FACULTY OF OBSTETRICS AND GYNAECOLOGY, WEST AFRICAN COLLEGE OF SURGEONS

TRAINING CURRICULUM FOR THE MEMBERSHIP AND FELLOWSHIP

IN

OBSTETRICS AND GYNAECOLOGY

(February 2014)

1. INTRODUCTION

There are enormous gynaecological, maternal and child health challenges in the West African sub-region as partly evidenced by the very high maternal morbidity and mortality rates. These challenges also include reproductive tract malignancies, low contraceptive uptake, pelvic infections, infertility, large pelvic tumours, pelvic organ prolapse and obstetric fistulae. Experts or fellows with the requisite training and certification are in the best position to handle these complex diseases. However, where fellows are scarce, specialists with membership certificates should be employed to hold forth and manage these obstetric and gynaecological cases but to refer complex cases to the consultants (fellows).

1.1 Mission statement

The Faculty of Obstetrics & Gynaecology of the West African College of Surgeons aims to produce specialist Obstetricians & Gynaecologists with advanced professional and academic skills. These specialists that are consultant-appoint able shall have leadership, training, research and supervisory skills and render other services for the promotion of women's health. This shall be achieved using a curriculum based on tested and current principles in postgraduate medical education.

The Faculty is however mindful of the scarcity of specialists (Fellows) in some countries within the sub-region, hence, those with Membership certificate would be encouraged to bridge the gap under such circumstances.

1.2 Objectives:

1. Encourage training centers to conduct training programs
2. Monitor the training activities of residents and the training centers through accreditation.
3. Conduct non-residential courses and workshops to update the knowledge & skills of the residents, fellows and other healthcare providers
4. Evaluate and certificate trainees, using reliable and valid assessment methods.
5. Promote excellence in professional training.

1.3 Membership

Those with Membership shall be:

i. Capable of managing many common obstetric and gynaecological cases especially the emergencies.

ii. Prepared to pursue further training to become Fellows

iii. Supervised by Fellows in the area of practice.

1.4 Fellowship

A Fellow of the WACS therefore shall be:

i. Eligible to take up substantive or honorary university clinical lectureship position on successful completion of the program

ii. Eligible to take up substantive or honorary consultant obstetrician and gynaecologist post on successful completion of the program

iii. Able to provide professional leadership in reproductive healthcare at tertiary centers and other settings.

2. Entry Requirements for Residency Training

The course is designed for fully registered medical practitioners. A candidate shall be admitted to the training program if he /she possesses a qualification register-able by the constituent country medical council and has obtained full registration to practice in the country. The prospective trainee may be required to also satisfy the Admission Panel of the training institution that he or she has applied to undertake the program of study. Training centers may insist on recruiting medical officers who have already passed the Primary examination of the College or its equivalent.

The enrolled postgraduate trainee shall be known as a resident.

3. Training Institutions

The constituent countries have training institutions that are accredited by the College.

The criteria for the accreditation of a training centre shall include four main domains viz:

a) Personnel

b) Infrastructure and services available

c) Structured training program

d) Acquisition of site(s) for community/rural obstetric posting for the trainees.

The list of accredited training institutions is available on the College website.

4. Duration of Training

i. The minimum duration shall be three (3) years, full-time, for the award of Membership and an additional two (2) years for the award of the Fellowship of the College.

ii. Exemptions from a part of the training program may be approved by the Council on the recommendation of the Faculty Board.

5. Examinations

The Examinations prescribed for the award of the Membership shall be in 2 parts:

i. The Primary Examination and

ii. The Part I (Membership) Examination

The Examination prescribed for the award of the Fellowship is the Part II Final (Fellowship) Examination

5.1 Primary Examination

It may be taken at any time after full registration as a medical practitioner. This is an examination in the Basic Sciences as applied to Obstetrics & Gynaecology and other relevant aspects of Reproductive Health. It shall cover the areas specified in the syllabus (Appendix A).

The components of the Examination shall be as follows:

- Multiple Choice Questions (Paper 1) in Basic/Applied Sciences
- Multiple Choice Questions (Paper 2) in Basic/Applied Sciences

Each paper shall consist of 100 questions, each with a stem and five derivative statements which shall be the True or False. The grading system shall be as prescribed by the Faculty Board.

5.2 Part 1 Examination (Membership)

5.2.1 Eligibility

Before a candidate can proceed to the Part 1 (Membership) examination, he or she must have passed or exempted from the Primary examination and after a minimum of 3years of training in an accredited institution. The 3 years training will consist of two years in core Obstetrics & Gynaecology and one year rotation through the following specialties:

- General Surgery – 2 months
- Urology – 1 month
- Neonatology – 2 months
- Anaesthesia – 2 months
- Radiology – 1 month
- Pathology – 1 month
- Community/Rural Obstetrics – 3 months (preferably in the 3rd year)

(Refer to Appendices B and C for further details)

The consultant (s) under whom the candidate trained must certify that he or she has completed the stipulated period of training and that his or her work has been satisfactory. The candidate must keep a LOG BOOK obtained from the College which shall contain a detailed record of the activities done in the course of training. This log book must be submitted with the application for the Examination. Acquisition of surgical skills from accredited surgical skills training centers and evidence of attendance of at least one revision course are part of the eligibility criteria.

5.2.2 Components

The components of the Part 1 Examination shall be:

- *Written (Multiple choice and Essay Questions)
- Clinical (one obstetric case and one gynaecological case) OR the Objective Structured Clinical Examination - OSCE
- Oral in Obstetrics & Gynaecology

*Only those who attain a pass mark in the written component of the examination shall be invited to the Clinical and Oral segments!

5.2.3 Pass the Part 1 Examination

To pass the Part 1 Examination, a candidate must:

- Obtain at least 50% in two parts of the examination which must include the clinical part; and
- Obtain at least, 50% in the overall examination.

5.2.4 Membership Certificate of the West African College of Surgeons shall be awarded to a candidate who was successful at the Part 1 examination.

5.3 Part II (Fellowship) Examination

The Part II examination shall be taken after a minimum of 24 months of passing the Part I Examination. A Casebook and a Dissertation on an approved topic of research on any aspect of obstetrics, gynaecology or reproductive health must have been completed and submitted before the candidate is invited to the examination (see Appendix D, E and F). Attendance at a College organized manuscript writing course is mandatory before taking the examination.

