"This prospectus is made under the provisions of the Universities Act, the Postgraduate Institute of Medicine Ordinance, and the General By-Laws No. 1 of 2016 and By-Laws No. 2 of 2016 for Degree of Doctor of Medicine(MD) and Board Certification as a Specialist"

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

Prospectus

DOCTOR OF MEDICINE (MD)
AND
BOARD CERTIFICATION
IN
OBSTETRICS & GYNAECOLOGY

2017

BOARD OF STUDY IN OBSTETRICS & GYNAECOLOGY

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PROSPECTUS
DOCTOR OF MEDICINE (MD) AND BOARD CERTIFICATION
OBSTETRICS & GYNAECOLOGY

1. Description, nomenclature and associated agencies of the degree programme

1.1. Name of the degree programme-MD in Obstetrics & Gynaecology
1.2. Full title– MD and Board Certification in Obstetrics & Gynaecology
1.3. University–University of Colombo, Sri Lanka
1.4. Faculties and institutes–Postgraduate Institute of Medicine of the University of Colombo (PGIM)
1.5. Departments, external resources and associated agencies–Board of Study in Obstetrics & Gynaecology (BOS), Ministry of Health, State Universities, the Sri Lanka College of Obstetricians and Gynaecologists.

2. Introduction

The Postgraduate in-service training programme of the Postgraduate Institute of Medicine of the University of Colombo will lead to the degree of MD (Obstetrics and Gynaecology) awarded by the University of Colombo.

The successful completion of post MD (Obstetrics and Gynaecology) training programme will entitle the trainee to be eligible for Board Certification by the Senate/Board of Management on the recommendation of BOS as a Specialist in Obstetrics and Gynaecology.

The objective of the training programme shall be to ensure that the trainee gains adequate knowledge, clinical acumen, procedural skills, communicative skills and attitudes which will enable him to; manage pregnancy and its complications, manage disorders affecting the female genital tract and problems in relation to human reproduction. The trainee should also acquire the professional skills to be an effective leader and a manager in the provision of sexual and reproductive health information and care, and organization of services. The trainee will also need to be able to design and conduct audits and research projects, critically appraise research publications and be committed to the practice of evidence based medicine and continuing professional development. The trainee will also be exposed to important areas in professionalism and moral and ethical conduct.

3. Rationale

In the recent past new changes to postgraduate training has been introduced locally and globally to improve the quality of training and assessments with the objective of producing a specialist to fulfill the expectations of the patients, employers and the Higher Education Sector. To achieve this University Grants Commission and the PGIM has introduced guidelines and recommendations. The external examiners who participated in postgraduate

examinations in the PGIM have also recommended amendments to enhance the quality and standards of the training programmes in order to meet the new challenges in the field of postgraduate education. These include changes to the assessment instruments and introduction of In-Courses assessments, a portfolio viva, structured progress reports, Peer Team Ratings (PTR) and a Pre Board Certification Assessment (PBCA).

The Obstetrician & Gynaecologist will function in a number of roles, including clinical, counseling, educating, leading and managing. The aims of training include the development of the necessary competencies to perform these roles. The Obstetrician & Gynaecologists adopt a scientific approach to the patient as a whole person, which requires a detailed knowledge of patho-physiology, diagnostics, therapeutics and appropriate operative options for a broad range of health problems. Their breadth and depth of knowledge and operative skills makes them ideally suited to provide high quality consultant services across a wide spectrum of health and illness.

These competencies place the Obstetrician & Gynaecologist in a unique position to give clinical expertise, teach, advocate for health promotion and conduct research, particularly where health problems are caused by several determinants, affect multiple organ systems, and/or require integration of multidisciplinary expertise. The work of Obstetrician & Gynaecologists is complemented by that of specialists in other disciplines who specialize in its allied specialties. They play the important role of effectively managing patients with highly complicated problems of a single organ or system, which can only be carried out with further specialized and elaborate knowledge and skills that build upon a scientific foundation in Obstetrics and Gynaecology. In combination, Obstetrician & Gynaecologists and specialists in these specialties provide a high quality, advanced and comprehensive care that covers the health problems of all patients falling within this spectrum. Such a combination of generalist and specialist care is an internationally recognized phenomenon, in both developed and underdeveloped countries. The new Programme will build on these successes and reach out to further improvements and refinements that will train the Obstetrician & Gynaecologist of tomorrow.

4. Eligibility criteria to register for the Selection Examination

To be eligible to sit for the Selection Examination and to be selected for admission to the Programme, a candidate should fulfill all of the following eligibility criteria:

4.1. Hold a medical degree registered with the Sri Lanka Medical Council (SLMC).
4.2. Complete an internship recognized by the SLMC.
4.3. Complete one year work experience in Sri Lanka, after internship.
4.4. Produce a medical certificate from a specialist physician to confirm general mental and physical fitness.

