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JOHANNESBURG OFFICE
EXAMINATIONS & CREDENTIALS

April 2022

R E G U L A T I O N S

FOR ADMISSION TO THE FELLOWSHIP OF THE COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS OF SOUTH AFRICA

FCOG(SA)

The examination comprises Part I (divided into sections IA and IB) and Part II

PART I

1.0 ADMISSION TO THE PART I EXAMINATION
(to be read in conjunction with the Instructions)

1.1 For admission to Part I of the examination, the candidate must hold a post-internship qualification to practise medicine which is registered or registrable with the Health Professions Council

1.2 The Senate of the CMSA, through its Examinations and Credentials Committee, will review all applications for admission to the examination and may also review the professional and ethical standing of candidates

1.3 Part IA and Part IB may be attempted together at the same examination sitting or on separate occasions, and in any sequence. Credit for one successful section does not require success in the other.

2.0 SYLLABUS FOR THE PART I EXAMINATION

The subjects covered by the Part IA examination will include the basic sciences of anatomy, embryology, physiology, endocrinology, cell biology and genetics, immunology, and imaging physics. The Part IB examination will cover applied basic sciences and include the fetus, microbiology, pharmacology, pathology, principles of bioethics, basic biostatistics, and the pathophysiology of diseases in Obstetrics and Gynaecology. Knowledge will be required of all those aspects of the subjects which should form part of the general education of any specialist; and particularly of those aspects applicable to Obstetrics and Gynaecology. A syllabus of subjects and notes forming a general guide to Part I of the examination is attached (Appendix A). The syllabus is not exhaustive and the candidate is expected to have a knowledge of basic sciences as related to Obstetrics and Gynaecology as well as of areas of new developments

3.0 CONDUCT OF THE PART I EXAMINATION
Online written papers (no oral examination) as follows:

3.1 **Part IA**
3.1.1 Basic Sciences: any combination of short answer and/or single best answer (3 hours)

3.2 **Part IB**
3.2.1 Applied Basic Sciences: any combination of short answer and/or single best answer (3 hours)

PART II.../

PART II

4.0 ADMISSION TO THE PART II EXAMINATION

(to be read in conjunction with the Instructions)

4.1 For admission to Part II the candidate must present evidence of

4.1.1 having passed Part I or the Part I Fellowship examination of one of the Colleges with which there is an agreement of reciprocity for the primary examinations

4.1.2

4.1.3 having completed the training set out in 5.0 of the regulations

4.1.4 having fulfilled the requirements set out in 6.0 of the regulations.

5.0 TRAINING FOR THE PART II EXAMINATION

The candidate must submit evidence that he/she has completed the following training in posts approved for the purposes by the CMSA before admission to Part II of the examination

5.1 **Obstetrics:**

A completed 18-month appointment in a full-time post as registrar, or a full-time post providing equivalent experience in a maternity hospital or in the maternity department of a general hospital, such posts having been recognised for the purpose of the Fellowship examination.

5.2 **Gynaecology:**

5.2.1 An eighteen-month appointment in a full-time post as registrar or clinical assistant, or a full-time post providing equivalent experience in a gynaecological hospital or in the gynaecological department of a general hospital, such posts being recognised for the purpose of the Fellowship examination

5.2.2 In carrying out the three-year completed post-registration training in Obstetrics and Gynaecology, a minimum of six consecutive months in any post is required. Training in Obstetrics and Gynaecology may be carried out simultaneously in a combined post recognised for the Fellowship. A minimum of one year in a combined post is required and a year in the combined post can be accepted as equivalent to six months of obstetrics and six months of gynaecology

6.0 PORTFOLIO OF LEARNING (*Appendix C)*

6.1 Before being allowed to enter for the examination, a candidate shall submit a completed Portfolio,

6.2 Candidates may enter the examination up to five years from the date of final sign-off by the HOD on the basis of their original Portfolio.

i. After five years, the candidate should submit a motivation letter and supporting documents including an updated portfolio of learning to Council via the President of the COG.

ii. If additional training is needed, that should be at the discretion of the Council of the COG. The details of this should be individualised for each candidate.

6.3 The Portfolio must reach the Academic Registrar in Johannesburg as detailed in Appendix C

7.0 SYLLABUS FOR THE PART II EXAMINATION

A syllabus forming a general (but not exhaustive) guide to Part II of the examination is attached (Appendix B)

8.0 CONDUCT OF THE PART II EXAMINATION

8.1 Two Online Written examinations: Any combination of short answer and/or single best answers (3 hours)

- Gynaecology EXAMINATION with aspects of medicine, surgery and basic medical sciences as are relevant to the practice of Gynaecology
- Obstetrics EXAMINATION with aspects of medicine, surgery, neonatal paediatrics and basic medical sciences as are relevant to the practice of Obstetrics

8.2 **Online Typed - Objective Structured Clinical Examination (OSCE):**
This will include questions on ultrasound, cardiotocography, colposcopy, radiology, cytology and any other topics relevant to the clinical practice of Obstetrics and Gynaecology

8.3 **Online Oral - Objective Structured Practical Examination (OSPE):**
Four gynaecology clinical scenarios and four obstetric clinical scenarios will be given to the candidate. The candidate will be required to discuss the management with the examiner after a period of preparation

9.0 ADMISSION AS A FELLOW

9.1 Only candidates who have completed at least 36 months of training in a CMSA recognised registrar post may be awarded a fellowship if successful in the examination. Candidates are eligible to be registered as a specialist Obstetrician Gynaecologist with the HPCSA only after completion of at least 48 months in an approved training post.