5.3.1 Components of the Examination

The components of the Part II Examination shall be as follows:

- Dissertation defense (30 minutes)
- Oral examination on the Case Book (30 minutes)
- General Oral (30 minutes)
  The candidate shall be examined by a panel of two or more examiners at each component of the Part 2 examination.

5.3.2 Passing the Part 2 Examination

To pass the Part 2 examination, a candidate must pass both the Dissertation Segment (**Segment 1**) and the Casebook/General Oral Segment (**Segment 2**).

- *A candidate that passes the Dissertation shall NOT be examined on it again. He/she will be credited with having passed that segment of the examination*
- *A candidate that passes the Casebook & Oral segment shall also NOT be examined on that segment again.*
- *Marks from the Casebook or Oral can buffer each other PROVIDED there is no Bad failure in any.*
- *Marks from the Dissertation cannot be used to buffer performance in the Casebook/Oral segment*
- *Marks from the Casebook/Oral segment cannot be used to buffer performance in the dissertation segment*

5.3.3 Fellowship Certificate

The Fellowship certificate of the West African College of Surgeons shall be recommended to the Council to be awarded to a candidate who has passed the Part 2 Examination.

6.0 The Education Committee

There shall be an Education Committee appointed by Council on the recommendation of the Faculty Board. The Chairman of the Faculty Board shall be the Chairman of the Committee.

6.1 Functions of the Education Committee:

i. To work out the curriculum for the membership and fellowship of the Faculty of Obstetrics and Gynaecology.

ii. To organize postgraduate courses and symposia on behalf of the College

iii. To make recommendations to the Faculty Board for the development of manpower needed for the delivery of standard reproductive health care to the people of the sub-region.
iv. To report to Faculty Board on all its deliberations.

7.0 The Examination Committee

There shall be an Examination Committee which shall be responsible for the conduct of examinations in its entire ramification and recommend to Council through the Faculty Board, eligible candidates for the award of the Membership and Fellowship of the College in Obstetrics and Gynaecology. The members of the Committee shall be appointed by Council on the recommendation of the Faculty Board. The Chairman of the Faculty Board shall be the Chairman of the committee while the Secretary of the Faculty Board shall be the Secretary.

8. 0 The Board of Examiners:

There shall be a 'Board of Examiners' which shall consist of Examiners at the membership and fellowship examinations of the Faculty. The Chairman of the Faculty shall be the Chairman and the Secretary of the Faculty Board shall be the Secretary.
The Board of Examiners shall publish the provisional results of the Membership and Fellowship examinations. Examiners shall be appointed by the Faculty Board.

APPENDIX A

Outline for the Primary Syllabus (Basic Sciences)

This is designed to cover areas of Basic Sciences as applied to the practice of Obstetrics and Gynaecology.

Embryology

- Embrylogical development of the urogenital tract in both female and male
- Oogenesis and spermatogenesis
- Fate of spermatozoa in the female reproductive tract
- Early development, structure and function of the placenta
- Development, structure, and function of the placenta
- Development of fetal membranes and formation and removal of amniotic fluid
- The general pattern and timing of organogenesis of the fetus: The effect of drugs at various periods of organogenesis
- Factors concerned in the determination of fetal sex

Anatomy

- A detailed knowledge of the gross structure, ossification, and landmarks of the pelvic bones and their associated joints
- Shape and dimensions of the normal female pelvis and its commoner variants. The influence of pelvic architecture on labour and delivery
- A detailed knowledge of the gross structure, histology, blood supply, nerve supply, lymphatic drainage of all intra-pelvic structures
- Topographical anatomy of all intra-abdominal structures, including the nerve supply, blood supply, and lymphatics. A detailed knowledge of the anterior abdominal wall and its nerve and blood supply
- Detailed structure, course, relations, and blood supply of the ureter
- Detailed gross anatomy of the inguinal canal, femoral canal, anal triangle, deep and superficial perineal pouches and the vulva
- Development, gross anatomy, and microscopic structure of the female breast. Blood supply, lymphatic drainage of the breast
- Gross and microscopic anatomy of the adrenal glands, hypothalamus, the pituitary gland, and the thyroid gland
- A knowledge of the major sensory and motor pathways within the central nervous system with particular regard to the nervous connections of the pelvic organs
- The lymphatic drainage of the lower limbs and vulva

Physiology

- A detailed knowledge of all aspects of male reproductive physiology (physiology of the testes and ovaries, etc)
- Physiology of menstruation
- Physiology of lactation: Exclusive breast feeding
- Control of ovulation
- Control of micturition: urinary continence in the female
- Control of blood pressure, heart rate, blood flow
- Normal renal function
- Control of body fluids
- Acid base balance and electrolyte balance
- Respiration, oxygen, and carbon dioxide transport mechanisms
- Control and mechanism of transport of substances between mother and fetus via the placenta
- Relationship between the hypothalamus, pituitary, and ovary or testis
- Functions of the hypothalamus

- The working and arrangements of somatic and autonomic nervous systems including the chemical transmission of nerve impulses
- Alimentary tract, including absorption of food substances, electrolytes and trace elements
- The constitution of normal diet and requirements of pregnancy
- The hormones of the placenta: especially chorionic gonadotrophin, estrogens, human placental lactogen and progesterone. Their production, secretion and the significance of each

Endocrinology

- Hormones of hypothalamus, anterior and posterior pituitary; their control and secretion
- Other hormones secreted by the brain, e.g. endorphins
- Ovarian and testicular hormones, their control and secretion during childhood, reproductive years, and menopause
- Adrenal gland; the cortical and medullary hormones; their metabolic pathways. The basis of intersex
- The pancreatic hormones and their involvement in carbohydrate metabolism, e.g. insulin and
- Detailed knowledge of thyroid hormones
- Hormones of the placenta, viz estrogens, HPL, progesterone: the mechanisms of their production; their functions

Elementary Statistics and Epidemiology

- An understanding of the basic statistical techniques with knowledge of the meaning of terms such as median, mean, mode, standard deviation, and normal distribution
- An understanding of the principles that lie behind tests of significance and the levels of probability which are normally accepted as demonstrating significance between populations

