint one of the Departmental Coordinators as Center Director. The Center Director will relate with all Departmental Coordinators and report on center and departmental activities at the training center to the College.

5. To liaise with the Centers Director and Departmental Coordinators on seminar presentations and scoring of same along the guidelines provided by the College.

The Departmental Coordinators will report to the Center Director on seminar presentations done in the department.

6. To witness the MD thesis defense as observers only. Supervisors are usually not allowed to attend Fellowship defense but you will be allowed to attend the MD as observers.

7.To encourage candidates to go for Faculty and College based courses.

8. To encourage the institutions to allow the candidates to attend courses. Supervisors will be expected to encourage all the MD candidates to attend the Annual Scientific Conference and All Fellows Congress (ASCAF) and other professional association conferences and to encourage the Institutions to sponsor such candidates.

COURSE WORK

The course work for the MD program consists of one

1. College based courses.
2. Faculty Based Courses

Residents not running the MD programme will be at liberty to attend the Faculty courses. These courses will be held every Wednesday with the College courses alternating with the Faculty courses, each candidate will be required to present a seminar to the others in the Faculty (for the Faculty course) and all the MD candidates (for the College based courses). A

pass will be required for both the Faculty courses (in an examination conducted by the Faculty) and seminar presentations to all MD candidates.

Supervisor/Candidate Compact

The compact between MD candidates and their Supervisors enables their relationship to be open and predictable. The work should be jointly designed by the supervisor and the candidate taking their time in relation to other things into consideration, in order for the research to be completed within the stipulated time. Though the success of the MD programme is not guaranteed by this Compact.

The Persons listed below have gone into a Compact to carry out this MD research programme.

(Name of Candidate) Faculty: Public Health and Community Medicine

(Name of Supervisor) Faculty: Public Health and Community Medicine

Duties and responsibilities of the Supervisor(s)

1. The Supervisor should familiarize the candidate with the current rules applying to MD programme at the host training institution.
2. The Supervisor should strive to provide the appropriate working conditions for the candidate.
3. The Supervisor should commit to regularly and professionally advise the candidate and should also commit to attending meetings regularly about the work in progress of the candidate, taking into consideration the work plan and the work schedule.
4. The Supervisor should encourage the candidate to work independently and also support the candidate by allowing access to his patients, medical students and residents. He should also provide access to scientific environments (national and international), by introducing her/him to working groups and scientific networks, by encouraging her/him to take part in seminars, workshops and conferences, by helping her/him to prepare presentations, by providing her/him with information on possibilities to publish articles and by helping her/him in the writing process.
5. The Supervisor should support the candidate regarding her/his career plan and should mention possibilities for further disciplinary and interdisciplinary qualification.
6. The Supervisor should assess the work submitted by the candidate promptly and in a neutral way.
7. If there are any disputes with the candidate, the supervisor should accept arbitration with the Court of Examiners.

Duties and responsibilities of the Candidate

1. The candidate should produce a detailed and structured work plan and work schedule and submit to the supervisor for approval. Such must inform the supervisor if there are changes made to the work plan or schedule.
2. The candidate must get permission from the supervisor to attend specific courses related to the program.
3. The candidate must regularly report on the work in progress to the supervisor(s). The report (approximately 1-page long) should contain a description of the achievements since the last report or since the start of the MD program, the overall progress on the research, and the participation to lectures, conferences, guest lectures, and specific workshops. In addition,

the candidate must submit part of the results (e.g. chapter of the research work, draft of article) to the supervisor(s) following the work plan and the work schedule.

4. The candidate must strive to present her/his scientific results to the scientific community by publishing articles in peer-reviewed journals and by presenting these results at conferences.

The persons signing this Compact agree to comply with the principles of good scientific practice and ethical guidelines.

Name of Candidate and Signature:……..
Name of Supervisor and Signature:…….
Date:…….
Work plan & Schedule (attached) see Appendix……

ACADEMIC REGULATIONS FOR POSTGRADUATE DOCTOR OF MEDICINE (MD)

ACADEMIC SESSION: An academic session consists of two semesters. Each semester comprises 15 weeks of teaching and two weeks of examinations.

MODULAR SYSTEM: All postgraduate programmes shall be run on modular system, commonly referred to as Course Unit System. All courses should therefore be sub-divided into more or less self-sufficient and logically consistent Packages that are taught within a semester and examined at the end of that particular semester. Credit weights should be attached to each course.