9.2 **Candidates who have written the examination as a prerequisite from the HPCSA for inclusion on the specialist register are not eligible to be awarded a Fellowship but will be sent a letter confirming their success in the examinations**

All other candidates will be asked to sign a declaration as below:

I, the undersigned, …… do solemnly and sincerely declare

that while a member of the CMSA I will at all times do all within my power to promote the objects of the CMSA and uphold the dignity of the CMSA and its members

that I will observe the provisions of the Memorandum and Articles of Association, By-laws, Regulations and Code of Ethics of the CMSA as in force from time to time

that I will obey every lawful summons issued by order of the Senate of the said CMSA, having no reasonable excuse to the contrary

and I make this solemn declaration faithfully promising to adhere to its terms

Signed at ..……. this ……..... day

of ……..... 20 …….....

Signature ……

Witness ……..…
(who must be a Founder, Associate Founder, Fellow, Member, Diplomate or Commissioner of Oaths)

9.2 A two-thirds majority of members of the CMSA Senate present at the relevant meeting shall be necessary for the award to any candidate of a Fellowship

9.3 A Fellow shall be entitled to the appropriate form of certificate under the seal of the CMSA

9.4 In the event of a candidate not being awarded the Fellowship (after having passed the examination), the examination fee shall be refunded in full excluding HPCSA candidates who are not entitled to a Fellowship.

9.5 The first annual subscription is due one year after registration (statements are rendered annually)

A P P E N D I X A

SYLLABUS FOR PART I OF THE FCOG(SA) EXAMINATION

This examination requires a wide knowledge of the basic sciences.
A detailed knowledge relating to the reproductive system, pregnancy and the foetus will be required. The content of Part IA will be confined to the basic sciences, while Part IB, will test knowledge on applied basic sciences in Obstetrics and Gynaecology, including pathophysiology and pathogenesis of common and important diseases.

PART IA – BASIC SCIENCES

The following list of subjects is a general guide to the information upon which questions will be based. It is not necessarily comprehensive, and questions may be asked on topics that are not covered directly in these lists, although topographic anatomy will be limited to the areas mentioned

1.0 ANATOMY - ADULTS

1.1 **Bony pelvis:** 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 more common variants; relationship between pelvic architecture and reproductive function

1.2 **Pelvis:** detailed knowledge of the gross and microscopic anatomy of all intra-pelvic structures

1.3 **Abdomen:** Topographic anatomy of all intra-abdominal structures, including the vascular, lymphatic and nerve supply of all intra-abdominal organs; detailed knowledge of the structure and nerve supply of the abdominal wall, the retroperitoneal area of the pelvis, the femoral triangle and the epidural space

1.4 **Breast:** Gross and microscopic anatomy

1.5 **Endocrine system:** Gross and microscopic anatomy of the endocrine glands

1.6 **Nervous system:** major sensory and motor pathways within the central nervous system with particular regard to the nervous connections of the pelvic organs; detailed knowledge of the nervous connections for the endocrine system, with particular reference to the hypothalamus and pituitary gland

2.0 EMBRYOLOGY

2.1 Oogenesis and spermatogenesis

2.2 Fate of spermatozoa in the male and female reproductive tracts

2.3 Early embryogenesis and placentation - fertilisation, transport and implantation

2.4 Early development of twin pregnancy

2.5 Development, structure and function of the placenta

2.6 Development of foetal membranes, including homeostasis and functions of the amniotic fluid

2.7 The general pattern and timing of organogenesis in the embryo

2.8 The factors concerned in the determination of sexual differentiation and gender

2.9 Embryology and development of the male and female genital tract

2.10 Embryology and development of the female breast

3.0.../

3.0 PHYSIOLOGY

3.1 Knowledge of all aspects of human physiology will be expected, with special emphasis on pregnancy:

3.2 Kidney: normal renal function

3.3 Water and electrolyte regulation, and acid-base balance

3.4 Cardiovascular system: cardiac cycle, cardiac output, control of heart rate, blood pressure and regional blood flow

3.5 Respiratory system: normal lung function; oxygen and carbon dioxide transport mechanisms

3.6 Central nervous system: the arrangement and function of somatic and autonomic nervous systems including the chemical transmission of nerve impulses

3.7 Alimentary tract and hepatobiliary system: secretory functions; digestion and absorption of food; normal liver function; general principles of dietetics

3.8 Haematology: production, composition and function of blood; normal haemostasis

3.9 Biochemistry: iron, calcium, iodine and energy

4.0 ENDOCRINOLOGY AND REPRODUCTION

4.1 Hormones of the anterior and posterior pituitary gland, and control of their secretion

4.2 Ovarian hormones: detailed knowledge of the synthesis and actions of the ovarian steroid hormones and their endocrine and paracrine mechanisms

4.3 Hormones of the adrenal gland including aldosterone, cortisol and catecholamines: regulatory pathways, synthesis and functions