Biochemistry

- Carbohydrate, protein and fat: their general properties and metabolic pathways
- Nucleic acid metabolism and pathways
- Metabolism of steroids
- Enzymes, their general properties, and relationship to intermediary metabolism
- Iron, folic acid, vitamin B12 requirements and metabolism; the haemoglobin molecule; haemopoiesis
- Sickle cell haemoglobin population biology and other abnormal haemoglobins
- Detoxification of metabolites in general
- Chemistry of steroid hormones: oestrogens, progesterone, and androgens

Cell Biology and Genetics

- Structure and function of the normal cell
- Detailed knowledge of mitosis and meiosis, including the cell cycle
- Principles of the genetic code. Genetic engineering
- Mechanism of inheritance of genetically determined abnormalities, e.g. Downs syndrome, Patau and Edward's syndromes
- Genetic counseling
- Transfer of substances across the cell membranes including active and passive transport
- The effect of ionising radiations on the cell

Haematology

- Detailed knowledge of haemopoiesis
- Detailed knowledge of coagulation factors. Mechanism of coagulation and its derangements
- Thrombo-embolism
- Knowledge of anaemias and leukaemias
- Blood group systems and method of inheritance in respect to ABO and Rh systems
- Blood transfusion and its complications

Microbiology

- A knowledge of the behaviour and characteristics of bacteria, viruses, fungi, protozoa, and parasites that cause disease of the female reproductive tract and fetus
- Principles of the control of infection: antiseptics, disinfectants, sterilisation, isolation, epidemic control
- The principles underlying the use of chemotherapeutic agents and antibiotics
- Principles underlying the identification of bacteria, parasites, and viruses of medical importance, including staining, culture, serology; sensitivity tests
- Tropical parasitology as related to obstetrics/gynaecology

Pharmacology

The principles underlying the mode of action and side effects of the following groups of drugs.

- Anaesthetics, analgesics, and sedatives
- Chemotherapeutic agents and antibiotics
- Anti-mitotic drugs
- Immuno-suppressive drugs
- Drugs acting on the sympathetic and parasympathetic systems; antihypertensives
- The teratogenic dangers of drugs and other drug hazards to the fetus
- Pharmacology of drugs acting on the female reproductive system
- Steroids and anti-emetics

Pathology

- The general histological and pathological patterns of inflammation, neoplasia and degeneration
- Features affecting pathology of wound healing and wound infection
- Common diseases of the cardiovascular, respiratory, alimentary, endocrine, musculo-skeletal, and central nervous systems
- Classification of neoplasms of the ovary
- Cancer of the cervix
- Cancer of the endometrium
- Trophoblastic diseases
- Thrombo-embolism

Immunology

- The Immune System
- Basic/Classical Immunity
  Innate
  Acquired
- Molecular Immunology: Hypersensitivity, Blood groups, Isoantigens, Serology
  Immunoassay, Immunochemistry, Phagocytosis, Precipitin, Transplantation Biology
  Vaccination
- Clinical Immunology
  Autoimmune diseases
  Allergies
  Immunosuppresion and immunosuppressive diseases
  Neoplasms, Immunomodulation
- Immunotherapy
  In context of treatment of gynaecological cancers, HIV/AIDS, autoimmune diseases
- Reproductive Immunology
  Fetus acceptance
  Subfertility, Recurrent miscarriages
  Prematurity, Pre-eclampsia

APPENDIX B

TRAINING FOR THE PART I (MEMBERSHIP)

Below is the guide to help give a structured training to the residents.

<table>
<tr><td colspan="13">CLINICAL ROTATION PROGRAMME FOR OBSTETRICS AND GYNAECOLOGY RESIDENCY TRAINING</td></tr>
<tr><td>MONTHS OF ROTATION</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr>
<tr><td>YEAR 1 RESIDENCY (JUNIOR)</td><td colspan="3">OBSTETRIC POSTING (PRENATAL, ANTENATAL, INTRAPARTUM AND POSTNATAL CARE)</td><td colspan="3">GYNAECOLOGY POSTING (THEATRE SESSIONS, GYNAE/FAMILY PLANNING CLINICS)</td><td colspan="3">OBSTETRIC POSTING (PRENATAL, ANTENATAL, INTRAPARTUM AND POSTNATAL CARE)</td><td colspan="3">GYNAECOLOGY POSTING (THEATRE SESSIONS & GYNAE/FAMILY PLANNING CLINICS))</td></tr>
<tr><td>YEAR 2 RESIDENCY (SENIOR)</td><td colspan="2">NEONATOLOGY</td><td colspan="2">ANAESTHESIA</td><td>RADIOLOGY/ULTRASOUND</td><td>HISTOPATHOLOGY</td><td colspan="3">GENERAL SURGERY AND UROLOGY</td><td colspan="3">**COMMUNITY OBSTETRICS</td></tr>
<tr><td>YEAR 3 RESIDENCY (CHIEF)</td><td colspan="6">OBSTETRIC AND PERINATOLOGY SERVICE</td><td colspan="6">GYNAECOLOGY/INFERTILITY SERVICE</td></tr>
<tr><td colspan="13"></td></tr>
<tr><td colspan="13">** The 3-month Community Obstetric/Rural Practice posting is at site designated by the training centre for ease of supervision, and activities performed shall be recorded on log books with dates. The impact of the posting will be most felt if undertaken in the 3rd year!</td></tr>
</table>

MODULES

The basic principle of credit point or unit acquisition was adopted for the current exercise. One credit unit or point is equivalent to 1h of mental engagement in a subject matter (such as a didactic lecture) per week for a period of one semester (often taken as 15 weeks). This means 15h of that activity constitutes 1 credit unit. If it is a practical session (hands-on activity, assisting and learning in operative sessions etc), then 2 or 3h such activity will be equivalent to 1h of an activity of a didactic nature. For our purpose and at this level, a 2h practical engagement is equated as 1h of a didactic tutelage. Therefore a 2h weekly engagement of a practical session over a 15 week period should be equivalent of 1 credit unit (would have been 2 credit units if it was all didactic).

Module 1

The first module of the course shall be devoted to the Basic Sciences as applied to Obstetrics and Gynaecology, basic epidemiology, elementary statistics, ethics and communication skills (Table 1).