4.5. Comply with any other PGIM regulations.

A candidate who is a citizen of Sri Lanka with CST (UK) or equivalent may be exempted from the Selection Examination but should fulfill 4.1, 4.4 and 4.5 above. However the candidate should have completed the Pre MD training acceptable to the BOS or in the absence should complete the deficiencies as recommended by the BOS and be successful at the MD Examination as well as complete the post MD training recommended by the BOS and be successful at the PBCA in order to be eligible for board certification.

Foreign nationals too should sit the Selection Examination after fulfilling 4.1, 4.2 and 4.5 and pass the examination to enter the training programme. However they will be eligible to receive only the Degree after completing the requirements and not Board Certification. But they may be permitted upon to follow Post MD training if they so wish.

5. Number to be enrolled for the training programme

The number to be admitted for training will depend on the requirements of the Ministry of Health/Universities/Armed Forces/Private sector and the training facilities available as determined by the BOS. The number to be admitted each year to each of the service sectors will be indicated in the circular/news paper advertisement calling for applications. The number may vary from year to year.

6. Selection Examination

The permitted number of attempts is unlimited unless this policy is changed by the PGIM. The examination questions shall be based on the curriculum described in **annex 1** which will include subjects such as Anatomy, Embryology, Genetics, Physiology, Biochemistry, Molecular Biology, Endocrinology, Microbiology, Pathology, Immunology, Pharmacology, Biophysics, Epidemiology and Statistics.

The Board of Examiners, consisting of the chief examiner and the other examiners, shall be appointed, for each examination, by the Board of Management (BOM) of the PGIM and approved by the Senate on the recommendation of the Board of Study in OG. An examiner so recommended should have completed a minimum period of service of five years after Board Certification and posses other requirements stipulated in 1.2 of the "Guidelines for conduct of examination" document of the PGIM. However in the event of non availability of examiners the BOS may request permission from the BOM/Senate to appoint examiners who do not fulfill the above stipulations. The responsibilities of the examiners are described in the book "*Guideline to Examiners"* published by the PGIM. For each examination two scrutiny experts will be appointed of whom at least one of them should not be a member of the BOS. The questions from the "Question Bank" will be obtained as much as possible.

In preparation of questions for all components of the examination the "Blue-printing" principle shall be adhered to maintain the content validity. The examiners of questions will be required to provide references to the subject matter from text books and other resources for each question.

To enroll in to the training programme in obstetrics and gynaecology a candidate is required to pass the Selection Examination. **The number to be admitted to the training programme will be decided by the BOS depending on the training facilities available and the requirements of the Ministry of Health.** The number to be admitted each year will be indicated in the circular/newspaper advertisement calling for applications. The number may vary from year to year. Allocation of training posts would be done by a subcommittee appointed by the Board of Study in OG according to the available training posts based on the ranking obtained at the Selection Examination and the preference of the candidate. Recommendations and requirements of the Ministry of Health will be taken in to account when applicable. The merit ranking of candidates who are enrolled into the training programme shall be done by taking into consideration the numerical order of the attempt by the candidate (those who pass after a lesser number of attempts will be placed above those who pass after a greater number of attempts) and the total mark obtained by him/her at the given selection examination, as given above.

6.1. Components

The selection examination shall consist of a Multiple Choice Question (T/F+SBA) Paper and a written Paper (two components).

6.1.1. Multiple Choice Question (T/F+SBA) Paper

There shall be twenty (20) true/false type MCQs and Thirty (30) Single Best Answer type Questions (SBA) (Total of 50 questions) to be answered in two and half hours (150 minutes).
Candidates who obtain a mark of 50% or more for this paper will be allowed to proceed to the other component (Written paper) of the examination.

6.1.2. Written Paper

This paper shall consist of four (4) structured essay questions (SEQ) and two (2) short answer questions (SAQ). The total duration of this paper shall be three hours.

6.2. Format of the examination

6.2.1. Composition of the Multiple Choice Question (T/F+SBA) Paper

The **approximate number** of questions will be:

Anatomy/Genetics/Embryology	- 15
Physiology	- 12
Pathology	- 08
Pharmacology	- 07

Microbiology	- 05
Medical physics/Research/Statistics/ Biochemistry/Audit	- 03

6.2.2. Composition of Written Paper

The **approximate number** of questions will be:

Anatomy/Genetics/Embryology	- 1 SAQ
Physiology	- 1 SAQ
Pathology	- 1 SEQ
Pharmacology/ Microbiology	- 1 SEQ
Immunology / Endocrinology	- 1 SEQ
Biochemistry & Molecular Biology / Biophysics / Epidemiology & Statistics	- 1 SEQ

6.3. Examiners

The Chief Examiner and the local examiners shall be appointed by the BOM of the PGIM and Senate on the recommendation of the BOS in Obstetrics & Gynaecology. Responsibilities of the examiners are described in the "PGIM Guideline to Examiners Book". The panel of examiners shall include Obstetricians & Gynaecologists, Physiologists, Pathologists, Anatomists and any other relevant specialists.

6.3.1 Multiple Choice Question (T/F+SBA) Paper

The Panel of examiners will select up to a maximum of 50 questions from the bank or will prepare new questions if appropriate questions are not available in the bank. The external examiner shall provide up to a maximum of 20 questions.