4.4 Detailed understanding of the menstrual cycle, including the hypothalamic-pituitary-ovarian axis, ovarian follicle development, and cyclic changes in the female reproductive organs

4.5 Detailed knowledge of insulin and related hormones and growth factors, and their effects on carbohydrate metabolism

4.6 Synthesis, control, secretion, and action of thyroid hormones

4.7 Control, secretion and action of parathyroid hormone

5.0 IMMUNOLOGY

5.1 The innate immune system: natural killer cells, macrophages, granulocytes and dendritic cells

5.2 The adaptive immune system: – T cells and B cells, antibody types and functions

5.3 The immunology of pregnancy, including the fetus as an allograft

6.0 CELL BIOLOGY AND GENETICS

6.1 Structure and function of the normal cell

6.2 Transfer of substances across the cell membrane, including active and passive transport mechanisms with special reference to the placenta

6.3 Cell death and apoptosis

6.4 Principles of the genetic code

6.5 Mitosis and meiosis

6.6 Chromosome constitution and the anomalies associated with common karyotypic abnormalities

6.7 Mechanism of inheritance of genetically determined abnormalities

6.8 Basic molecular biology

7.0.../

7.0 BASIC PHYSICS OF IMAGING TECHNOLOGY, AND IRRADIATION

7.1 The physics of a sound wave including wavelength, frequency, intensity and velocity of sound

7.2 Interaction of ultrasound with matter including absorption, attenuation, diffraction, scatter and possible hazards

7.3 Doppler principle - measurements made possible by the Doppler principle with special reference to vascular flow and colour flow mapping

7.4 Basic physics of X-ray and magnetic resonance imaging

PART IB - APPLIED BASIC SCIENCES

1.0 THE FETUS

1.1 Gross anatomy of the fetus with particular reference to the skull and cardiovascular system

1.2 Fetal growth and maturation

1.3 Oxygen, carbon dioxide, nutrient and drug transport

1.4 The effect of uterine contractions upon fetal oxygenation and blood supply

1.5 Factors involved in the initiation of respiration

1.6 Physiological adaptation of the neonate to extra-uterine life in the first few days

1.7 Fetal responses to chronic and acute placental insufficiency and hypoxia

1.8 Pathophysiology of blood-group incompatibility

1.9 Pathogenesis of hydrops fetalis

2.0 PATHOLOGY

2.1 General principles of aetiology, cytopathology, histopathology and natural progression of disease

2.2 Principles and patterns of inflammation, infection, neoplasia, degeneration, regeneration and wound healing

2.3 Basic principles of isotopes and therapeutic irradiation; effects of ionising radiation on cells and tissue

2.4 Detailed knowledge of the pathology of intra-epithelial and invasive neoplasia of the cervix and vulva

2.5 Basic knowledge of the pathology of benign and malignant tumours of the upper genital tract

2.6 The genetic basis of malignant disease

2.7 Basic knowledge of the pathology of endocrine disorders in obstetrics and gynaecology, including diabetes, thyroid disease, and functional disorders of the hypothalamus, pituitary gland, adrenal gland and ovary, including menstrual disorders, pubertal development and the menopause

3.0 MICROBIOLOGY

3.1 Principles of microbiology including broad outlines of bacteriology and virology

3.2 Characteristics and behaviour of bacteria, viruses, fungi and parasites causing disease of the female reproductive tract, placenta and/or fetus

3.3 Principles of control of infection; antisepsis, asepsis, sterilisation, epidemic control, isolation

3.4 Principles of vaccines and vaccination

3.5 Pathogenesis of sexually transmitted infections, including human immunodeficiency virus

4.0.../

4.0 PHARMACOLOGY

4.1 Pharmacology, mode of action and side-effects of the following classes of drugs:
- 4.1.1 Anti-cancer agents
- 4.1.2 Antimicrobials for infections listed above for Microbiology, including mechanisms of microbial resistance
- 4.1.3 Antihypertensives
- 4.1.4 Hormones, anti-hormones including contraceptives
- 4.1.5 Analgesics
- 4.1.6 Local anaesthetic agents
- 4.1.7 Mineral and vitamin supplements

4.2 Pharmacology and principles of prescribing in pregnancy and breastfeeding

4.3 Teratogenic drugs and chemicals, and their effects on embryo or fetus

4.4 Principles of prescribing in palliative care

5.0 PATHOPHYSIOLOGY IN OBSTETRICS AND GYNAECOLOGY

5.1 Pathogenesis and pathophysiology of pre-eclampsia and related disorders

5.2 Effects of, and adaptation, to severe haemorrhage, with reference to pregnancy and the puerperium

5.3 Severe sepsis, systemic inflammatory response, septic shock and multi-organ dysfunction

5.4 Clotting dysfunction, including disseminated intravascular coagulopathy

5.5 Blood products, components and substitutes; principles of transfusion medicine

5.6 Inherited and acquired thrombophilias

5.7 Disorders of energy metabolism in pregnant and non-pregnant women

5.8 Electrolye and acid-base disturbances; interpretation of arterial blood gas analysis

5.9 Causes and pathophysiology of acute renal failure; renal function tests

5.10 Causes and pathophysiology of acute respiratory failure; lung function tests

5.11 Causes and pathophysiology of anaemia; interpretation of haemoglobin, haematocrit and red cell indices

6.0 EPIDEMIOLOGY AND STATISTICS

6.1 Commonly used study designs, and their uses, advantages and disadvantages

6.2 Principles and methods of sampling in clinical research

6.3 Frequency distributions and measures of central tendency and dispersion

6.4 Evaluation of diagnostic tests: sensitivity, specificity, positive and negative predictive values, likelihood ratios, and receiver operator characteristic curves