The NPMCN MD degree programme ensures that Residents have a breadth and depth of knowledge in a particular discipline or area and candidate's ability to conduct research is assessed by the preparation of a written dissertation. It is advised as a guide for candidates to choose a course in the specialty where he/she intend to spend the last one year of Senior Residency. The title of candidate's thesis is expected to also fall in line with candidate's choice.

The followings are the fields a candidate can be awarded MD in the Faculty of Public Health and Community Medicine of the NPMCN

1. Epidemiology and Biostatistics
2. Public Health Policy, Planning and Management
3. Reproductive & Family Health
4. Environmental and Occupational Health
5. Health Promotion and Education
6. Public Health Nutrition
7. Social and Rehabilitative Medicine
8. International and Travel Medicine

The MD program courses will be taken as part of Residency training postings, seminars, practicals, clinicals and didactic Lectures.

COLLEGE BASED COURSE

COURSE CODE	COURSE
PMC 993	Ethics in Clinical Practice
PMC 994	Medical Education
PMC 995	Advanced Research Methodology in Medicine
PMC 996	Advanced Health Resources Management
PMC 997	Assessment and Examination

College Based Courses Synopsis

PMC 994 MEDICAL EDUCATION COURSE Credit Unit 2

The objective is to facilitate acquisition of knowledge, understanding and appropriate teaching and research skills in Medical education in Health Institutions.This course is designed for medical and dental resident doctors. The need for doctors, involved with teaching in the medical school and postgraduate medical training to have training in teaching is widely recognized. The skills in Medical Education course has been designed to meet this need. The course is aimed at resident doctors who are new to teaching and at Fellows with years of experience who would like an update on current best practice and a greater understanding of the basic principles. The course recognizes that, with appropriate help, all teachers, even those with considerable experience, can improve their skills in teaching. The topics to be taught are, standard setting in educational assessment; assessment of clinical skills; threshold concepts in medical statistics and evidence based practice; numeracy issues in learning about research; mapping and revising the learning and teaching of research; e-learning and blended in medical education; problem based learning; programme development; educational; computer communication networks; community-institutional relations; reproducibility of result; patient simulation; databases, factual; clinical decision making; selection of medical students.

PMC 995 ADVANCED RESEARCH METHODOLOGY IN MEDICINE. Credit Unit 2

The main objective of this course is to facilitate acquisition of sound knowledge and necessary skills for research in Medicine and Dentistry.

Subject Areas:

i. Definition, Spectrum and Types of Health Research Design.
ii. Defining Research problems, Setting Objectives,
iii. Statistics and Research Methods.
iv. Writing Research Proposals (Planning, Protocol Development and Report Writing)
v. Good Clinical Practices and Clinical Trials.
vi. Translations Medical Research
vii. Role of Computer in Medical Research (EPI Info and SPSS).
viii. Literature Review,
ix. Use of Physical and Virtual Library,
x. Use of Internet, Search Engines,
xi. Systematic Reviews and Meta-analysis.
xii. Ethical considerations in Medical Research.

xiii. Clinical Governance.
xiv. Writing –Up, Presentation and Defence of Theses.
xv. Evidence Based Health Care.
xvi. Statistical Methods (Summary, Inferences and Interpretation).
xvii. Principles of Writing Articles for Publications.
xviii. Research integrity and Plagiarism.
xix. Budget and Sources of Funding for Research.

PMC 996 ADVANCED HEALTH RESOURCE MANAGEMENT. Credit Unit 2
The objective is to facilitate acquisition of knowledge and necessary skills required for management of health resources in Health institutions and for programme implementation.
Subject Areas:

i. Principles and application of Management
ii. Strategic Management
iii. Health Care Planning
iv. Health Policy formulation and evaluation
v. Health Resources mobilization and allocation
vi. Human Resources Management
vii. Monitoring and Evaluation of Health Services
viii. Performance Management
ix. Sustainable Development
x. Problem Solving and Decision-Making skills
xi. Emotional Intelligence
xii. Leadership
xiii. Management of Change
xiv. Risk Management
xv. Financial Management
xvi. Material Resources Management
xvii. Quality and quality Assurance in Health and Equity in Health.
xviii. Managing the Health Team
xix. Leadership and Team Building.
xx. Health Care Financing.
xxi. Financial Resources Management and Cost-Recovery Systems.
xxii. Health Economics-the Economic appraisal of Health Programme.
xxiii. Public Private Partnership (PPP).
xxiv. Health Services Management Information Systems.
xxv. Essentials of Budgeting and Accounting.
xxvi. Social Marketing of Health Programmes.
xxvii. Ethical and Legal Considerations in Medical Practice