6.3.2 Written Paper

The Panel of examiners including the external examiner should submit questions with the marking grid for discussion and the final selection shall be done at the Scrutiny Board.

6.4. Marking Scheme

6.4.1 Multiple Choice Question (T/F+SBA) Paper

A MCQ true/false type shall consist of a stem and five responses. The maximum score for each question shall be +5 marks (100 marks). In a True / False type MCQ, (five responses) each correct answer shall score +1, wrong answer shall score –1 or if not attempted shall score 0. Negative marks will apply within the question and will not be carried forward. **The final mark for T/F part of the paper shall be calculated out of a total of 150.**

Each SBA question shall have a lead question and 5 responses for each question. In a SBA type question (five responses) a correct answer shall score +3, a wrong answer or if not attempted shall score a 0. The SBA question will carry +3 marks. **The final mark for SBA part of the paper shall be calculated out of 150.**

The total mark For Multiple Choice Question Paper shall be calculated out of a total of 300.

6.4.2 Written Paper

The Panel of Examiners shall determine the expected answers and the proportionate allocation of marks.

Each Question will be independently marked out of **100** by two examiners, and only multiples of 05 marks will be allocated. The mark for each question will be the average of the two marks given by the two examiners based on the predetermined marking scheme for the expected answers, provided the two marks are within **15 marks** of each other. If the two marks are more than **15 marks** apart for any question, the two examiners will re-correct such questions and arrive at an agreed mark.

The total marks for the written paper shall be converted to a final mark out of 300 marks.

6.4.3 Marks required to pass the Selection Examination

The candidate should obtain an aggregate of 50% or more of the total mark (300 or more out of 600)

AND

50% or more for the Multiple Choice Question Paper (150 out of 300)

AND

50% or more for the Written Paper (150 out of 300)

6.5 Dr. Nalin Rodrigo Gold Medal for the Selection Examination in Obstetrics & Gynaecology

For a candidate to be eligible for the award of the Gold Medal, all of the following criteria must be fulfilled:

- Should be successful at the first attempt
- Should obtain the highest total aggregate mark
- Should obtain a **total aggregate of 390** (65% of 600 marks) or more **marks and should obtain 180 (60% of 300 marks) or more for each of the two components** (MCQ paper and Written paper).

6.6 Counseling of candidates

Following the examination candidates will be given a feed-back based on item analysis individually or collectively.

7. Stages and duration of the training programme

This is a five-year full time programme of study, set at SLQF level 12 (i.e. a MD degree with a Research Component and Board Certification.

The curriculum of the training programme is given in annex 2. The training programme shall consist of seven stages.

7.1. Pre MD (Stage 1) – Duration - One year

- In general obstetrics & gynaecology as a Registrar in a training unit in circuit 1 2 or 3.
- The selection of the research topic and preparation of research proposal (3rd month), submission of the detailed proposal (6th month), resubmission if requested (9th month) and obtain final approval (on or before the 12th months).

7.2. Pre MD (Stage 2) – Duration - One year

- In general obstetrics & gynaecology as a Registrar in a training unit in a circuit not selected in Stage 1.
- Commence collection of data for the research project after obtaining Ethical Clearance from the PGIM Ethics Committee or an accredited Ethics Committee.

7.3. Pre MD (Stage 3) – Duration - One year

- Rotational appointments allocated according to the availability of units and trainee's preference. During this rotation the trainee is expected to get adequate exposure to relevant areas such as general surgery, general medicine, urology, adult and neonatal intensive care, and emergency treatment.
    - 6 months obstetrics and gynaecology as Registrar (peripheral appointment) in obstetrics & gynaecology in a training unit in Circuit 4.
    - Three (3) months in gynaecological oncology in a Training Unit approved by the board of study in Obstetrics & Gynaecology.
    - Three (3) months in obstetrics and gynaecology as Registrar in the same unit in which the Stage 2 appointment was done. **(This is to be allocated during the stage 3 based on availability of units for the peripheral and oncology training).**
- Continue collection of data for the research project.

7.4. MD Examination (Stage 4)

7.5. Post MD training as a Senior Registrar (Stage 5)

- One year in general obstetrics & gynaecology as a Senior Registrar in a training unit in one of the 1-3 circuits in which Registrar appointments were not done.

- Preparation of the Dissertation.
- Preparation of at least one full research paper.

7.6. Post MD overseas training (Stage 6)

- One year training in an approved centre overseas.
- Submission of the completed Dissertation or proof of acceptance/publication of one full research paper, the trainee as the first author, based on the research study for the dissertation in a peer reviewed journal indexed in Pub Med.

*** The submission of the research proposal, dissertation / full research paper may be done before the indicated deadlines above.**

7.7. Pre Board Certification Assessment and Board Certification (Stage 7)

During the entire training period (including the overseas training) the trainee shall maintain the Training Portfolio to document and reflect on his training experience and identify and correct any weaknesses in the competencies expected of him, and also recognize and analyze any significant clinical event. The details are in **annex 5**.