6.5 Hypothesis testing, statistical errors and principles of sample size calculation

6.6 Commonly used statistical tests, parametric and nonparametric, and interpretation of p values

6.7 Principles and techniques used in evidence-based medicine, with special reference to randomised controlled trials, meta-analyses and systematic reviews

7.0 BIOETHICS

7.1 Principles of current bioethical theories: Kantian deontology, utilitarianism, virtue ethics

7.2 Using the principles of beneficence, non-maleficence, respect for autonomy and distributive justice for decisions in health care

7.3 Content and application of informed consent in clinical practice

A P P E N D I X B

SYLLABUS FOR PART II OF THE FCOG(SA) EXAMINATION

This examination requires a wide specialist knowledge of Obstetrics and Gynaecology. Candidates are expected to have a good general knowledge of Obstetrics and Gynaecology including the latest developments in the speciality and a clear understanding of evidence-based principles of practice

The syllabus below forms a general guide to the knowledge which the candidates will be expected to have acquired. It is not exhaustive and questions may well be asked on topics which are not covered directly in this syllabus. The examination aims to test specialist rather than subspecialist knowledge

OBSTETRICS

1.0 NORMAL PREGNANCY

1.1 **Obstetrical history-and examination:**

1.1.1 *Examination of the obstetric patient (antenatal):*

- General examination including the thyroid gland and breasts
- Cardiorespiratory examination
- Symphysis-fundal height
- *The four manoeuvres of Leopold:*
  - Fundal palpation
  - Lateral palpation
  - Pawlik grip
  - Pelvic palpation
- Fetal heart sounds
- Pelvic examination at the first antenatal visit, and thereafter only when indicated

1.2 **Prepregnancy counselling:**

- Teratogenic and harmful drugs
- *Effects of:*
  - Smoking
  - Alcohol
  - Drug abuse
- Management of medical problems before pregnancy
- Prevention of neural tube defects
- Counselling about HIV/AIDS

1.3 **Diagnosis of pregnancy:**

- *Clinical methods:*
  - History of amenorrhoea, unprotected sexual intercourse, morning sickness, abdominal swelling, fetal movements, size of uterus
  - Physical examination: breasts, abdomen, uterus, pelvis
- Laboratory methods: immunological and radioimmunoassay of urine or serum beta-hCG
- Special methods: ultrasound examination

1.4 **Physiological adaptations:**

- The uterus and cervix
- The placenta and its functions; amniotic fluid
- Hormonal and metabolic changes
- Haematological changes
- Cardiovascular and haemodynamic changes
- Renal changes
- Pulmonary, GIT and other changes

1.5.../

1.5 **Antenatal care**:

1.5.1
- Initiation of antenatal care
- History and physical examination at the first visit
- Routine antenatal investigations: VDRL; blood group & Rh; urinalysis; haemoglobin; counselling about HIV/AIDS

1.5.2
- Maternal monitoring: history and examination; weight; BP; urinalysis

1.5.3
- Fetal surveillance: fetal movements; symphysis-fundal height; fetal heart sounds; non-stress test
- Screening tests for and diagnosis of congenital abnormalities
- Prenatal diagnosis including early ultrasound

1.5.4 *Identification of high risk pregnancy:*
- Maternal age, stature, marital status, socio-economic status
- Parity
- Poor obstetric history
- Previous caesarean section
- Antenatal complications
- Hypertension
- Abnormal presentation or lie
- Multiple pregnancy
- Preterm rupture of membranes
- Risk of preterm labour
- Risk of abruptio placentae
- Medical conditions, eg cardiac disease, diabetes mellitus, anaemia, thyroid disease, tuberculosis, asthma
- Sexually transmitted diseases

1.6 **Normal labour:**
- *Current theories of the onset of labour:*
  - Role of progesterone and oestrogens
  - Role of corticotropin releasing hormone
  - Role of oxytocin and prostaglandins
  - Initiation of labour
  - Physiology of labour
  - Definition, signs and symptoms of labour
  - Mechanism of normal labour
  - Obstetric examination in labour: SF height; lie; presentation; position; attitude; descent; fetal heart rate pattern
  - Evaluation of cervix: effacement; application to presenting part; dilatation
  - Membranes; liquor
  - Presenting part: station; moulding and caput succedaneum
  - Pelvic assessment in primigravidae, and patients with history of previous caesarean section or assisted delivery
  - *Stages of labour:*
  - first, second, third and fourth stages of labour
  - *Evaluation of normal progress of labour:*
  - use of the partogram
  - Assessment of fetal well-being: electronic and auscultatory fetal heart monitoring
  - Fetal scalp pH; fetal pulse oximetry
  - Emotional support and pain relief during labour