Table 1: First modular courses and credit points

Subject	**Theory hrs/wk**	**Theory credit points**	**Practical hrs/wk**	**Practical credit points**	**Total credit points**
Anatomy	2	2	0	0	2
Physiology	2	2	0	0	2
Biochemistry	2	2	0	0	2
Pathology, including gynaecological pathology	2	2	6	1	5
Pharmacology	2	2	0	0	2
Microbiology	1	1	0	0	1
Medical Ethics & Communication	1	1	0	0	1

Skills					
Basic Epidemiology & Research Methodology & Hospital Management	2	2	0	0	2
Total Credit Points					17

It is recommended that the primary examination be taken at the end of this module and this module is applicable to only trainees in the training program that have not passed the Primary Examination.

Module 2: Shall be devoted to the following courses/subjects:

- Clinical obstetrics & gynaecology
- Operative obstetrics & gynaecology
- Family planning

[Ideally some teaching by way of consultation goes on when residents run clinics with their teachers. This should be reflected. Lets assume 1h of the 6h is used in consulting the teacher. Credit hours will therefore be 2.5 + 1 = 3.5h = 3.5 credit points.]

The 2nd Module of the course shall be devoted to the subjects in the table.

Table 2: Second Modular Courses and Credit Points

Subject	**Theory hrs/wk**	**Theory credit points**	**Practical hrs/wk**	**Practical credit points**	**Total credit points**
Clinical Obstet/Gynaec – Lectures	2	2	0	0	2
Clinical Obstetrics – Outpatients clinic	1	1	5	2.5	3.5
Clinical Gynaec – Outpatients clinic	1	1	5	2.5	3.5
Clinical Obst/Gyn – Teaching Ward Rounds	5	5	1	0.5	5.5
Emergency Operative Obst/Gynaec	0	0	18	9	9
Elective Operative Obstet/Gynaec	0	0	6	3	3
Family Planning Clinic Sessions	2	2	6	3	5
Total credit points					31.5

Module 3: Shall be devoted to the following courses/subjects:

- Clinical obstetrics & gynaecology
- Operative obstetrics & gynaecology
- Radiology

The 3nd Module of the course will be devoted to the subjects in the table.

Table 3: Third Modular Courses and Credit Points

Subject	**Theory hrs/wk**	**Theory credit points**	**Practical hrs/wk**	**Practical credit points**	**Total credit points**
Clinical Obstet/Gynaec – Lectures	2	2	0	0	2
Clinical Obstetrics – Outpatients clinic	1	1	5	2.5	3.5
Clinical Gynaec – Outpatients clinic	1	1	5	2.5	3.5
Clinical Obst/Gyn – Teaching Ward Rounds	5	5	1	0.5	5.5
Emergency Operative Obst/Gynaec	0	0	18	9	9
Elective Operative Obstet/Gynaec	0	0	6	3	3
Radiology Sessions	2	2	6	3	5
Total credit points					31.5

Module 4: Shall be devoted to the following courses/subjects:

- Clinical obstetrics & gynaecology
- Operative obstetrics & gynaecology
- Pathology

The 4th Module of the course will be devoted to the subjects in the table.

Table 4: Fourth Modular Courses and Credit Points

Subject	**Theory hrs/wk**	**Theory credit points**	**Practical hrs/wk**	**Practical credit points**	**Total credit points**
Clinical Obstet/Gynaecology – Lectures	2	2	0	0	2
Clinical Obstetrics – Outpatients clinic	1	1	5	2.5	3.5
Clinical Gynaecology – Outpatients clinic	1	1	5	2.5	3.5
Clinical Obst/Gyn – Teaching Ward Rounds	5	5	1	0.5	5.5
Emergency Operative Obst/Gynaecology	0	0	18	9	9
Elective Operative Obstet/Gynaecology	0	0	6	3	3
PathologySessions	2	2	6	3	5
Total credit points					31.5

Module 5: Shall be devoted to the following courses/subjects:

- Clinical and operative General Surgery for half semester
- Clinical and operative Urology for half semester

The 5th Module of the course will be devoted to the subjects in the table.

Table 5: Fifth Modular Courses and Credit Points

Subject	**Theory hrs/wk**	**Theory credit points**	**Practical hrs/wk**	**Practical credit points**	**Total credit points**
Clinical General Surgery – Outpatients clinic	2.4	1.2	9.6	2.4	3.6
Clinical General Surgery – Teaching Ward Rounds	6.4	3.2	1.6	0.4	3.6
Emergency Operative General Surgery	0	0	12	3	3
Elective Operative General Surgery	0	0	12	3	3
Clinical Urology – Outpatients clinic	2.4	1.2	9.6	2.4	3.6
Clinical Urology – Teaching Ward Rounds	6.4	3.2	1.6	0.4	3.6
Emergency Operative Urology	0	0	12	3	3
Elective Operative Urology	0	0	12	3	3
Total credit points					26.4

Module 6: Shall be devoted to the following courses/subjects:

- Clinical and operative Anaesthesia
- Clinical Neonatalogy

The 6th Module of the course will be devoted to the subjects in the table.

Table 6: Sixth Modular Courses and Credit Points					
Subject	**Theory hrs/wk**	**Theory credit points**	**Practical hrs/wk**	**Practical credit points**	**Total credit points**
Clinical Anaesthesia – Outpatients clinic	2.4	1.2	9.6	2.4	3.6
Clinical Anaesthesia – Teaching Ward Rounds	6.4	3.2	1.6	0.4	3.6
Emergency Anaesthesia	0	0	12	3	3
Elective Anaesthesia	0	0	12	3	3
Clinical Neonatalogy – Outpatients clinic	2.4	1.2	9.6	2.4	3.6
Clinical Neonatalogy – Teaching Ward Rounds	6.4	3.2	1.6	0.4	3.6
Emergency Neonatalogy	0	0	12	3	3
Total credit points					23.4

APPENDIX C

Outline of topics /subjects/procedures to be covered before the Part I Examination (Membership)

NORMAL OBSTETRICS

Physiologic Changes in Pregnancy
Use of Drugs in pregnancy
Placental development and physiology
Endocrinology of pregnancy
Fetal development and physiology
Normal labour and delivery
Obstetric Analgesia and anaesthesia
Puerperium
Lactation