7.8 For details of attendance requirements for all components of training, leave, lines of communication and other general matters pertaining to all stages of the training, refer to PGIM General Regulations and Guidelines.

8. Training units and allocation of units

8.1. Training Units and resources

- Obstetrics and gynaecology training Units approved by the BOS.
- Other relevant special units such as ICU, SCBU, NICU
- Family Planning and other special clinics such as subfertility and fetal medicine.
- Imaging units.
- Diagnostic Laboratories.
- Skills Laboratories.
- Information technology Laboratories.
- Libraries.
- International Web Sites.
- Books and Journals.

8.2. Allocation of Units

Based on the guidelines made by the BOS, allocation of following training appointments will be made by the allocation committee.

A. Training units in Obstetrics and Gynaecology for stages 1, 2, and 3 (main circuits)

The trainee shall undergo training for a period of one year each, in one of the training units in each of the following three circuits during stages 1, 2 and 5.

Circuit 1: Training units in Kandy, Peradeniya, Anuradhapura and Jaffna Teaching Hospitals.

Circuit 2: Training units in Colombo North, Colombo South and Galle Teaching Hospitals.

Circuit 3: Training units in De Soysa Hospital for Women, Castle Street Hospital for Women and Sri Jayewardenepura Teaching Hospital.

Circuit 4: Training units for rotational training for stage 3
(Peripheral circuit)

- Obstetrics and Gynaecology Training units in in District General Hospitals; Kurunegala, Kalutara, Batticoloa, Ratnapura, Badulla, Matara or any other hospital approved by the BOS/BOM from time to time.
- Training units in oncology in any hospital approved by the BOS/BOM from time to time.

(The BOS may update the list of training centres when new training units are accredited as per PGIM regulations)

9. Training instruments and calculation of credits

The notional learning hours include direct contact hours with teachers and trainers, clinical training in wards/clinics/operating theaters time spent in self-learning, preparation for assignments, carrying out assignments and assessments. Some of the direct training activities are listed below.

- Clinical training in wards/clinics
- Operative skills training operating theatre/labour room/skills lab
- Lectures (schedule with topics in **Annex 6**)
- Tutorials/Small Group Discussions (schedule with topics is in annex **6**)
- Workshops/Study Days (schedule with topics **annex 6**)
- Dissertation and Peer reviewed article Writing
- Portfolio writing

The volume of learning at each level is described in terms of credits. In the SLQF credit system, the student workload of a full time study Programme is defined as 1500 notional learning hours per

academic year. Hence the minimum number of hours in MD & Board Certification should be 7500 notional learning hours.

One credit is considered equivalent to 50 notional learning hours earned through a taught course, laboratory studies course or field studies/clinical work.

Table 1-Calculation of Credits-MD and Board Certification in Obstetrics and Gynaecology

Training component	Notional learning hours	Credits
A. Pre MD O&G clinical training in stage 1[35 hours per week x 48 weeks	1680	33
B. Pre MD clinical training in stage 2 [35 hours per week x 48 weeks	1680	33
C. Pre MD Special clinical training in stage 3 [35 hours per week x 48 weeks]	1680	33
G. Tutorials/Small Group Discussions /Lectures/Seminars/Workshops [100 hours per year in the Pre MD training period]	300	6
MD Total	**5340**	**105**
D. Post MD local clinical training in stage 4 [35 hours per week x 48 weeks]	1680	33
E. Post MD overseas clinical training in stage 5 [35 hours per week x 48 weeks]	1680	33
F. Dissertation in stage 3 and Portfolio	500	05
Board certification Total	**3860**	**71**
Total for the full training programme	***9200***	***176***

10. Curriculum – Selection examination

The curriculum shall include 12 modules. The course content of each module is described in **annex 1. The Candidates should have a comprehensive knowledge (**above undergraduate level) **in the content areas listed in the following Learning Modules.**

- Anatomy
- Embryology
- Genetics
- Physiology
- Biochemistry and Molecular Biology
- Endocrinology
- Microbiology
- Pathology
- Immunology
- Pharmacology

- Biophysics
- Epidemiology & Statistics

11. Curriculum – MD Training programme

The curriculum described in this section is the framework for systematic training in obstetrics & gynaecology. The overall objective is to ensure that the trainee gains adequate knowledge, clinical acumen, procedural skills, teaching skills, communicative skills and attitudes which will enable him to practice as a specialist obstetrician & gynaecologist. The detail curriculum is given in **annex 2.**

11.1. Modules

The curriculum shall include 28 modules. The **learning outcomes** of each module are described in **annex 2.** The modules are listed below:

- Basic Clinical Skills
- Teaching, Appraisal and Assessment
- Information Technology
- Standards, Audits and Clinical Governance
- Risk Management
- Research Ethics and Legal Issues
- Core Surgical Skills
- Surgical Procedures
- Postoperative Care
- Contraception and Family Planning
- Adolescent Health
- Pre conception and Early Pregnancy Care
- Antenatal care
- Maternal Medicine
- Management of Labour
- Management of delivery
- Postpartum Care
- Gynaecological Problems
- Subfertility
- Sexual and Reproductive Health
- Post Reproductive Life Issues
- Gynaecological Oncology
- Urogynaecology and Pelvic Floor Problems
- Developing Professionalism
- Health Services in Sri Lanka

- National, Regional and Global Health Policies and Health Economics
- Health Statistics and their applications
- Obstetric and gynaecology ultrasound
- Endoscopic procedures in gynaecology
- Professionalism (professionalism for all trainees done by PGIM)

11.2. Gynaecological oncology

The details of this module is given in **annex 3**.