1.7 **The newborn baby:**
- Apgar score
- Examination of the newborn: sex; weight; gestational age; congenital abnormalities
- Physiological changes at birth

1.8.../

1.8 **The puerperium:**

- Involution of uterus and other organs
- Lochia
- Lactation
- Contraception
- The postnatal clinic

2.0 ABNORMAL PREGNANCY

2.1 **Antepartum haemorrhage:**

- Placenta praevia: clinical features; complications; diagnosis; management
- Abruptio placentae: risk factors; clinical features; complications; diagnosis; management
- Vasa praevia
- Local causes of bleeding
- Unclassified

2.2 **Multiple pregnancy:**

- Monozygotic twins and chorionicity
- Dizygotic twins
- Presentations
- Antenatal complications
- Antenatal diagnosis and management
- Management of labour in twin pregnancy; delivery of the second twin

2.3 **Abnormal presentations and abnormal lie:**

- Breech presentation
- Transverse lie
- Oblique lie
- Unstable lie
- Diagnosis and antenatal management: external version

2.4 Polyhydramnios/oligohydramnios

2.5 **Preterm and prelabour rupture of membranes and preterm labour:**

- Causes
- Diagnosis
- Complications
- Management

2.6 **Abnormalities of growth:**

2.6.1 *The large foetus; intrauterine growth restriction and intrauterine death:*

- Causes

2.6.2 *Diagnosis:*

- Management

2.7 **Hypertensive disorders:**

2.7.1 *Current theories of the aetiology and pathogenesis of preeclampsia and eclampsia:*

- Placentation and trophoblastic invasion of spiral arterioles
- The vascular endothelium: functions; products; nitric oxide; endothelin
- Platelet function: platelet activation
- Endothelial damage: oxygen free radicals; lipid peroxides; role of antioxidants

2.7.2 *Criteria for diagnosis of hypertension:*

- Risk factors for preeclampsia and eclampsia
- *Simplified classification of hypertensive disorders of pregnancy:*
  - Pregnancy-induced hypertension (PIH)
  - Preeclampsia (gestational proteinuric hypertension)
  - Eclampsia
  - Chronic hypertension:
    - Essential Hypertension
    - Renal Hypertension
    - Coarctation of aorta
    - Other secondary hypertension: phaeochromocytoma etc
  - Superimposed preeclampsia/eclampsia
  - Unclassified hypertension

2.7.3 *Complications:*

- Maternal: eclampsia; HELLP; pulmonary oedema; renal abruption; DIC; death
- Fetal: prematurity; IUGR; IUFD

2.7.4 Management: antenatal; intrapartum; postpartum.

2.7.5 Prognosis

2.8 **Prenatal diagnosis:**

- Chorionic villus sampling
- Ultrasound screening: first trimester and second trimester anomaly scan, amniocentesis and second trimester (20-22 weeks)

2.8.1 *Other screening procedures:*

- Counselling for and diagnosis of congenital abnormalities
- Cordocentesis/amniocentesis

2.8.2 Knowledge about karyotyping including FISH and PCR

2.9 **Blood grouping incompatability, pathogenesis, diagnosis and management**

2.9.1 **Intrauterine fetal therapy:**

- Fetal reduction
- Intrauterine transfusion
- *Drugs:*
  - Steroids
- Intrauterine fetal surgery

3.0 ABNORMAL LABOUR/DELIVERY

3.1 **Prolonged/obstructed labour:**

- Inefficient uterine action; cervical dystocia
- *Abnormal fetal presentation:*
  - Breech
  - Face presentation
  - Brow presentation
  - Shoulder presentation
- *Abnormal position:*
  - Occipito-posterior positions
  - Mento-posterior positions

3.2 **Abnormal lie:**

- Transverse lie
- Oblique lie

3.3 **Cephalopelvic disproportion:**

- Contracted pelvis
- *Big baby:*
  - Macrosomia
  - Shoulder dystocia
- *Congenital anomalies:*
  - Hydrocephalus
  - Other congenital tumours
- *Pelvic tumours:*
  - Ovarian
  - Uterine fibroids

3.4 **Shoulder Dystocia:**

- Causes
- Diagnosis
- Complications
- *Management:*
  - McRobert's manoeuvre
  - Delivery of the posterior shoulder

3.5 **Ruptured uterus**:

3.5.1 *Spontaneous rupture:*

- Obstructed labour
- *Previous scar on uterus:*
  - Previous caesarean section scars
  - Lower segment scars
  - Classical scar
  - Previous gynaecological operations: eg myomectomy
- Congenital anomalies
- *Iatrogenic rupture:*
  - Oxytocics
  - Uterine manipulations

3.5.2 *Prevention and management of ruptured uterus*

3.6 **Cord Accidents:**

- Cord prolapse
- Cord presentation
- Management: role of filling the urinary bladder

3.7 **Fetal Distress:**

- Placental insufficiency as a result of various conditions, eg hypertension etc
- Cord accidents and cord compression
- Obstructed labour
- Management of fetal distress

3.8 **Preterm labour:**

- Spontaneous: causes; prevention; management: antibiotics; tocolytics
- Induced
- Management of preterm labour and birth