PMC 997 ASSESSMENT AND EXAMINATION

Modified Angoff Standard Setting Multiple Choice Questions and Objective Tests; Oral Examinations; Patient Management Problems; The long clinical case; the objective structured long examination record' (OSLER), the short clinical case; objective structured clinical examination (OSCE); objective structured practical examination (OSPE); objective structured picture examination (OSPicE); workplace-based assessment; mini-CEX (mini-Clinical Evaluation Exercise); direct observation of procedural skill (DoPS) and Multi-source feedback (MSF); Simulated Patients; Observed Clinical Situations; Ensuring safe and effective patient care through training; Establishing and maintaining an environment for learning; Teaching and facilitating learning; Enhancing learning through assessment; Supporting and monitoring educational progress; Guiding personal and professional development; Continuing professional development as an educator; use of standardized patient (SP) encounters; Data gathering technique (history and physical examination); Interpersonal communication; Clinical management (diagnostic strategy and treatment plan); Professional documentation (post encounter note or PEN); Checklists; Patient Simulators.

The following courses have been taken during Junior Residency training program as didactic lectures, Tutorials, practicals, postings and seminars:

S/N	Broad Topics/Courses	Duration and aspect of Junior Residency Training	Credit Unit
1.	EPIDEMIOLOGY	3 months year one Junior residency training	2
3.	BIOSTATISTICS	2 months year one Junior Residency Training	2
4.	COMPUTER APPLICATION IN MEDICINE	One month year one Junior residency training	1
6.	Health Services Organization and Management	One month year one Junior Residency Training	2
7.	ENVIRONMENTAL HEALTH	One month year one Junior Residency Training	2
8.	OCCUPATIONAL HEALTH	One month year one Junior Residency Training	2
9.	SOCIAL MEDICINE AND REHABILITATIVE MEDICINE	One month year one Junior Residency Training	2
10.	REPRODUCTIVE AND CHILD HEALTH	One month year one Junior Residency Training	2
11.	HEALTH EDUCATION	One month year one Junior Residency Training	1

13.	COMMUNITY HEALTH AND PRIMARY CARE	Two months year one Junior Residency Training	1
16.	SOCIAL AND BEHAVIOURAL INTERVENTION	One month year two Junior Residency Training	1
17.	INFECTIOUS DISEASE EPIDEMIOLOGY	One month year two Junior Residency Training	1
18.	CHRONIC DISEASE EPIDEMIOLOGY	One month year two Junior Residency Training	1
19.	CLINICAL INVESTIGATION	One month year two Junior Residency Training	1
20.	BIOETHICS AND HEALTH POLICY	One month year two Junior Residency Training	1
21.	PUBLIC HEALTH NUTRITION	One month year two Junior Residency Training	1
22.	INTERNATIONAL AND PORT HEALTH	2 months year two Junior Residency Training	2
24.	GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL	One month year two Junior Residency Training	1
26.	MEDICAL OFFICER of HEALTH	3 months year two Junior residency Training	2
28.	HISTORY OF MEDICINE, PUBLIC HEALTH HISTORY AND PUBLIC HEALTH MUSEUM	One month year two Junior Residency Training	1
29.	PUBLIC HEALTH LABORATORY AND CLINICAL INVESTIGATION	One month year two Junior Residency Training	1
TOTAL			**30**

FACULTY BASED COURSES FOR AWARD OF POSTGRADUATE DOCTOR OF MEDICINE (MD)

S/N	Course Code	Course	Topics/Skills	Duration	Course Credit
1.	**PUB 924**	**Environmental Health**	The composition of the human environment and its contribution to health and disease. The components of the human environment and its contribution to health and disease. The natural importance of water, distribution, and sources of water, properties of potable water, water standards,tests for portability. Refuse Collection and Disposal. Sewage and waste water collection and disposal.	4 weeks	2