11.3. Specific learning outcomes

At the end of his training the Trainee should have:

11.2.1. Adequate knowledge in the basic sciences related to the reproductive system and the changes during the different phases of life including pregnancy.

11.2.2. Adequate knowledge of the pathophysiological events of the diseases of the reproductive system.

11.2.3. Developed skills in the diagnosis and management of pathological states presenting in obstetrics and gynaecology practice,

11.2.4. Developed correct attitudes for good clinical practice.

11.2.5. Developed the skills required for the organization of reproductive and gynaecological health care services and evaluate its outcome.

11.2.6. Developed the skills required to conduct audits and scientific research, with a view to contributing to the scientific knowledge in this field and participating in the task of improving the obstetric and gynaecological services in the community.

11.2.7. Developed the skills required to be a medical teacher / resource person in order to impart medical education to medical personnel and the public.

11.2.8. the experience to make clinical decisions pertaining to management, undertake undergraduate and paramedical training, train intern medical officers and be able to participate and supervise clinical audit and research, and be equipped with knowledge on current developments and advances in the specialty.

11.2.9. the ability to critically appraise research publications and practice evidence based medicine

11.2.10. the ability to maintain the highest standards of professionalism, moral and ethical conduct

11.2.11. the commitment to engage in continuing professional development.

12. Evaluation of progress

12.1. Progress Reports

Progress reports should be submitted to the PGIM by the respective trainers once in six months during **Stages 1 and 2 (Annex 7).** The reports of **Stage 3 (Peripheral appointment)**

should be submitted at the completion of each appointment (**Annex 8**). These have to be made available to the panel assessors at the In-service Training Assessment for evaluation.

The progress reports during the **Stage 5** local post MD training should be sent by the trainer every six months **(annex 9)** and **Stage 6** of overseas training should be sent by the overseas trainer every six months (**annex 10**). These have to be made available at the PBCA.

If progress reports are not received on time immediate action must be taken by the Chairperson and Secretary of the BOS to obtain the reports.

12.2. In-Service Training Assessments (ISTA)

The ISTA should be done at the end nine months of Stage 1 and at the end of nine months of Stage 2. The panel should be another trainer (specialist with three years of Post Board Certification experience) from the same hospital and one external trainer appointed by the BOS. Panel should evaluate the trainee, based on a marking grid **(annex 11).**

The Pre MD Portfolio to be made available to the panel, 2 weeks before the schedule date of ISTA with the Progress Reports.

Following the completion of the assessment the trainer has to be invited for a discussion on the trainee's performance and to clarify issues. Following this the trainee should be invited to discuss his performance and to highlight the strengths and weaknesses the training and the assessment.

If the grading is "Fail" the identified deficiencies to be rectified and a reassessment (only the failed components) to be done by the same panel **within a period of two months,** as much as possible by the same panel or by a new panel maintaining the same composition. In the event the trainee failing the repeat assessment the trainee should not be allowed to progress to the next Stage until a committee appointed by the BOS reviews the performance and the assessments with the participation of the trainee/trainer and submits the necessary recommendations to the BOS for implementation. The BOS will make a decision regarding the suitability of the candidate to proceed to the next stage, based on the recommendations of the committee.

12.3. The Peer Team Ratings

The Peer Team Rating forms (**annex 12**) should be submitted by the trainees once in six months. The trainer should supervise this activity and ensure that the forms are sent to the Monitoring Unit of the PGIM.

In the event of negative reports with adverse comments the BOS should take prompt action according to the General Rules and Regulations and initiate a preliminary Investigation if necessary.

13. Training Portfolio

Objectives:

To be appointed as a Specialist in Obstetrics and Gynaecology to practice independently in Sri Lanka, on completion of the in-service training before and after the MD (Obstetrics and Gynaecology) Examination, the Trainee should:

a) have administrative and organizational skills
b) be able to clearly document and prioritize problems
c) have skills appropriate to a specialist (diagnostic, operative, counseling, risk management, management of medico-legal issues)
d) have appropriate attitudes
e) be able to carry out and also supervise research and clinical audits
f) be committed to Continuous Professional Development
g) be able to disseminate knowledge effectively
h) have adequate knowledge of the English Language and be able to communicate effectively
i) have adequate knowledge and skills in Information Technology

The Trainee should maintain the Pre MD part (Section I) of the Training Portfolio during Stage 1, 2 and 3. During the Stage 5 and 6 the Post MD part (Section II) of the Training portfolio has to be maintained. The Training Portfolio **(annex 5)** has to be maintained to document and reflect on his training experience and identify and correct any weaknesses in the competencies expected of him, and also to recognize and analyze any significant clinical events experienced, so that appropriate changes in management could be adopted in order to reduce the risks arising from such situations in the future. The Trainers/supervisors are expected to review the candidate's progress at regular intervals. It is the responsibility of the Trainee to obtain the signature of the Trainer after these reviews, and **submit the Portfolio for evaluation at the ISTA and at the Pre Board Certification Assessment for evaluation** of his competence to practice independently as a Specialist in Obstetrics and Gynaecology with the recommendations and approval of the trainer.