3.9 **Induction of labour:**

- Bishop's score
- Surgical methods
- *Medical methods:*
  - Oxytocin
  - Prostaglandins (PGE_2; misoprostol)

3.10 **Augementation – Methods, indication, complications**

4.0 OPERATIVE OBSTETRICS AND IMAGING

4.1 **Caesarean section:**

- *Elective:*
  - definition; indications; pre-requisites; complications
- *Emergency:*
  - definition; indications; preparation; complications
- Perimortal caesarean section

4.2 **Instrument delivery, indications, method and complications**

- *Assisted vaginal delivery:*
  - Vacuum extraction
  - Forceps delivery
  - Assisted breech delivery

4.3 **Laparotomy for ruptured uterus**

4.4 **Repair of perineal tears**

4.5 **Manual removal of placenta**

4.6 **Routine follow-up ultrasonography**

5.0 POSTPARTUM HAEMORRHAGE: DEFINITION; CAUSES; PREVENTION; MANAGEMENT

5.1

- Uterine atony
- Retained placenta
- *Trauma:*
  - cervical and vaginal tears
  - uterine rupture
- Management of pelvic haematomas
- Coagulopathy
- Uterine inversion
- Infection (after 24 hours)
- Surgical Management and aspects thereof
- Postpartum Collapse
- Insertion of balloons

5.2 Vaginal birth after caesarean section (VBAC)

6.0 ABNORMAL PUERPERIUM

6.1 **Puerperal sepsis:**

- Endometritis
- Endometritis with pelvic or generalised peritonitis/abscess
- Pelvic thrombophlebitis
- Management

6.2 **Septic shock:**

- Systemic Inflammatory Response Syndrome (SIRS)
- Management

6.3 **Psychiatric disorders**

6.4 **Contraception, including IUCD insertion**

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7.0 MEDICAL AND SURGICAL DISORDERS

7.1 Cardiac disease:

- Difficulties in diagnosing heart disease in pregnancy (reasons)
- Symptomatology of heart disease in pregnancy
- NYHA classification of heart disease (limitations)
- *Rheumatic heart disease:*
  - mainly mitral valve disease (MS; MS + MI; AI)
  - natural history
- *Congenital heart disease:*
  - ASD, VSD, PDA
  - primary pulmonary HT
  - Eisenmenger syndrome
- *Other:*
  - cor pulmonale
  - valve prolapse
  - bacterial endocarditis
- Effects of heart disease on pregnancy; effects of pregnancy on heart disease
- Complications
- *Management of the cardiac patient:*
  - pre-conceptional
  - antenatal
  - intrapartum
  - postpartum
  - contraception
  - Emergency management

7.2 Diabetes mellitus:

- Diagnosis of diabetes mellitus in pregnancy
- IDDM
- *NIDDM:*
  - GDM
  - Impaired glucose metabolism
- Effects of pregnancy on DM; effects of DM on pregnancy
- Complications
- Management of diabetes: preconceptional, antenatal, intrapartum and postpartum

7.3 Endocrine disorders:

7.3.1 *Pituitary:*

- Hypopituitarism
- Hyperprolactinaemia

7.3.2 *Thyroid disorders:*

- Hypothyroidism
- Hyperthyroidism
- Autoimmune thyroiditis
- Effect on fetus/neonate

7.3.3 *Adrenal disorders:*

- Congenital adrenal hyperplasia
- Cushing syndrome
- Addison's disease
- Management of patient on corticosteroids

7.3.4 *Endocrine emergencies*

7.4.../

7.4 **Central nervous system disorders:**

- *Epilepsy:*
  - Idiopathic
  - Neurocysticercosis
  - Other
  - Anticonvulsants during pregnancy
- Myasthenia gravis
- Other neurological conditions

7.5 **Pulmonary disease:**

- Pulmonary tuberculosis
- Asthma
- Pneumonia
- Management of respiratory disorders in pregnancy: importance of consulting a physician or referral

7.6 **Anaemia in pregnancy**

7.7 **Urinary tract infections:**

- Cystitis
- Pyelonephritis
- Role of asymptomatic bacteriuria
- Complications
- Management

7.8 **HIV infection and pregnancy:**

- Diagnosis; counselling before HIV testing
- Vertical transmission
- AIDS
- Prevention of mother to child transfer
- Complications
- Management

7.9 **Infections other than HIV:**

7.9.1 *Sexually transmitted diseases in pregnancy:*

- Gonorrhoea
- Chlamydiae
- Syphilis

7.9.2 *Other infections in pregnancy:*

- Group B streptococci
- Bacterial vaginosis

7.10 **Venous thromboembolism (VTE):**

- Diagnosis of VTE
- Pulmonary embolism
- Management: prevention; anticoagulant treatment

7.11 **Other conditions**:

- Collagen diseases/auto-immune disorders
- Thrombotic thrombocytopaenic purpura (TTP)
- Idiopathic thrombocytopaenic purpura (ITP)
- SLE etc

7.12 **Obesity and pregnancy**

7.13 **Dermatological conditions**

- Diagnosis and treatment

7.14.../

7.14 **Liver disease in pregnancy**

- Diagnosis, investigations
- Treatment
- Complications

7.15 **Critical care**

- Principles of fluid replacement, intubation and care of the critically ill pregnant patient during or after delivery