ABNORMAL OBSTETRICS

Abortion and ectopic pregnancy
Second-Trimester pregnancy loss
Late pregnancy bleeding (Antepartum care)
Medical and surgical conditions complicating pregnancy especially common diseases such as sickle cell, disease, anaemia, hepatitis, renal failure
Hypertensive disorders in pregnancy
Isoimmunization
Multiple pregnancy
Fetal growth retardation
Premature rupture of the Membranes
Infectious diseases, STD, Chorioamnionitis
Preterm Labour
Induction of labour
Dystocia, CPD, Malpresentation, Obstructed labour, Uterine Rupture
Fetal Heart Rate Monitoring
Postpartum Hemorrhage and Obstetric Shock
Puerperal Morbidity
Maternal Mortality
Perinatal Mortality and Mobility

Genetic Counselling
Fetal and placental abnormalities
Newborn Resuscitation

OBSTETRIC OPERATIONS:
Forceps operations and vacuum
Cesarean Delivery
Other obstetric operations including symphysiotomy,
Destructive Procedures

CONTROL OF REPRODUCTION AND INFERTILITY:
Population Control
Family Planning Method
Infertility

SEXUALITY
Development of Identity
Physiology of Sex
Sexual relationships
Sexual Dysfunction
Sexual Variations

GYNAECOLOGY
Normal Development of Urogenital Tract
Disorders of Development
STD including Inflammation and Infections of the Vulva
Vagina
Inflammation and Infections of the Uterus and adnexa
Inflammations and Infections of the Urinary Tract
Endometriosis
Dysmenorrhea
Drug Therapy
Pelvic relaxation
Pelvic masses, Fibroids, Tumors
Pelvic Injuries and trauma
Sexual assault
Pediatric Gynecology
Adolescent Gynecology
Sexuality – Human Sexual Response and Disorders

GYNAECOLOGIC ENDOCRINOLOGY
Female Reproductive Cycle
Abnormal Menstruation
Primary Amenorrhea
Secondary Amenorrhoea
Hirsutism
Galactorrhea
Menopause
Infertility

GYNAECOLOGICAL ONCOLOGY
Neoplasiaof the Vulva
Neoplasia of the Vagina
Neoplasia of the Cervix
Neoplasia of the Endometrium
Neoplasia of the Fallopian Tube and Ovary

Trophoblastic Diseases
Neoplasia of the Breast
Palliative and Terminal Care
Radiation Therapy

UROGYNECOLOGY
Urinary Complications
Incontinence
Stress
Fistula

PEDIATIRCS AND ADOLESCENT GYNECOLOGY
Female Genital Cutting/Mutilation

PREVENTIVE OBSTETRICS AND GYNAECOLOGY
Preventive medicine and primary health care
Epidemiology: including and experience and project in community-based maternal child health
Educational methods and academic skills
Leadership roles
Team participation
Record system

GENERAL ISSUES IN WOMEN'S HEALTH AND ADVOCACY
The role of Ob/Gyn as advocates for women health
Violence against women
Sex selection
MANAGEMENT, ETHICS AND COMMUNICATION SKILLS
Ethical framework for Gynaecological and obstetric care
Guidelines regarding informed consent
The ethical aspects of sexual and reproductive rights
Some ethical issues in the doctor/patient relationship
Ethical guidelines in regard to terminally ill women
Ethical considerations in sterilization
Ethical aspects of HIV infection and reproduction
Ethical guidelines regarding management of pregnancy related to sudden unexpected maternal death

GYNAECOLOGIC OPERATIONS
The resident should be able to perform the following gynecologic operative procedures:

External genitalia
- Local excisions and incisions
- Biopsy
- Simple vulvectomy
- Batholin's duct marsupialization
- Urethral prolapse repair
- Hymeneal operations, including imperforate hymen
- Perineotomy
- Perineorrhaphy and repair of old perineal lacerations

Vaginal operations and reconstruction for
- Septum
- Constriction
- Traumatic obliteration
- Developmental defects or absence
- Injuries

Utero-Vaginal prolapse
- Exposure of ureter
- Exposure of obturator nerve and vessel
- Exposure of branches of the internal iliac

Small and large bowel
- Repair of injuries
- Sigmoidoscopy
- Appendicectomy

Bladder
- Repair of injuries
- Cystoscopy

Upper abdominal exploration
- Liver and gallbladder
- Spleen and pancreas
- Stomach, duodenum, and intestines
- Kidneys and adrenal
- Periaortic nodes
- Diaphragm

Breast: Oupatient evaluation; management of breast abscess

Vagina: Vesicovaginal and recto-vaginal fistulas
- Vaginal cysts
- Suburethral diverticulum

Uterus and pelvis other than transabdominal procedures
- Cervical dilatation and fractional curettage
- Suction curettage
- Colpsocopy and cervical biopsy
- Cervical cautery, cryousurgery, and laser therapy
- Cervical conization
- Cervical suture for incompetent cervix
- Removal of cervical stumps
- Posterior colpotomy, including needle and drainage
- Proctostomy for drainage of pelvic abscess
- Drianage of inguinal abscess
- Repair of inverted uterus
- Vaginal hysterectomy, with and without vaginal repairs,
- Salpingo-oophorectomy, or other operation on the adnexa

Gynaecological Endoscopy
- Laparascopy via abdominal approach: Diagnostic and operative
- Laparascopy and Dye test
- Hysteroscopy: Diagnostic and operative

Uterus by transabdominal approach
- Abdominal incisions
- Transverse incisions
- Abdominal hysterectomy, including supracervial and total
- Myomectomy
- Uterine unification
- Uterine suspension

Uterine Tubes
- Salpingostomy

Tubal implantation
Tubal reconstruction

Ovary: Ovarian drilling
Oophorectomy
Ovarian cystectomy

Broad Iigament: paraovarian cystectomy (mesonephric paramesonephric)
Major vessels and ureters
Exposure of iliac vessels
Urinary tract infection
Vaginal cuff infections or abscess
Fistulas of the bowel, bladder, and ureter
Hemorrhage
Pelvic hematomas

The resident should be able to recognize and manage the following postoperative complications:

- Wound infection
- Wound dehiscence
- Ileus
- Intestinal obstruction
- Thrombo-phlebitis
- Atelectasis
- Pneumonia
- Pulmonary embolism

The resident should be able to state the indications for the following operations, the major steps in the operative technique, the principles of post-operative care, and the common complications and their management:

- Radical vulvectomy with, and without lymph node dissection
- Radical hysterectomy with and without adnexal resection
- Bowel resection and anastomosis
- Colostomy
- Urinary diversion, e.g. ureteral transplant, ileal bladder
- Repair of bladder
- Repair of major vessels

I. Outline of Activities for the Rotations in General Surgery and Urology

Duration of rotation: 3 months (2 months General Surgery; 1 month Urology)
This rotation shall be complimented with the Basic Surgical Skill workshops which shall be mandatory for pre-part I candidates.