14. Research Project leading to the Dissertation or Publication of a Full Research Paper

The objective of this exercise is to expose the trainee to research methodology and scientific writing. The work should be original. In the research project the trainee should demonstrate his ability to identify a problem, conduct a literature search, design and conduct a study, collect and manage data, carry out appropriate statistical analyses and present the results, and prepare a dissertation with rational conclusions after a discussion. A trainee who publishes the research findings as the first author in a journal indexed in PubMed, acceptable to the BOS, need not submit a dissertation.

The Research topic should be submitted to the BOS for approval within three months following commencement of Stage 1 and the detailed Research Proposal for the Dissertation should be submitted to the BOS for approval **within six months.** This is to be prepared as described in **annex 13.** The proposal will be assessed by two **reviewers** as described in **annex 14.** If it is not accepted the reviewer resubmission has to be done within **3 months** with the recommended corrections and improvements. The final approval should be obtained before the commencement of Stage 2 of the training programme.

A supervisor, who should be one of the trainers in Stage 1 or Stage 2, nominated by the trainee, will be appointed by the BOS to assist the trainee. The instructions to the supervisor are described in **annex 15. T**he supervisor should sign the form in **annex 16** and accept the appointment. The supervisor should submit progress reports as described in **annex 17, every 12 months.**

During Stage 2 (or before) the data collection has to be done. In Stage 3 and 5 (or before) the preparation of the Dissertation and a full research paper should be completed. Final submission (as per format in **annex 18)** of the completed Dissertation (soft copy on CD) or a full research paper based on the dissertation, with proof of acceptance or publication by a peer reviewed Journal indexed in Pub Med, should be done at least two months before the date of the PBCA. A publication in lieu of the dissertation shall be acceptable only if the trainee is the first author of the research paper.

The acceptance of the dissertation and obtaining a "Pass Grade" (Evaluation based on a marking grid as in **annex 19** or acceptance of publication of a research paper is a prerequisite to be eligible to sit for the PBCA.

15. Assessment of the Research Proposal, Dissertation and Portfolio

Two assessors will be appointed by the BOS to assess and approve (Pass/Fail) the **Project proposal** using a predetermined marking scheme as described in **annex 14**. A "Pass" grade for the Project proposal is a prerequisite to proceed to Stage 2. If a "Fail" grade is obtained the trainee should resubmit within **3 months** with the corrections and improvements.
Two assessors will be appointed by the BOS to assess and accept (Pass/Fail) the completed **Dissertation** using a predetermined marking scheme as described in **annex 19.** A "Pass" grade for the Dissertation is a prerequisite to proceed to the PBCA. If a "Fail" grade is obtained the trainee should resubmit within 3 months with the corrections and improvements.

The **Pre MD Portfolio** will be assessed as per marking scheme in **annex 20 at the ISTA** (there shall be no separate Pre MD Portfolio Assessment) and the **Post MD Portfolio** as per marking scheme in **annex 23** at the **PBCA** prior to Board Certification. If a "Fail" grade is obtained the trainee should resubmit in 8-12 weeks with the recommended corrections and improvements.

16. MD Examination

16.1. Eligibility criteria to register for the MD Examination

1. Satisfactory completion of 27 months of training (Stage 1, 2 and 3) in Obstetrics & Gynaecology in main training units.
2. Satisfactory completion of one Obstetrics and Gynaecology appointment of 6 months duration in a unit in the peripheral circuit (Stage 3).
3. Satisfactory completion of one Gynaecological Oncology appointment of 3 months duration in an approved unit (Stage 3).
4. Obtain a "Pass grade" for both ISTA 1 and 2.
5. Satisfactory progress reports acceptable to the BOS.
6. Satisfactory Peer Team Ratings acceptable to the BOS.
7. A duly completed Training Portfolio which is accepted ("Pass" grade) by the assessors.
8. Satisfactory progress reports of the Research project.
9. Satisfactory professional conduct and attendance during the training period certified by the trainers.
10. Good health certified by a specialist approved by the PGIM

16.2. Format of the MD Examination

The MD examination shall be held at the successful completion **of stages 1 to 3** as a Registrar. The examination shall have **three components:**

C1.Theory Examination = **1000 Marks**

C1.1.Written paper - 400

C1.2. SBA+EMI paper - 600

C2. Objective Structured Clinical Examination = 400 Marks

C3. Clinical Examination = 600 Marks

Total = 2000 Marks

16.3. The details of MD Examination

C1. Theory Examination

The theory examination shall consist of:

C1.1. A written paper with four (4) Structured Essay Question (SEQ) and two (2) Short Answer Question (SAQ). A total of 6 questions)
Time allocated - Three (3) hours.