8.0 MISCELLANEOUS CONDITIONS

8.1 Trauma including head injuries, chest trauma or trauma to the pregnant abdomen following blunt, sharp injuries or following gunshots

8.2 Domestic violence and physical abuse

8.3 Contraception

9.0 SURGICAL DISEASE IN PREGNANCY

9.1

- Appendicitis
- Cholecystitis

10.0 PERINATAL AND MATERNAL STATISTICS

10.1 **Perinatal statistics:**

- Stillbirth rate
- Neonatal mortality rate
- Perinatal mortality rate
- Main causes of perinatal deaths

10.2 **Maternal statistics:**

- Severe maternal morbidity
- Maternal mortality ratio
- Main causes of maternal deaths

10.3 **Audit in obstetrics**

10.4 **Evidence based Medicine**

GYNAECOLOGY

13.0 COMPLICATIONS OF EARLY PREGNANCY

13.1 **Gynaecological history:**

- General examination, including breast and thyroid gland
- Cardio respiratory examinations
- Abdominal examination
- Specific examinations, cervical smear, wet mount smear
- Bimanual pelvic examination
- Recto-vaginal examination

13.2 **Spontaneous, miscarriage:**

- Miscarriage
- *Spontaneous, types, diagnosis and management:*
  - Threatened
  - Inevitable
  - Incomplete
  - *Missed:*
    - Septic/septic shock/ systemic inflammatory response syndrome
- Recurrent

13.3 **Recurrent miscarriage causes, diagnosis, management**

13.4 **Induced abortion:**

- Legal
- Unsafe
- Methods and complications

13.5 **Molar pregnancy**

13.6 **Ectopic pregnancy**

- Acute ruptured
- Unruptured
- Leaking
- Abdominal pregnancy
- Medical treatment

14.0 MENSTRUATION AND MENSTRUAL DISORDERS

14.1

- Mechanism of normal menstruation
- Dysmenorrhoea
- New classification, causes and management of abnormal uterine bleeding
- Dysfunction uterine bleeding
- Premenstrual tensions

15.0 UROGYNAECOLOGY, GENITAL PROLAPSE & PELVIC FLOOR DEFECTS

15.1

- Anatomy of pelvic supports: the levator ani; the cardinal ligaments and other supports
- Diagnosis, causes and management of:
  - Utero vaginal prolapse
  - Enterocele
  - Vault prolapse
  - Urinary dysfunction
  - Urinary incontinence, stool incontinence
  - Fistulae

16.0…/

16.0 GENITAL TRACT INFECTIONS

16.1 **STD's:**

- Trichomonas vaginalis
- Candida albicans
- Bacterial vaginosis
- LGV/LGI
- Syphilis
- Gonorrhoea
- Chlamydia trachomatis
- HIV/AIDS
- Investigations and diagnosis, including side lab procedures

16.2 **Vaginitis, vulvitis – other conditions**

16.3 **Pelvic Inflammatory Disease:**

- Causes
- Investigations and diagnosis
- Clinical staging: Gainsville staging; natural history and pathophysiology of PID
- Complications
- *Management:*
  - preventive
  - use of antibiotics
  - treatment of sexual partner
  - rehabilitation
  - safer sex counselling

16.4 **Chronic pelvic pain**

16.5 **TB of genital track**

16.6 **HIV & AIDS**

17.0 GYNAECOLOGICAL ENDOCRINOLOGY

17.1 **Puberty and early development:**

17.2 **Abnormalities of genital differentiation:**

17.3 **Menstrual dysfunction:**

- Oligomenorrhoea, amenorrhoea, galactorrhoea
- Investigations and diagnosis
- Management

17.4 **Hyperandrogenism:**

17.5 **Menopause and hormone therapy:**

- Mechanism of menopause
- *Hot flashes:*
  - mechanism
- Atrophy
- Osteoporosis
- Cardiovascular disease
- *Management of the menopausal woman:*
  - cancer screening
  - HRT
- Risk of cancer with HRT
- Hormone therapy in cancer survivors

17.6…/

17.6 **Contraception and family planning:**

- Contraceptive counselling
- *Barrier methods:*
  - Male and female condoms
  - Caps, sponges
- *Hormonal contraceptives:*
  - Oral pills
  - Combined pills
  - Progestin only pills
- *Injectables:*
  - Depot medroxyprogesterone acetate (DMPA)
  - Nuristerate
- Norplant and other implants
- Vaginal rings
- *Spermicides:*
  - Nonoxynol-9
  - Intrauterine contraceptive devices
  - Intrauterine contraceptive systems
- *Sterilisation:*
  - *Tubal ligation:*
    - postpartum;
    - interval
    - vasectomy
- *Natural family planning:*
  - underlying principles

17.7 **Hirsuitism**

17.8 **Osteoporosis**

17.9 **Thyrid disease**

18.0 Infertility:

18.1 **Mechanism of normal conception:**

- Gametogenesis (folliculogenesis; spermatogenesis)
- Coitus and gamete transport
- Fertilisation, ovum transport and implantation