Main Objective:
At the end of the rotation, the resident should be able to competently perform a laparotomy and specific abdominal surgical procedures.

Specific Objectives: The resident should be able to perform:-

1. Abdominal incisions and closure including insertion of drainage tubes.
2. Repair of various abdominal incisional hernias
3. Omentectomy
4. Small and large bowel surgery: -repair of injuries, -appendicectomy
   -identify the indications for intestinal resection at laparotomy

5. Bladder and Ureter
   -repair of bladder laceration, -cystostomy, -reimplantation of ureter into bladder
   -surgical prevention of ureteric injuries
6. Upper abdominal exploration
   -liver and gall bladder, -spleen and pancreas, -stomach, duodenum and intestines
   -kidneys, -pre-aortic nodes

II. Outline of Activities s for the Rotation in Anaesthesia

Duration of rotation: 2 months

Main Objective:
At the end of the rotation, the resident should be conversant with the theory and practice of all forms of anaesthesia.
Specific objectives:

1. Principles of sedation and analgesia
2. Sedation and analgesia in labour
3. Regional analgesia
   - Local anaesthetic agents
   - Obstetric nerve blocks eg. pudendal, para-cervical.
   - Spinal and epidural analgesia
   - Inhalational anaesthesia: Gas anaesthetics eg N_2O, Volatile anaesthetics
   - Intravenous anaesthetics, The anaesthetic machine
   - Principles and practice of endotracheal intubation
4. Anaesthesia for caesarean section
5. Prevention of accidents in Obstetric and Gynaecological anaesthesia
6. Blood transfusion, electrolyte and fluid therapy and anesthesia

III. Outline of Activities for the Rotation in Neonatology

Duration of rotation: 2 months

At the end of the rotation in Neonatology the resident should have become knowledgeable and competent discussing and practicing the principles underlying the following topics:-

- Neonatal assessment
- The physiology of transition
- Resuscitation, Monitoring the Newborn
- Early neonatal diseases related to Asphyxia
- RDS, Meconium aspiration, Intraventricular haemorrhage
- Effect of asphyxia on the newborn nervous system
- Heart disease in the early neonatal period
- Early GIT complications: imperforate anus, esophageal atresia
- Early Urinary tract disorders
- Neonatal haematology: Placental transfusion, Bilirubin, Bilirubin toxicity
- Management of neonatal jaundice
- Birth trauma, Birth defects

- Drug effects in the newborn
- Neonatal infections

. Neonatal sepsis, predisposition LBW, PROM etc.

. - Specific infections
Group B streptococci, Staphylococcus, N. Gonorrhoea, Syphilis
Candida albicans, Viruses: perinatal chicken pox, measles, hepatitis,
Coxsackie virus, echovirus, HIV/AIDS

- Newborn feeding

. Lactation, Drugs in breast milk, HIV/AIDS and breastfeeding

. Methods of feeding, Hypoglycaemia.

- High risk babies: preterm, postterm, diabetic baby, Rh iso-immunisation, assisted vaginal delivery, caesarean section , small and large for dates etc.

IV. Radiology Rotation for Obstetrics and Gynae Residents

Duration of Rotation-Four weeks

Resident is expected to perform the following activities at the end of the rotation.

- Participate in performing and reporting on HSG
- Participate in performing and reporting on intravenous urography
- Participate in performing and reporting on Urethrograms
- Understand and perform basic gynaecological and obstetric ultrasound
- Participate in reporting relevant conventional radiographs
- Interpret mammographs
- Understand basic CT scan and MRI anatomy of the pelvic organs
- Be familiar with relevant radiological language used in reporting various studies
- Be familiar with basic indication and dangers of radiological procedures as well as the advantages and limitations of various modalities relevant to obstetrics and gynaecology.

V. Pathology Rotation for Obstetrics and Gynaecologic residents

Duration of Rotation-Four weeks

1. Gross pathology: To do a general postmortem exam with special emphasis on obstetric and gynaecological cases. This involves the performance of the procedure and documentation and report writing.
2. Histology: This involves the handling of specimen from operation site to pathology slide preparation and staining. The ability to do a basic histological diagnosis is taught.
3. Cytology: This involves slide preparation for Pap smears, reading and interpretation of slides and making appropriate diagnosis.

VI. Rural/Community Obstetric Posting

Duration of Rotation-3 months (12 weeks)

The three months of community obstetrics or rural posting shall be at site(s) adopted and accredited by the training centre (with at least a comprehensive emergency obstetric care package). At the end of the period, there should be a form of certification as evidence of such exposure.

APPENDIX D

FACULTY OF OBSTETRICS & GYNAECOLOGY, TRAINEES' LOG BOOK

The log book serves as a documentation of the achievements in the cognitive and psychomotor aspects of the training of the resident doctors.
The objectives of the Log book are:

1. To help the candidate record briefly the variety of cases he/she has attended to, so that his/her training and experience can be assessed.

2. To enable the Consultant/Supervisor to assess the candidate progressively; so that the extra experience needed can be arranged.

3. To enable the Faculty determine that the candidate has the necessary experience for the Part I Examination.

Timing of the Log Book

1. Candidate should start filling the book 6 months after commencing training.
2. The completed Log Book (s) should be sent to the College 6 months before the examination ie. in October/April for April or October Exams respectively.

Instructions to Candidates

A formal quarterly review of the trainee's progress is required and should be documented by the trainee through an interview.
The aim of such an interview is to ensure that the trainee is exposed to, and is taught all aspects of the specialty available in his/her hospital/or if appropriate, an adjacent hospital. Deficiencies in training, both theoretical and practical, should be recognized and appropriate steps taken to overcome them.