Each Question will be independently marked out of 100 by two examiners, and only multiples of 05 marks will be allocated. The mark for each question will be the average

of the two marks given by the two examiners based on a predetermined marking scheme for the expected answers, provided the two marks are within 15 marks of each other. If the two marks are more than 15 marks apart for any question, the two examiners will re-correct such questions and arrive at an agreed mark. Total Final mark for C1.1 shall be **calculated out of 400.**

C1.2. SBA+EMI Paper with 60 questions

Time allocated - Two hours

The 60 questions will include **30 Single Best Answer type (SBA) and 30 Extended Matching Items (EMI).**

Each SBA question shall have a lead question and 5 responses for each question. Each EMI should have 8-10 sets of options. Each set of option should be followed with at least 2-5 scenarios with a question for which the appropriate answer to be selected from the respective set of options. Each scenarios/question should be counted as a single question.

The SBA will carry +3 marks (90 marks) and each question in an EMI will carry +3 marks (90 marks).

In a SBA type question (five responses) a correct answer shall score +3, a wrong answer or if not attempted shall score a 0.

In the Extended Matching Items (EMI), each correctly answered scenarios/question shall score +3 marks, incorrectly answered or not attempted items shall score a 0.

The Final mark out of the total of 180 shall be **calculated for C1.2 out of 600**

C2. Objective Structured Clinical Examination (OSCE) - Nine stations/135 minutes

There shall be nine stations and each station shall consist of two examiners. The duration in each station will be 15 minutes. Each station will be independently marked out of 100 by the two examiners. The mark for each station will be the average of the two marks given by the two examiners based on a predetermined marking scheme for the expected answers, provided the two marks are within 15 marks of each other. If the two marks are more than 15 marks apart for any station, the two examiners will discuss and arrive at an agreed mark. The total marks for the nine stations shall be converted to a final mark out of 400 for C2.

C3. Clinical Examination – Total 120 minutes

Each candidate will be allocated one gynaecology patient and one obstetric patient. The history taking and the genera/systems examination shall be done without the direct observation of the examiners. The obstetric and the gynaecological examination shall be done in the presence of the examiners and there will be a discussion.

The total time allocated for each patient will be 60 minutes. (25 minutes for clinical interview and general/systems examination by the candidate, 15 minutes for obstetric OR the gynaecological examination with the examiners, 20 minutes for the discussion).

Each case will be marked out of 100 by both examiners independently. The agreed mark out of 100 shall be decided by both examiners. The final mark for each case shall be calculated out of 300. The Total Final mark for C3 shall be calculated out of 600.

16.4. The Requirements to Pass the MD Examination

The candidate must obtain a **total mark of 1200 (60%) or more out of 2000.**
AND
50% (500 marks) or more out of 1000 marks for Theory (C1)
AND
60% (240 marks) out of 400 or more for OSCE (C2)
AND
60% (360 marks) out of 600 or more for Clinical (C3)

16.5. Procedure for candidates who fails the MD Examination at first attempt

Candidates who fail the MD Examination will be reverted back to their previous permanent posts in the Ministry of Health, Universities or Armed Services pending the next available MD Examination. The BOS in Obstetrics and Gynaecology will conduct a counselling session for failed candidates after each MD Examination, to offer guidance and advice of a general nature.

A candidate who fails the MD Examination at **a given** attempt but has obtained **more than 60% of the total mark** with **minimum required marks for two components** as described above but **fails only one component** will be permitted to **sit only the failed component** at the next examinations subject to provisions in 16.6 below.
However this concession will be given only for a maximum number of four (04) more attempts or for a maximum period of four (04) years, whichever is the earlier. Thereafter a candidate who fails the examination would be required sit for all three components of the examination in future attempts

A candidate ***who fails the MD Examination at the fourth attempt*** will be permitted to attempt the examination for the fifth time, only following further compulsory **training for a period of six months**, under a trainer who has not been a previous trainer. A candidate ***who fails the MD Examination at the fifth attempt*** will be permitted to attempt the examination

for the sixth time, only following further compulsory **training for a one year**, under a trainer **decided by the BOS.**

16.6. Number of attempts

The maximum number of attempts allowed for the MD (Obstetrics and Gynaecology) Examination will be **six (6) within eight years** from the first attempt.

16.7. Professor Henry Nanayakkara Gold Medal for MD in Obstetrics and Gynaecology

The following criteria have been recommended for the award of the above Gold Medal.
The candidate,

a) Has to be successful at the first attempt.
b) Shall be a PGIM trainee.
c) Shall obtain highest aggregate marks in the examination.
d) Shall obtain a minimum aggregate of 1300 (65%) **marks and pass in all three components with 62% or more for at least two components.**

16.8. Examiners

An examiner recommended for the MD Examination should have completed a minimum period of service of seven years after Board Certification and be currently working in a unit approved by PGIM for training. The examiner should also posses other requirements stipulated in 1.2 of the "Guidelines for conduct of examination" document of the PGIM. However in the event of non availability of examiners the BOS may request permission from the BOM to appoint examiners who do not fulfill the above stipulations.

