#### POSTGRADUATE TRAINING PROGRAMME

#### FOR DIPLOMA IN OBSTETRICS & GYNAECOLOGY

#### CURIICULUM FOR DIPLOMA COURSE IN OBSTETRICS & GYNAECOLOGY (D. G. O.)

- 1. Departmental Objectives
- 2. Contents
- 3. Recommended Reading
- 4. Evaluation

#### **INTRODUCTION**

At the end of the 2 years Postgraduate course, the resident will be expected to work as a specialist in the field of Obstetrics & Gynaecology, particularly meeting the needs in the peripheral regions. This will require thorough knowledge of the fundamental, particularly in Obstetrics. He/she should be reasonably acquainted with basic gynaecological conditions and procedures. He/she should be able to make decisions regarding patient management and adopt favourable ethical attitudes.

#### 1. Departmental Objectives

A postgraduate resident should be able to achieve objectives in the following domains:-

#### A. Cognitive Domain

- 1. Learn the basics of the subjects of Obstetrics and Gynaecology covering all conditions likely to be met with in Obstetric practice in our country.
- 2. Provide effective prenatal care depending on the clinical condition of the mother, including nutrition, immunization and risk assessment.
- 3. Able to diagnose and manage normal pregnancy, Labour and puerperium and recongise any departure from normal in the above.
- 4. Learn in greater detail about common problems like hypertension complicating pregnancy.
- 5. Appreciate the indications and methods of induction of labour.
- 6. Gain knowledge of other branches of medicine which are relevant to Obstetrics and Gynaecology with special stress on Diabetes mellitus, Hypertension, cardiac Disease, Anaemia, Lower urinary tract disorders and surgical causes of abortion, spontaneous and induced, including ectopic gestation and hyudatidiform mole.
- 7. Able to competently manage cases of abortion, spontaneous and induced, including ectopic gestation and hydatidiform mole.

- 8. Diagnose and manage preterm labour.
- 9. Assess clinically the fetal well being, maturity and birth weight and to use that information in deciding the obstetric management.
- 10. Develop decision making skills by utilizing the clinical and laboratory data.
- 11. Able to diagnose and manage acute abdomen, haemorrhage and other emergencies i.e. eclampsia.
- 12. Understand the need for common obstetric operative interventions i.e. episiotomy, forceps, ventouse, Caesarean section, dilatation and evacuation etc.
- 13. Understand the importance of population control, contraception and different methods of contraception.
- 14. Understand the physiology of menstruation and manage common menstrual abnormalities.
- 15. Identify common adolescent and paediatric gynecological problems and their management.
- 16. Learn about screening and diagnosis of gynaecological operative procedures.
- 17. Acquaint oneself with common basic gynecological operative procedures.
- 18. Learn about screening and diagnosis of gynaecological malignancies including breast.
- 19. Acquaint oneself with common basic gynecological operative procedures.
- 20. Learn the proper method of handing data and resenting statistics in a scientific and orderly fashion in seminars, symposia and papers.
- 21. Utilise journals and reference works effectively.

#### **B.** Affective Domain

- 1. Appreciate the fact that women and children are especially a vulnerable group as regards health problems.
- 2. Appreciate particularly the problem of patients of advanced and terminal disease and to develop a sympathetic attitude to them and their relatives.
- 3. Understand the psychological aspects of gynecologic diseases in general and in=fertility and unwanted pregnancy in particular.
- 4. Develop the ability to view the patients condition ion a wider social perspective and to adjust therapy to suit her social and financial reality.
- 5. Understand the importance of good medical care in preventing most of the morbidity and mortality in Obstetrics and Gynaecology.

- 6. Develop skills to communicate with patients and their relatives and to elicit a thorough history and developing a rapport with the patients.
- 7. Understand that Obstetrics and Gynaecology forms a hotbed for ethical issues and follow necessary precautions needed for an ethical practice.

#### C. Psychomotor Domain

- 1. Able to select cases for the following Obstetric procedures and able to perform them independently and confidently:
  - i. Lower segment caesarean section including cases of obstructed labour and malpresentations.
  - ii. Outlet and low forceps delivery.
  - iii. Vacuum extraction.
  - iv. Assisted Breech Delivery.
  - v. External cephalic / internal podalic version.
  - vi. Manual removal of placenta and exploration of uterine cavity.
  - vii. Management of atonic and traumatic Post Partum Haemorrhage.
- 2. Able to select cases for the following Obstetric procedures and able to perform them independently and confidently:
  - i. Suction Evacuation/MVA
  - ii. Dilation and Evacuation
  - iii. Extra amniotic instillations & other newer methods like medical aboration.
- 3. Able to perform the following gynaecological surgical procedures:
  - i. D & C / FC, Menstrual Regulation
  - ii. Polypectomy
  - iii. Insert and remove IUCD
- 4. Able to assist / perform the following gynaecological surgical procedures:
  - i. Minilap tubectomy
  - ii. Vaginal Hysterectomy with pelvic floor repair
  - iii. Abdominal Hysterectomy for 'Straight-forward' cases
  - iv. Salpingectomy for ectopic pregnancy, Salpingo-ovariotomy.
  - v. Amputation of Cx/Manchester repair/Conisation
- 5. Able to assist in the following:
  - i. Laparoscopic sterilization
  - ii. Diagnostic Laparoscopy
  - iii. Colpocentesis /colpotomy, laparotomy & drainage of pus