			Housing and health. Food Hygiene. Vector Control, Management of disaster, Public Health laws. Air pollution and control. Environmental impact assessment (EIA) of developmental projects		
2.	**PUB 925**	**Occupational Health**	Principles of occupational health. Diseases due to physical factors. Mechanical environment and its problems. Diseases due to biological agents. Diseases due to chemical agents. Diseases due to psychosocial factors. Occupational Cancers. Regulation and Control of Occupational Health Problems. Occupational Hygiene. Occupational toxicology and pathology.	4 weeks	2
3.	**PUB 926**	**Social and Rehabilitative Medicine**	The concept of health and illness, class, culture and health, Life style and health, substance use, dependency, diagnosis and treatment, barriers to good health. Place migration and health.	4weeks	2
4.	**PUB 927**	**Reproductive and Child Health**	The physiological and psycho-social disadvantage basis of maternal and child health (MCH). The modern ideological concept of reproductive health. Components of Reproductive health. Key issues of concern in RH and global efforts / programmes for addressing them. Safe Motherhood, Adolescent reproductive health	4 weeks	2

			information and services. Gender equity.		
5.	**PUB 928**	**Public Health Nutrition**	Principles of nutrition, Food, culture and nutrition, Nutrition problems of developing countries. Basic concept of maternal nutrition. Food security. Household, national nutritional values of local foods. Role of the health sector in nutritional programme	4 weeks	2
6.	**PUB 929**	**Health Policy, Economic and management**	The role of the health sector in national development. The Public policy making processes, contemporary policy issues, the policy environment and health decision making.	4 weeks	2
7.	**PUB 930**	**Health Promotion and Education**	Current theories and models of health behavior change process, change and maintenance. Mass and interpersonal communication –theories, models and methods. Audio-visual media and technology Community education, social and community mobilization and development, Community development process.	4 weeks	2
8.	**PUB 931**	**Epidemiology and Disease Control**	Definition, meanings and purpose of Epidemiology. Scope of epidemiology, Sequence and methods of epidemiological reasoning. Decision making in Epidemiology, Epidemiological methods. Incidence and prevalence studies. Communicable and non-	12 weeks	6

			communicable diseases.		
9.	**PUB 932**	**Biostatistics**	Descriptive and Inferential statistics. Probability laws and theories. Sampling and sampling methods. Statistics in medical research. Critical appraisal of medical literature. Computer Programmes for Epidemiological & Statistical Analysis. Medical Informatics.	4 weeks	2
10.	**PUB 933**	**International and Travel Medicine**	Global health, International health regulations, Port health services. International and non-governmental health agencies. Global response to disease outbreaks and disasters. disaster diplomacy, travel medicine	4 weeks	2
TOTAL				**48weeks**	**24**

ASSESSMENT

PUB 999 Thesis Credit Unit 12

1. A recommendation of 50,000 to 100,000 total word count for MD thesis
2. Candidate may publish aspects of the work before defense in a manner similar to other PhD programs
3. Arrangement of the other structures to be similar to College Part II dissertation
4. Successful Defense to take place at least 6 months before final fellowship exam
5. Dissertation component of Part II to-be waived for successful MD defenses
6. Binding colors as determined by College.

Oral defense of the Thesis/dissertation

Candidate shall defend his/her Thesis orally. This would entail responding to questions and clarifying issues that the examiners might have observed reading the Thesis. This examination will last for at least one hour and will be conducted by a panel of 2-3 examiners at least one of whom must have read the proposal. All examiners are expected to have read the dissertation and developed written reports on the dissertation that they are expected to bring to the examination. The examination gives the candidate an opportunity to present and discuss his/her work verbally. The examiners will also be able to clarify any points with the candidate.

The Dissertation and its defense may be assessed as

P+ =Accepted in the present form

P = Accepted with minor editorial corrections

P- =Provisionally accepted with significant corrections. The corrections must be vetted by one of the examiners.

P-1 =Rejected, to be re-written, re-presented and defended at a subsequent examination.

DEFINITION OF CREDIT UNIT

Credits are weights attached to a course. One credit is equivalent to one credit unit which consists of: 1 hour /week of lectures or tutorials or Self instruction per semester of 15weeks. This is equivalent to 15 Lecture hours or 3 hours/week of term paper work per semester of 15 weeks 45 term-paper hours or 3 hours/week of practical per semester of 15 weeks 45 practical hours

REQUIREMENTS FOR GRADUATION

30 Credit units earned from Part I Course work
6 Credit Units earned from departmental Seminars
24 Credit Unit earned from Faculty Based Courses
6 Credit units for Mandatory College Based Courses
12 Credit Unit for Thesis
TOTAL 78 Credit Units

SENIOR RESIDENCY TRAINING

Specific Objectives

The senior residency programme aims to equip residents who have passed the Part I examination with the relevant knowledge, attitudes, competence and specialized professional and managerial skills required to

practice as consultants in Public Health in the Federal, State and Local Government Public Health services, as well as, in private industrial health establishments or International or local Non Governmental Health-related Organization. The programme also provides opportunity for further specialized experience in any of the sub-specialty areas of Public Health.