Confidentiality

Candidate must not identify patients by name. Cases should be recorded by hospital number and or patient's initials.
At the end of the training the Log Book has to be endorsed by the Consultants/Supervisors and the Head of Department.
A copy of the Log Book is obtainable from the College.

APPENDIX E

Additional training before the Part II Examination

PART 2 FELLOWSHIP PROGRAMME	
YEAR 1 FELLOWSHIP	RESEARCH PROPOSAL SUBMISSION AND FELLOWSHIP TRAINING 6 MONTHS OBS AND 6 MONTHS ADVANCED GYNAE.
YEAR 2 FELLOWSHIP	DISSERTATION, CASE BOOK SUBMISSION AND FELLOWSHIP TRAINING 6 MONTHS OBS, 6 MONTHS ADVANCED GYNAE
PART 2 EXIT EXAMINATIONS - FELLOWSHIP	

Recommended Textbooks (Membership and Fellowship)

1. Obstetrics: Normal and Problem Pregnancies. Gabbe SG, Simpson JL, Niebyl JR, Galan HL, Goetz L, Jauniaux ERM, Landon MB. 5th ed. Churchill Livingstone; 2007. (Newer edition is preferred when available).
2. Comprehensive Obstetrics by Turnbull. (Eds): Chamberlain G, Steer PJ. 3rd ed. Churchill Livingstone; 2001. (Newer edition is preferred when available).
3. Williams Obstetrics. (Eds): Cunningham FG, Leveno K, Bloom S, Hauth J, Rouse D, Spong C. 23rd ed. McGraw-Hill Professional, USA; 2009. (Newer edition is preferred when available).
4. Comprehensive Obstetrics in the Tropics. (Eds): Kwawukume EY, Ekele BA, Danso KA, Emuveyan EE. 2nd ed. Asante & Hittscher Printing Press Ltd; 2014. (Newer edition is preferred when available).
5. Comprehensive Gynaecology in the Tropics. (Eds): Kwawukume EY, Emuveyan EE. 1st ed. Graphic Packaging Ltd, Accra; 2005. (Newer edition is preferred when available).
6. Handbook of Obstetrics. Kwame – Aryee RA. Bel-team Publication Ltd, Accra; 1998. (Newer edition is preferred when available).
7. Handbook of Gynaecology. Kwame – Aryee. Seffah JD. Bel-team Publications Ltd, Accra; 1999. (Newer edition is preferred when available).
8. Te Linde's Operative Gynaecology. Rock JA, Jones HW. 9th ed. Lippincott Williams & Wilkins, USA; 2003. (Newer edition is preferred when available).
9. Dewhurst's Textbook of Obstetrics and Gynaecology for Postgraduates. (Ed): Edmonds DK. Blackwell Science Ltd ; 2012. (Newer edition is preferred when available).
10. Current Obstetric and Gynaecologic Diagnosis and Treatment. (Eds): DeCherney AH, Nathan L, Goodwin TM, Laufer N. 10th ed (Int). Lange Medical Books/ McGraw-Hill Medical Publishing Division; 2007. (Newer edition is preferred when available).
11. Textbook of Obstetrics and Gynaecology for Medical Students. (Ed): Agboola A. 2nd ed. Heinemann Educational Books (Nigeria); 2006. (Newer edition is preferred when available).

APPENDIX F

GUIDE TO WRITING AND PROCESSING THE CASEBOOK AND DISSERTATION FOR THE PART 2 EXAMINATION (FELLOWSHIP)

As recommended by the Faculty Board and approved by Council, a candidate preparing for the Part II Final examination in Obstetrics and Gynaecology shall present a Casebook and a Dissertation.

The Casebook shall contain:
i. Ten (10) Gynaecological cases of **good spread** (to include oncology, fertility and reproductive endocrinology, endoscopy, and uro-gynaecology); at least 6 (six) of which would have been personally managed by the candidate after passing Part I Examination, with a brief commentary and review of the literature at the end of each case.

ii. Ten (10) Obstetric cases of **good spread**, at least 6 (six) of which would have been personally managed by the candidate after his/her success at the Part I Examination, again with a brief commentary and review of literature at the end of each case.

iii. The references in the Casebook (and the Dissertation) shall be cited according to the Vancouver system and listed at the end of each commentary in the order of appearance in the text, also using the Vancouver system.

The Dissertation
The dissertation shall be an original, prospective, research conducted during the period of training with prior approval by the Faculty Board using an external assessor. KAP (knowledge, attitude and practice) studies are not acceptable!
Two (2) spiral-bound copies and an electronic copy (compact disc) of the dissertation proposal shall first be sent to: The Secretary-General WACS (Attention: Faculty Chairman, Obstetrics and Gynaecology), as soon as the Part I examination is passed, provided the proposal has received the endorsement of the candidate's internal supervisors and the institutional ethical clearance where necessary. The proposal must also include a work plan with time lines for the research work.

For every corrected version of the dissertation proposal submitted to the Secretariat, there must be an accompanying electronic copy to help facilitate the review process as most of the communication with the external assessor shall be by email. Candidates are also advised to indicate their email addresses at the time of first submission to the Secretariat.

The research work can only start after the external assessor has given consent. The completed dissertation and the casebook each separately bound in navy blue colour, shall be submitted together to the College Secretariat at least six (6) months before the examination that the candidate intends to take. Late submissions shall be treated and processed for the next available examination!

Supervisors:
The dissertation should be supervised by at least two Fellows, one of which must be a Fellow of the Faculty and of at least five years post-Fellowship.
The supervisors should be directly and fully involved in guiding the candidate at the different stages of proposal writing, data gathering and dissertation writing. The study/field work must not commence until approval of the proposal is given by the nominated external assessor.

APPENDIX G
Guide to Formative Assessment of Dissertation Proposals

Preamble

The purpose of Formative Assessment is to correct errors in the candidate's proposal so that the quality of the output can be improved. It is to help ensure that what the candidate is proposing to do is worthwhile and that the methods described can help the candidate achieve the stated objectives.