18.2 **Female factors in infertility:**

- Tubal disease
- Anovulation
- Uterine and cervical factors

18.3 **Male factors (Andrology):**

- Impotence/ejaculatory problems
- Abnormal spermatogenesis
- Azoospermia

18.4 **Evaluation and management:**

- hormonal profiles; HSG; ovulation induction; tuboplasty
- ARTs
- Endoscopy

18.5 Sexual dysfunction

19.0…/

19.0 BENIGN TUMOURS AND OTHER CONDITIONS

19.1 **Ovarian cysts and tumours**
Diagnosis management

19.2 **Fibroids**
Diagnosis, Management Strategies, including newer innovations, complications of management

19.3 **Endometriosis, adenomyosis**
Etiology, diagnosis, clinical presentation, medical and surgical management options, complications of treatment

20.0 GYNAECOLOGICAL ONCOLOGY

20.1 **Gynaecological cancer screening:**

- Cervical screening for carcinoma of the cervix - role of primary, secondary and tertiary modalities in decreasing cervical cancer
- Ultrasound for ovarian and endometrial cancer: vaginal ultrasound; colour Doppler
- Tumour markers: CA-125; CEA; AFP; HCG
- Role of other imaging modalities

20.2 **Vulva and vagina including premalignant conditions:**

- Embryological rest tumours
- Genital warts
- White lesions of the vulva
- Vulvar intra-epithelial neoplasia (VIN)
- Vaginal intra-epithelial neoplasia (VAN)
- Vaginal cancer

20.3 **Tumours of the cervix and premalignant conditions:**

- Epidemiology of cervical cancer; risk factors; Role of HPV
- *CIN/SIL:*
  - definition; types; significance; natural history; diagnosis and management
- *Squamous cell carcinoma of cervix:*
  - risk factors; presentation; spread; lymph drainage; staging; management
- Adenocarcinoma of the cervix
- Colposcopy
- LLETZ
- Role of surgery
- Role of radiotherapy
- Role of chemotherapy
- Palliative therapy

20.4 **Tumours of the uterus and premalignant conditions:**

- Endometrial hyperplasia and PMB
- Role of ultrasonography
- Role of hysteroscopy
- Endometrial sampling
- Endometrial carcinoma
- Risk factors
- Clinical features
- *Investigations and diagnosis:*
  - Surgical staging
  - *Management:*
    - roles of surgery,
    - radiotherapy,
    - chemotherapy
- Mixed mesodermal tumours of uterus
- Sarcoma of the uterus

20.5…/

20.5 **Tumours of the ovary and premalignant conditions:**

- Embryology of ovarian development
- Functional cysts
- *Benign tumours:*
  - Epithelial tumours
- Mature teratomas
- Fibromas
- *Malignant tumours of the ovary:*
  - *Epithelial tumours:*
    - Serous cystadenocarcinoma
    - Mucinous cystadenocarcinoma
- *Germ-cell tumours:*
  - Malignant teratoma
  - Dysgerminoma
  - EST
  - Embryonal carcinoma
  - Mixed germ cell tumour
- *Sex-cord tumours:*
  - Granulosa-cell tumour
  - Sertoli-Leydig cell tumour
- *Secondary tumours:*
  - Krukenberg tumours
  - Clinical presentation
  - Investigations and diagnosis
  - Management of ovarian tumours
- *Border line tumours of the ovary*
  - Definition
  - Diagnosis
  - Treatment strategies

20.6 **Tumours of the Fallopian tubes**

20.7 **Trophoblastic tumours:**

- Molar pregnancy: presentation; investigations and diagnosis; management and follow-up
- Persistent mole
- Choriocarcinoma: investigations and diagnosis; management

20.8 **Oncogenes and tumours:**

- Chemotherapy and radiotherapy in gynaecological cancer
- Chemoprevention in gynaecological cancer

21.0 PAEDIATRIC GYNAECOLOGY

21.1

- Examination of child
- Infections
- Normal bleeding
- Abuse
- Tumours
- Ambigiuous genitalia. Disorders of puberty

22.0 SURGICAL PROCEDURES INCLUDING

22.1 Need to know indications, contraindication, technique and complications of:

- Laparoscopy
- Hysteroscopy
- Endometrial ablation
- Vaginal procedures
- Laparotomy and pelvic surgery

23.0…/

23.0 OTHERS

23.1
- Micronutrients in obstetrics
- Evidence-based obstetrics and gynaecology
- Audit in obstetrics and gynaecology
- Ethical issues in obstetrics and gynaecology
- Litigation in obstetric and gynaecologic practise

A P P E N D I X C

1.0 REGULATIONS FOR THE PORTFOLIO OF LEARNING FOR THE FCOG(SA) PART II

1.1 The Portfolio template is available on the website, www.cmsa.co.za, with instructions for its completion and must be obtained at the commencement of training. It must be correctly filled in during the course of the candidate's training, and must be certified by the consultants under whose supervision the cases and clinics were conducted

1.2 i. Candidates may enter the examination up to five years from the date of final sign-off by the HOD on the basis of their original Portfolio

1.3 ii. After five years, the candidate should submit a motivation letter and supporting documents including an updated portfolio of learning to Council via the President of the COG.

1.4 iii. If additional training is needed, that should be at the discretion of the Council of the COG. The details of this should be individualised for each candidate.

JOHANNESBURG
April 2022