Through lectures, discussions, case studies, field visits, attachments and field practice, the residents should be competent at the end of the training period to;

- Practice as consultants in public health.
- Plan and manage community health services
- Conduct appropriate research required for the efficient practice of the discipline.

Sub-Specialties of Public Health

The following are the sub-specialties of Public Health recognized for the senior residency training programme. They are areas for practicals and postings as represented in the training Log Book.

PUB 934 Epidemiology and Disease Control ……24 Credit Units
PUB 935 Reproductive and Family Health……....5 Credit Units
PUB 936 Environmental health……..6 Credit Units
PUB 937 Health Policy, Planning and Management……..4 Credit Units
PUB 938 Occupational Health…….6 Credit Units
PUB 939 Public health nutrition…….....4 credit Units
PUB 940 Health Promotion and Education……..4 Credit Units
PUB 941 International and Port Health…….....4 Credit Units
PUB 942 Biostatistics……...6 Credit Units
PUB 943 Social and Rehabilitative Medicine……...4 Credit Units
Total……67 Credit Units

Duration and Postings

The training shall be for a period of 36 months after passing the Part I examination of the National Postgraduate Medical College of Nigeria in Public Health. For those specializing in any of the subspecialties such shall spend the last 12months in their area of specialization. The training must take place in an institution that is accredited for the training in the Sub-specialty by the College. Trainees shall work under the direct supervision of at least one recognized medical consultant who must also be a Fellow of the Faculty of Public Health of the College. The resident is expected to spend a specified minimum period in each subspecialty. The trainee must attend compulsory courses in Health Management and Research Methodology run by the Faculty or the College during this period of training, it is recommended that the courses are attended early in the training phase.

PART II (FINAL) EXAMINATION

Eligibility

A candidate is eligible to sit the Part II (final) fellowship examination if he has:

- Passed the Part I Examination of the Faculty;
- Completed 36 months post Part 1
- Completed an approved dissertation, the proposal of which must have been assessed and approved at least 9 months before the date of proposed examination.

Training Goals to be Assessed:

- Advanced competences as in Part I, but with more emphasis on Communication, Academics, Management and Leadership skills, as well as Creative Thinking.
- Research capability through ability to conceptualize, design, execute, report and defend a dissertation.

Field activities

The following field activities should be integrated into the training programme.

- Dental Public Health
- Mental Health
- Computers in Public Health
- Public Health Laboratory for exposure in Microbiology, Parasitology, Haematology and Blood Transfusion
- Treatment of common endemic diseases including malaria and the sexually transmitted diseases (STDs)
- Management of essential drugs
- Tuberculosis and leprosy control
- Posting to Medical Officer of Health's office
- Rural health posting
- International Health, Port Health
- Posting for experience in Industrial and Occupational Health
- Posting for experience in Paediatrics, Obstetrics and Gynaecology, Medicine, Dentistry and Surgery, e.g., in an Accident and Emergency centre both in an urban and rural setting
- Rehabilitative & social medicine

MANDATORY TRAINING COURSES

A senior resident must attend at least two review courses approved by the College and Faculty in Research Methodology and Health Services Management; and Medical Ethics not earlier than January of the year preceding that which he/she intends to sit the Part II examination. Courses in any other additional sub-disciplines are encouraged. The details of the courses and other activities as indicated below must be documented in the Log book that is submitted for vetting prior to admission for the examination.

1. Management Experience/Responsibilities

- Courses attended in Management
- Workshop or seminars attended
- Administrative duties undertaken
- Assignments undertaken on ad hoc basis

3. **Teaching Experience**

- Medical students
- Others e.g., Community Health Officers, Community Health Extension Officers, e.t.c.,

3. **Research Training**

- Course attended on research methodology and papers published or presented at scientific meetings

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Membership of Learned Societies*

It is desirable that residents for the final fellowship examination show evidence of commitment to the specialty by registering with at least one learned society in Public Health or any of its sub-specialties before sitting for the Part II fellowship examination.

PART II EXAMINATION FRAMEWORK

Components

Candidates will be examined in two areas as follows:

1. Oral examination in Principles and Practice of Public Health

Oral discussion of the theory and applications of: Epidemiology, Medical Statistics, to solve Public Health issues of Communicable and Non-communicable diseases, Social Medicine, Environmental and Occupational Health, Health Education, Public Health Nutrition, International Health, Rehabilitative Medicine, Medical Ethical issues, Leadership, Teaching and Management issues of health and public health services

2. Oral defense of the dissertation

In this component, candidate shall defend his/her dissertation orally. This would entail responding to questions and clarifying issues that the examiners might have observed reading the dissertation. This component shall be for one hour.