Purpose of the Proposal

In writing a proposal for a dissertation, the science is the focus. The proposal helps the candidate to focus his/her thoughts and distil out what is essential to accomplish the set goal of answering specific research questions

Components of the Proposal

1. Title
2. Abstract
3. Introduction
4. Literature Review
5. Working Hypothesis
6. Materials and Methods
7. References
8. Appendices
9. Work plan

With a good proposal, all that would need to be added in the final dissertation ***(with modifications to the sections written earlier in the proposal)*** are the *Results*, the *Discussion* and the *Conclusions & Recommendations.*

Specifications

Presentation: The Proposal should be spiral bound with a cover containing the title and the full name of the candidate (Surname Last).

Title Page: The Title Page should be the first inside-page of the proposal and should contain

1. the title of the proposal for the dissertation,
2. the full name of the author (not initials!)
3. the institution where the work is to be/being done
4. the fact that it is being submitted to the Faculty of Obstetrics & Gynaecology
5. the examination in view (Part II Fellowship Examination)
6. the year of submission

The title should be brief ***(maximum 150 characters, including spaces)*** but sufficiently informative to enable the reader have an idea of what the proposed study is about (intent and scope of the study). It should not include any abbreviations that may have an ambiguous meaning (it is better to avoid abbreviations altogether if that is possible). The candidate should use current terms, not obsolete or discarded ones. Proprietary names for drugs and devices should be avoided – the proper pharmacological or scientific names should be used.

The Abstract

The Abstract is a summation of what is being proposed. A ***Structured Abstract*** not exceeding 500 words should precede the chapters of the proposal.

Chapters & Sections

The proposal should be divided into numbered chapters along the lines of the components. It is also helpful to number the sections and sub-sections of the chapters in a manner that facilitates ease of reading, identification and reference.

Example: Chapter 1, Section 2, Sub-section 4 will be rendered as 1.2.4

Chapter 1 - The Introduction

This should be a brief overview of the subject to be studied and the overall purpose of carrying out the study (essentially a statement of why the study is necessary). Unlike the introduction in journal articles, it does not include a review of the literature on the subject. Generally, it should not exceed one thousand words. Its main purpose is to define the research problem. The general goal or *Aim* of the study (not specific objectives) is stated at the end of the "Introduction".

Chapter 2 - The Literature Review

The purpose of the literature review is not just to cite publications but to examine the *pros* and *cons* of the methods used in those studies as well as the impact of these on their findings and conclusions. A good literature review identifies gaps in knowledge of the subject brought about by the limitations of the methods employed in those previous studies and it ends by summing up or listing these gaps in knowledge and how the new study being proposed intends to address the gaps.

Whilst it is desirable to consult as many relevant previous studies on the subject as possible, the number of articles cited is not necessarily an index of thoroughness or erudition. Relevance to the new subject of study is the key to a good selection of literature to be cited. Assessors should watch out for shallowness in the review of the literature, but it is important to also avoid an over-reach or the inclusion of irrelevant matters

Example: A study looking at the prevalence of a health problem should not begin to dwell on the merits and demerits of different approaches to the management of the problem. Its focus should be on screening techniques and diagnostic criteria.

The literature review should be divided into sub-sections which are numbered appropriately.

Each aspect of the study being contemplated needs to be looked at in-depth and these explorations will constitute the sections and sub-sections of the literature review. The literature review should rely more on journal articles publishing original research findings rather than on information from textbooks. The Literature Review should be 4000-6000 words

Chapter 3 - The Objectives & Hypotheses

The specific Objectives of the study are set out in a separate chapter after the literature review.

The Objectives require a separate chapter because of their major importance in the proposal and in the eventual dissertation. Each objective is stated in a separate short paragraph.

Good dissertations will generally have three or more separate objectives which will set the ground for the conclusions to be drawn at the end of the study. Clarity is the most important attribute of a statement of objectives.

The Hypotheses: The Working Hypotheses naturally flow from the statement of objectives.

If the objectives are clearly stated, it is relatively easy to formulate the hypotheses.

Example: in a comparison of two treatment methods of a disease, the hypothesis will assume that one method is superior to the other in some specified ways and that will be the statement of hypothesis.

If several attributes of treatment are being compared, each can be formulated as a different objective with a different hypothesis.

Example: comparing the treatment methods may look separately at relief of symptoms, short term side effects and long term complications as separate measurable objectives, with parameters clearly stated for each. A separate hypothesis will be stated for each of these

Chapter 4 - The Methodology

The Materials & Methods (sometimes titled Patients & Methods) is another crucial part of the proposal. If the objectives are clear, the methods to be used will be easier to describe. One of the most important tasks of the Assessor is to determine whether the methods described will be sufficient to attain the stated objectives or not.

The specific points to scrutinize are:

Sample Size: In most clinical and epidemiological studies, a suitable sample size is needed to make meaningful conclusions. Sample size determination is a crucial portion of the methodology section. Various formulae exist for calculating adequate sample sizes for different types of studies. It is important to use the appropriate calculation techniques for the study being contemplated as this underpins the validity of the study

Experimental Methods: New experimental methods should be described in detail but references can be provided for methods that have been well described in the published literature. To improve clarity, dividing this section into sub-sections is strongly advised

Data Analysis & Statistical Methods: The proposed methods of statistical analysis are also an important aspect of the methodology. It is important to provide a framework for analyzing the data to be collected, including how the data will be summarized and the specific statistical tests to be used If possible, some dummy tables of how data will be summarized should be included For qualitative studies, how the data will be analyzed in a standardized manner must be clearly stated.

References & Appendices: The References to be listed are only those cited in the proposal. The Vancouver style shall be adopted in citing and listing the References. The Appendix or Appendices will include materials to be used in data collection such as questionnaires and proformas, or other technical details that could not be included in the main body of the manuscript.
Work plan: There should be a work plan with time lines detailing when the candidate intends to start the work, how long it will take and when he/she intends to submit the completed work.
Ethical Clearance: It is vital that evidence of ethics committee (institutional review board) clearance be obtained before the commencement of data collection. Certification to this effect, or evidence that such certification is being processed, should be included in the proposal
The actual dissertation must contain certification from the committee that the study was duly approved
Style: The British method of spelling words should be used or American but not a mixture or other spelling styles. Short simple sentences are easier to follow and understand than long windy ones. Abbreviations should be avoided unless they have been introduced properly into the text.