- iv. Caesarean Hysterectomy
- v. Repair of bladder injury
- vi. Hysterectomy in 'difficult cases'
- vii. Tubal microsurgery
- 6. Able to Manage the intra-operative and post-operative complications.
- 7. Able to perform the following investigations:
  - i. Obstetric Ultrasonogrphy for
- Pregnancy diagnosis
- Pregnancy dating
- Early pregnancy bleeding
- Antepartum Haemorrhage
- Biophyscial profile
- Fetal anomalies
- ii. Hysterosalpingography
- 8. Able to assist the following investigations:
  - i) Colposcopy
  - ii) Cystoscopy
  - iii) Gynaecological USG for adenxal mass, uterine pathology and follicular monitoring.
- 9. Able to resuscitate an asphyxiated newborn by emergency measures and recognize signs requiring referal of a baby for specialized care.

## 2. CONTENTS

#### **OBSTETRICS**

#### Must Know

- 1. Obstetrics Aims and vital stastistics
- 2. Embryolgy applied Fertilisation, Implantation and fetal development
- 3. Morphological and functioning development of fetus
- 4. Maternal adaptation to pregnancy
- 5. Management of normal pregnancy
  - Perinatal care
  - Techniques to evaluate fetal growth and health

- Conduct of normal labor and delivery
- Labour Analgesia and Anaesthesia
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- 6. Mnagement of labour
  - The normal pelvis
  - Attitude, Lie , Presentation and position of the fetus
  - Parturition : Biomolecular and Physiologic processes
  - Mechanisms of Normal labor
  - The Newborn infant
  - The Puerperium
- 7. Complications of pregnancy
  - Abortion, gestational trophoblastic disease
  - Ectopic pregnancy
  - Diseases and abnormalities of the placenta and fetal membranes
  - Congenital malformations and inherited disorders
  - Diseases, Infections and Injuries of the fetus and newborn infant
  - Multifoetal pregnancy
  - Hypertensive Disorders in Pregnancy including eclampsia
  - Obstertical Haemorrhage
  - Abnormalities of the Reproductive Tract
  - Preterm and postterm pregnancy and inapproriate foetal growth.
- 8. Abnormal labour
  - Dystocia due to abnormalities of the expulsive forces and porecipitate labour

- Dystocia due to abnormalities in presentation, position and develop; ment of the fetus
- Dystocia due to pelvic contraction
- Dystocia due to soft tissue abnormalities of the Reproductive Tract
- Techniques for Breech Delivery and occipito posterior
- Injuries to the Birth canal Perineal tears, cervical
   / vaginal lacerations, rupture uterus
- Abnormalities of the third stage of labour.
- 9. Operative Obstetrics:
  - 1. Forceps / vacuum delivery and related techniques.
  - 2. Caesarian Section and Caesarian Hysterectomy.
- 10. Abnormalities of the Puerperium
- 11. Medical, surgical illness complicating pregnancy.
- 12. Family , welfare including Post Partum programme.
- 13. Other National programmes applicable to Obst. & Gynae.
- 14. Drugs in pregnancy.
- 15. Current concepts in the management of preterm labour.
- 16.Conservative management of Ectopic gestation.
- 17. Ante Partum monitoring of fetus at risk.
- 18. Imaging in Obstetrics.
- 19. Medico legal aspects pertaining to obst. & gyn.

## **Desirable to know:**

- 1. Chromosomal abnormalities in the fetus and genetic counseling.
- 2. Immunology of recurrent abortiuons and other Obst. Complications.
- 3. Destrucitive operations.