Part II Examination Format

1. Oral Examination in Principles and Practice of Public Health

This entails oral discussion of Principles and Practice of Public Health. The questions will examine at higher level of cognition mainly application and problem solving. Each candidate shall be examined by two panels of examiners for 30 minutes per panel.

What will be assessed	How will it be assessed	Resources Required	Time Required
· Epidemiology and Disease Control · Occupational Health · Reproductive & Family Health · Public Health Policy, Planning and Management · Health Promotion and Education · Public Health Nutrition · Biostatistics · Environmental Health · International and Port Health · Social and Rehabilitative Medicine · Management experience/responsibilities Teaching Experience · Research training	Each Candidate Will answer 5-8 Questions from a standard pool of Questions Specifically Collated for the Examination	Stationary Including Index cards. HP – Photosmart scanner, printer with photocopier (with cartridge), timer.	60 minutes per candidate, in Two 30-minutes Sessions

1. Oral Defense of Dissertation

This examination will last for at least one hour and will be conducted by a panel of 2-3 examiners at least one of whom must have read the proposal. All examiners are expected to have read the dissertation and developed written reports on the dissertation that they are expected to bring to the examination. The examination gives the candidate an opportunity to present and discuss his/her work verbally. The examiners will also be able to clarify any points with the candidate.

How will it be assessed	Time required
A set of examiners, at least one of whom would have assessed and approved the proposal will examine the candidate. They would have read the dissertation prior to the defense and have written their individual examiner's reports. Prior to the defense, the examiners meet briefly to harmonize their views and agree on the direction of the defense. The defense should start with the candidate giving an overview of the work. Thereafter, specific issues will be addressed by the examiners. The examination should last for sixty minutes after which the candidate is assessed and recommendations made as follows:	60 minutes per candidate

Outcome of Part II Examination

Outcome of each component of the Part II examinations shall be independent as indicated below:

1. **Oral examination in Principles and Practice of Public Health**

To obtain a Pass in this component of the examination, a candidate must obtain an aggregate score of 50 or more from the two panels of examiners. However, a score of less 20 from any of the panels of examiners cannot be compensated; the candidate automatically fails the examination.

2. **Oral Defense of Dissertation**

The Dissertation and its defense may be as

P+ =Accepted in the present form
P = Accepted with minor editorial corrections
P- =Provisionally accepted with significant corrections. The corrections must be vetted by one of the examiners.
P-1 =Rejected, to be re-written, re-presented and defended at a subsequent examination.

- To pass the overall examination, a candidate must have his/her dissertation accepted and also Pass the oral examination in Principles and Practice (Viva Voce)
- However, a candidate who has his Dissertation accepted at P or P+ level but Fails in the Viva Voce shall be referred in the Viva Voce only against the next examination.
- A candidate whose dissertation needs significant corrections (P-) level but who has passed the Viva Voce shall earn a Provisional Pass. Minor editorial /typographical errors shall not affect the candidate's full Pass rating
- A candidate having Passed the Viva Voce but whose dissertation needs a major re-structuring shall be Referred in the Dissertation only against the next examination.

DURATION: 36month

Course Work …….. 67 Credit Unit

Departmental Seminar & Scientific paper presentations……12 Credit Units

Dissertation...……...…….12 Credit Units

TOTAL CREDIT UNIT……..91 Credit Units

36

The Part II Dissertation

Credit Units: 12

Objective

The dissertation is intended to test the trainee's ability to apply the knowledge and skills already acquired during the Part I training programme to identify and solve public health problems. The emphasis of this aspect of the examination is the assessment of the trainee's ability to:

- Identify a public health problem in Nigeria or other developing countries of the world.
- Critically review literature relevant to the public health problem.
- Carry out appropriate research studies with the main objective of finding solutions to the public health problem identified and making appropriate recommendations to alleviate the problem.
- Alternatively, the study may also focus on providing a deeper understanding of the problem or issue presented or test a cost-effective way of diagnosing or solving a problem or issue of public health importance

Approval of Title

Every post-Part I candidate must submit a dissertation proposal that provides a brief description of a public health problem and the proposed research methodology to address the problem. Candidates are to present their proposals to the department before getting it signed. The proposal must be duly signed by his/her supervisor and Head of Department before sending it for approval by the Faculty. Candidates must obtain approval from the Faculty to proceed before commencing the study.