## GYNAECOLOGY

## <u>Must know</u>

1. Anatomy and embryology of female reproductive tract.

- 2. Ovarian function and physiology of menstruation.
- 3. Disorders of breast.
- 4. Malformations and maldevelopment of female genital tract.
- 5. Sex determination, asexuality and intersexuality.
- 6. Injuries to female urogenital tract.
- 7. Genital prolapsed.
- 8. Other displacements of the uterus.
- 9. Torsion of the pelvic organs.
- 10. Infections.
- 11. Epithelial abnormalities of the genital tract.
- 12. Endometriosis and allied states.
- 13. Trophoblastic tumours.
- 14. Tumours of the cervix uteri
- 15. Tumours of the corpus uteri
- 16. Tumours of the ovary.
- 17. Genital cancer screening & prevention.
- 18. Amenorrhoea, Scanty and infrequent
- 19. Abnormal uterine bleeding, DUB
- 20. Dysmenorrhoea
- 21. Vaginal discharge, sexually transmitted infections.
- 22. Pruritus vulvae
- 23. Low Backache
- 24. Problems of sex and marriage.
- 25. Infertility and subfertility.
- 26. Contraception Sterilization, termination of pregnancy.
- 27. Urinary problems in Gynaecology
- 28. Hormone therapy.
- 29. Preoperative and postoperative management, postoperative complications.

- 30. Advancers in the diagnosis and management of urinary incontinence.
- 31. Radiotherapy & chemotherapy in Gyn. Cancer.
- 32. Hormone Replacement Therapy.

## Desirable to know:

- 1. Immunology and Immunotherapy of gynaecological cancers.
- 2. Assisted reproduction techniques Endometrial ablation and other conservative surgeries in Gyn.
- 3. Role of GnRH analogues in Gynaecology
- 4. Tumours of the vulva
- 5. Tumours of the vagina
- 6. New approaches to male and female cointraception.
- 7. Laparoscopic surgery.

## **<u>3.RECOMMENDED READING</u>**

## A. BOOKS

Williams Obsterics – FG Cunningham et al 22 <sup>nd</sup> Edn. –	2005
McGraqw – Hill	
Practical Guide to High risk pregnancy & delivery Fernando	2008
Arias – 3 <sup>rd</sup> Edn – Daftary.	
Turnbull"s Obstetrics 3 <sup>rd</sup> Edn. – Geoffrey Chamberlain –	2001
Churchill Livingstone Harcourt Publishers – 2001.	
Mudaliar & Menon's Clinical Obs. – 10 <sup>th</sup> Edn. – Orient	2005
Longman.	
Manual of Obs. – Shirishs Daftary & Sudip Chakravarti – 2 <sup>nd</sup>	2005
Edn. – Elsevier	
High risk pregnancy – Management Options – 3 <sup>rd</sup> Edn. –	2006.
James, Steer, Weiner, Gonik – Elsevier	
Medical Disorders in Obst, Practice – 4 <sup>th</sup> Edn – Michael de	2002
Swiet – Blackwell	
Practical Obsterics problems (Ian Donald – 5 <sup>th</sup> Edn – BI Pub.	1998
Pvt. Ltd. Delhi	
Munrookerr's Operative Obstetrics – 10 <sup>th</sup> Edn – Balliere	2000
Tindall UK – AIRBS De;lhi	

Danforth's Obstetrics & Gynaecology – 9thEdn. – 2003	2003.
Lippincott Williams and Wilkins.	
Shaw's Text Book of Gynaecology – 13 <sup>th</sup> Edn – Elsevier	2004
Shaw's Text Book of Opeative Gynaecology – 6 <sup>th</sup> Edn. –	2004
Elsevier	
Jeffcoate,s principles of Gynaecology – International Edn –	2001
Arnold	
Te Linde's Operative gynaecology – 9 <sup>th</sup> Edn. – Lippincottt	2003
Berek & Novak's Gynaecology – 14 <sup>th</sup> Edn. – Lippincott	2007
Clinical Gynaecologic Endocrinology and infertility – 7 <sup>th</sup> Edn.	2005
Speroff & Fritz, Lippini9cott	
Recent Advasnces in Obst. & Gynaecology. Bonner J: 23,	
Harcourt Publishers	
Progress in Obst. & Gynaecology, Studd, 17 Elsevier	
Obstetrics & gynaecology for postgrasduates (Vol.1) –	2001
Orient Longman (Ratnam, SS Raso, BK Arulkumaran	
Clinical methods in Obsat. & Gynaecology – a problem	2007
based approach – 2 <sup>nd</sup> Ed. Orient Longman	
Clinical Gynaecologic Oncology : Disaia JP, Craftsman TM,	1997
5 <sup>th</sup> Edn. The CV Mosby Co. 1989	
<ul> <li>Latest Editions of the above Books are</li> </ul>	

• Latest Editions of the above Books are recommended.

## **B. JOURNALS**

- a. Journal of Obst. & Gyn. India.
- b. British Journal of Obst. & Gynaecology
- c. American Journal of Obstetrics & Gynaecology
- d. International Journal of Obst. & Gynaeacology
- e. Obstetrics & Gyn. Survey
- f. Obstetric & Gyn. Clinics of N. America.

## **TEACHING / LEARNING METHODS.**

- 1. Seminars /Sympopsia
- 2. Journal clubs
- 3. Group Discussions
- 4. Cl;inical rouynds / combined case discussions.

- 5. Case presentations /Bedside teaching
- 6. Maternal care Review meetings
- 7. Perrinatal meetings
- 8. Clinicopathological meetings
- 9. Attending conferences, Workshops CME programmes etc.

## A) Active involvement in patient care in

- Antenatal clinic
- General Gynae OPD
- Postnatal clinic
- Infertility clinic etc.

# B) Operation Theatre

- Assist procedures
- Operation under supervision
- Operate independently as per above
- Emergencies Participation in Management
- In the community visits to RHC / CAMPS

## **POSTINGS:**

- 1. There should be rotation amongst all units atleast once
- 2. Labour room posting 4 months )(minimum)
- 3. Obst. Ward 12 months
- 4. Gynaec ward 6 months
- 5. Family Planning 1 month
- 6. Peripheral postings:

Neonatology: 2 weeks

Anasesthesiology: 2 weeks.

7. Optional – Reproductive medicine: 1 week.

## **4.EVALUATION**

## 1. Internal assessment book

- a. Regularity / Attendance- Case sheet writing
- b. Punctuality
- c. Attitude
- d. Operative skill
- e. Clinical acumen
- f. Operations Observed
- g. Assisted
- h. Done
- i. Presenting cases, Seminars
- j. Attending Conferences, Workshops, CMEs

# 2. Periodic evaluation

Every 6 month/1 year

Written

Clinical

Oral

# 3. Scheme for theory ,clinical and oral examination <u>Theory (300marks)</u>

At the end of 2 years there will be a written examination on 3 papers, 100 marks each (total 300 marks).

Paper-I: Basic Sciences

Paper- II: Obstetrics and New Born

Paper- III: Gynecology and contraception

Paper- I will have 10 short notes and will carry 10 marks each (10X10=100marks)

Paper –II and Paper – II will have 2 essay questions and 5 short notes. Each essay question will carry 25 marks (2X 25=50marks) and each short notes will carry 10 marks (5X10=50marks)

# Clinical(200 marks)

- 1. Obstetrics : 100marks One long case- 100 marks
- 2. Gynecology : 100 marks One long case- 100 marks

# <u>Orals (100 marks)</u>

- a) Obstetrics and gynecology general viva: 40 marks
- b) Dummy& pelvis, Contraception,Xray/USG,Specimens/instruments,FHR tracing or partograam/ Gravidogram tracing : 40 marks
   c) Five spots : 20 marks

<u>Criteria for pass</u>: A candidate should obtain 50% in clinical examination (100 out of 200) separately and 50% in (theory + oral) put together (200 out of 400). On the whole a candidate should obtain 300 marks out of 600 marks. A candidate <u>CAN</u> <u>NOT PASS</u> even if he/she obtain a total of 300 marks unless separately50% in clinics & 50% in (theory + oral) are obtained.

## Model Question papers

Paper- I: Basic Sciences

Duration 3 hours 10X10=100

Marks-

Answer all questions

- A) Surgical anatomy of pelvic floor and its clinical significance
- B) Describe the course of ureter and its surgical importance.
- C) Physiology of micturition in female and pathophysiology of genuine stress incontinence.
- D) Feto-placental circulation.
- E) Ovarian steroidgenesis.
- F) Iron metabolism.
- G)Calcium channel blockers and its use in obstetrics.
- H) Cervical intraepithelial neoplasia.
- I) Organism implicated in puerperal sepsis.
- J) Asymptomatic bacteriuria.

# Paper- II: Obstetrics and New Born

## Duration 3 hours Marks- 100

# Answer all questions

- 1. Discuss the aetiopathology and management of severe pre-eclamsia.(25 marks)
- 2. List the causes of breech presentation and factors determining perinatal out come in breech presentation. Discuss the merits and demerits of planned caesarean section in breech presentation. (25 marks)
- 3. Write short notes on (5X 10= 50 marks)
  - a. Diagnosis of pregnancy
  - b. Care of a growth restricted newborn.
  - c. Biophysical profile.
  - d. Predisposing factors and prevention of Postpartum Haemorrhage
  - e. Reproductive Child Health Programme

## Paper- III: Gynecology and Contraception

## Duration 3 hours Marks- 100

#### Answer all questions

- 1. Discuss the clinical features and management of endometriosis. (25 marks)
- 2. Discuss the management of early stage carcinoma cervix. (25 marks)
- 3. Write short notes on marks)

( 5X 10= 50

- a. Hyperprolactinaemia
- b. Tubal patency tests
- c. Barrier contraceptives
- d. No scalpel vasectomy
- e. Treatment of vault prolapsed.