Choice of Research Topic

The trainee is responsible for choosing his/her topic in his/her intended area of specialization. He/she may receive advice from one or more supervisors, one of whom must be a fellow of the Faculty of Public Health, and must also be an expert in the chosen field of specialization. Where a candidate uses two supervisors, it is advisable that these should consist of content/specialty expert and a research methodology expert respectively.

The topic needs to be original in the sense that it gives a new insight into an already known area or introduces an innovative perspective to a neglected research area. It may also provide a follow-up to what had been previously done highlighting innovative refinements or adjustment or improvement of methodologies used or interventions proposed, or challenges current thinking, provides a more nuanced understanding or simply is based on research for improvement of service (operations research). It must also be of relevance to the practice of public health in the developing countries. It must not be a direct duplication of a previous study by the trainee or other research workers.

The research proposal shall provide comprehensive introduction and detailed review of the literature and proposed methodology. The proposal shall be typewritten, double-spaced and submitted to the Faculty for approval before the trainee embarks on the study. The proposal should be submitted to the Registrar of the College by uploading the document at College e-portal for processing,

The following format shall be used for presenting the proposal:

Title of Study
Introduction as Chapter One
Literature Review as Chapter Two
Methodology as Chapter Three

References
Questionnaires and other tools for data collection

Details of Format for the Proposal

A. A title page

The title of the proposed study
"Submitted by"
The name of the author
To

"The National Postgraduate Medical College of Nigeria in part fulfilment of the requirements for the award of the Final Fellowship of the Medical College in Public Health and Community Medicine"

B. The declaration page

On this page the trainee declares that he has done the proposal being presented under appropriate supervision and that it has not been submitted in part or in full for any other examination. Name of candidate's institution should be

included.

C. The certification page

On this page, the supervisor(s) testifies(y) that the proposal was written by the candidate and under his (their) supervision.

Chapters

D. Introduction

The introductory chapter should contain a background to the study (which should contain a brief description of what is known about the topic, the gaps in knowledge identified, the approach/perspective of the candidate and context of the study), clear definition of the problem to be studied (Problem Statement), justification for the study including the public health importance of the study, and the broad and specific objectives.

E. Literature Review

This will contain a systematic critique/review of all relevant literature on the subject matter.

F. Methodology

The study design should be stated clearly. This section will also include a detailed description of the study area, study population, study design, sample size, sampling technique, methods to be used to collect relevant information and data and methods of data analyses.

G. References

The system proposed is as recommended by the International Committee of Medical Journal Editors, Uniform Requirements for Manuscript Submitted to Biomedical Journal` Brit. Med. J. 1988, 296, 401-405. This article has been reproduced in the College Research Methodology Handbook

Format of the Dissertation Write-up

The final dissertation should follow the approved format set out below:

A. Title

The title of the study
"Submitted by"
The name of the author
"To"

"The National Postgraduate Medical College of Nigeria in part fulfilment of the requirements for the award of the Final Fellowship of the Medical College in Public Health and Community Medicine "

Month/Year; e.g., Jan. 2020.

B. Declaration

On this page the trainee declares that the work presented has been done by him/her under appropriate supervision and that it has not been submitted in part or in full for any other examination.

C. Dedication

This page is optional and may be excluded.

D. Certification

On this page, the supervisor(s) testifies(y) that the study was done by the candidate and the dissertation written under his (their) supervision.

E. Acknowledgement

On this page the candidate acknowledges all the assistance he/she has received in the course of the work including copyright permissions.

F. Table of Contents

Will contain a listing of the chapter headings with corresponding page numbers.

G. Summary

The main study begins with a summary of the dissertation featuring the key points. This section should include a summary of all the sections from introduction to recommendations in a structured abstract format. This section should not exceed 2 pages.

Chapter One

H. Introduction

The introductory chapter should contain a background to the study (which should contain a brief description of what is known about the topic, the gaps in knowledge identified, the approach/perspective of the candidate and context of the study). A clear definition of the problem to be studied (Problem Statement), including justification for the study and the public health importance of the study and a brief description of the scope of the study, and the contribution of the study to public health. The introduction should also contain statements on the broad and specific objectives.

Chapter Two

I. Literature Review

This will contain a critique/review of all relevant literature on the subject matter. Adequate relevant local literature on the subject matter of the study should be included in this chapter.

Chapter Three

J. Methodology

This will include a detailed description of the methods used to collect relevant information and data and methods of data analyses. A summary of the difficulties encountered during the execution of the study, and the limitations of the study could be included in this section.

Chapter Four

K. Results

There should be a brief introduction of the overall study results and then of specific aspects thereof in words followed by their tables and graphical presentations; e.g., histograms, bar diagrams, pie charts, etc. Padding of result presentation is to be avoided; i.e., the introduction of each table or figure should only mention details the candidate wishes to highlight to readers and not all the other details which are self evident. Comments to further elucidate the tables and figures could be written below each such presentation.

Each table and graphical presentation should be titled. Each title should contain as much information as possible about the Table. Legends where appropriate, should be stated below the table or graph for clarity. Appropriate tests of significance should be given below the table when required. As an illustration, tests of significance could be presented in form of $\chi 2$ value, df value and appropriate p-value in form of < or > when compared with the appropriate levels of significance; i.e., 0.0001, 0.01 or 0.05 or at any other acceptable level of significance. Other appropriate tests such as correlation coefficients, etc, are encouraged.

Chapter Five

L. Discussion

The aim of the discussion chapter is for the candidate to review his/her study findings with the purpose of highlighting how the study has contributed to knowledge. In the discussion, the candidate should attempt to interpret the results and give explicit explanations of the findings obtained of the study. In this regard, repetition of data in the result chapter should only be minimal. Candidates would be required to compare findings of study with similar studies conducted locally and internationally. Through this comparison, it will be possible to note the candidate's contribution to the existing body of knowledge. The discussion should be written in prose and preferably with no subsections. This chapter should close with a

section on Conclusions and Recommendations. These sections should only contain inferences drawn from the study that are relevant to the study objectives. The recommendations must be relevant to the objectives of the study and must be based on the specific findings and discussions of the study.

M. References

The system proposed is as recommended by the International Committee of Medical Journal Editors, "Uniform Requirements for Manuscript Submitted to Biomedical Journal" Brit. Med. J. 1988, 296, 401-405. This article has been reproduced in the College Research Methodology Handbook

Submission of the Dissertation

Candidates are expected to submit e-copies of the dissertation duly signed by the supervisor(s), and the Head of Department, at least 3 months before the date of proposed Part II Examination.

Following a successful defense of the dissertation candidates shall upload the dissertation documents through College e-portal. Candidate is awarded Fellowship only when the dissertation has been certified by College.

FACULTY OF PUBLIC HEALTH AND COMMUNITY MEDICINE, NATIONAL POSTGRADUATE MEDICAL COLLEGE OF NIGERIA, LAGOS.

GUIDELINE FOR ASSESSMENT OF MASTER OF PUBLIC HEALTH (MPH) AND OTHER POSTGRADUATE QUALIFICATIONS for EXEMPTION FROM PRIMARY FMCPH AND REGISTRATION AS PROFESSIONAL MPH WITH MEDICAL AND DENTAL COUNCIL OF NIGERIA

1. **Name of Applicant:**
2. **Title of Qualification and Date:**
3. **Institution:**
4. **Adequacy of the Curriculum** *vis-a-vis* **Part I FMCPH Curriculum** *(Please complete table below)*

	Subject Area	Adequate	Inadequate	Not Covered	Other Remarks
1	Principles and Applications of Epidemiology				
2	Medical Statistics				
3	Environmental Health				
4	Occupational Health				
5	Health Policy, Health Economics, Health Services Planning and Management				
6	Health Education and Community Mobilisation				
7.	Reproductive and Family Health				
8.	Rehabilitative and Social Medicine				
9.	International Health				
10.	Public Health Nutrition				
11.	Publications				

5. **Curriculum covers at least 7 of the 10 core sub-specialties in the table above?**

   ☐ **Yes** ☐ **No**

6. **Did programme include at least 1 to 3 months of practicum in acceptable public health management office e.g. office of a Medical officer of Health?**

   ☐ **Yes** ☐ **No**

7. **Conclusion and Recommendation to Faculty Board: Curriculum provided is narrow.**

   I) **Acceptable as Postgraduate Professional Qualification for Nigeria** *(adequate exposure to 7 of the 10 subspecialties of public health listed in the table above and 1 – 3 months of relevant field exposure)*

   ☐ **Yes** ☐ **No** ☐ **Not Applicable**

   ii) **Acceptable for Exemption from Primary examination** *(adequate exposure to 7 of the 10 subspecialties of public health listed in the table above)*

   ☐ **Yes** ☐ **No** ☐ **Not Applicable**

Faculty Secretary, Public Health, NPMCN.