17. Post MD Training

17.1. Description

The Post MD training programme is described in **annex 21.**

17.2. Duration

This will consist of 12 months of training locally as a Senior Registrar in general obstetrics and gynaecology, and 12 months of training at a recognized centre overseas, approved by the PGIM. The 12 months of local training can be done *en bloc* or in two parts before and after the period of overseas training. The trainee should obtain approval for the overseas placement from the BOS by submitting an application on the prescribed form **(annex 22).**

17.3. Progress Reports

During the Post MD training period, progress reports will have to be submitted once in six months **(annex 9 and annex 10).**

17.4. Guidelines for maintenance of Post MD Training Portfolio

During this 24 month period, the trainee has to document the progress of his training and maintain a comprehensive record in the **Training Portfolio – Section II (Post MD)**. This will

enable the Trainee to reflect on his training experience and identify and correct any weaknesses in the competencies expected from him, and also recognize and analyze any significant clinical events experienced, so that appropriate changes in management could be adopted in order to reduce the risks arising from such situations in the future. The Trainer needs to conduct regular assessments and certify that the Trainee has satisfactorily acquired the required competencies. The Training Portfolio – Section I (Pre MD) and Section II (Post MD) will be used at the ISTA and PBCA respectively, to evaluate the trainee's competence to practice independently as a Specialist in Obstetrics and Gynaecology.

18. Pre Board Certification Assessment (PBCA)

18.1. Eligibility criteria

After the completion of the prescribed post MD training programme, to be eligible to sit the PBCA, the trainee should provide the following one month before the PBCA:

- Completed Training Portfolio.
- Submission of the completed dissertation and acceptance ("Pass grade") or publication of a full research paper, by the trainee as the first author, based on the research study approved by the BOS for the dissertation in a peer reviewed Journal indexed in PubMed.
- Satisfactory progress reports of local and overseas training.
- Certificate of good attendance.

18.2. Format of the Pre Board Certification Assessment (PBCA)

The PBCA will be carried out by a board of examiners appointed by the Board of Study. This board will consist of 2 trainers who have not been trainers of the candidate. This to be done in 4-6 weeks following return from overseas training provided the trainee has completed all the listed eligibility criteria.

In the event the trainee is unable to sit for PBCA due to non completion on eligibility criteria the duration taken to complete such criteria will be added to the date of Board Certification.

The PBCA will consist of the following components:

1. A brief ***presentation*** of the post-MD training programme, including the overseas or flexible training experience. This should normally be about 15-30 minutes long.

2. A ***portfolio viva.*** This examination will be based mainly on the Post MD Portfolio (Stages 5 and 6), but it will also take into account the outcome of the Pre MD Portfolio (stages 1-3). The duration shall be 30 minutes, and will:
    i. Examine each of the 6 components of the Portfolio and reflective practice.
    ii. Examine the overall adequacy of the training experience, including learning in the professional setting, workplace-based assessments, fulfillment of learning agreements, and actions taken following self-appraisals and previous appraisals. Any reflective logs and records of reflective practice will also be considered.
    iii. Examine the adequacy of the fulfillment of any learning agreements and the commitment to personal and professional development.
    iv. Evaluate the Progress reports

The overall decision of the panel/s will be one of the following categories based on a Marking Grid – **annex 23**:

- **Successful.**
- **Unsuccessful.**

If unsuccessful, the PBCA will be followed by counseling regarding improving the portfolio, and re-sitting of the PBCA after a minimum period of 3 months. If the trainee is successful at this sitting, the date of board certification will not be delayed. If the trainee is unsuccessful at this attempt as well, then a further training (in a unit selected by the Board of Study in Medicine) of a minimum of 6 months will be prescribed, followed by another PBCA, in which case the date of board certification will be the date of the passing PBCA. A trainee who is unsuccessful in such PBCA may be required to re-do further training (minimum period of six months) and re-sit the PBCA. In each case (i.e., where the trainee passes a third or a subsequent PBCA), the date of board certification will be the date of the PBCA that the trainee passes.

19. Eligibility criteria for Board Certification

A trainee who has fulfilled the following criteria is eligible for Board Certification as a Specialist in Obstetrics and Gynaecology on the recommendation of the Board of Study in Obstetrics and Gynaecology:

(a) Passed the MD Examination.
(b) Satisfactorily completed one year local and one year overseas training (Post MD) in units approved by the Board of Study.
(c) Received satisfactory progress reports from the local supervisor appointed by the Board of Study.
(d) Received satisfactory progress reports from the overseas supervisor appointed by the Board of Study.
(e) Successful completion of the Pre-Board Certification Assessment.

20. Trainers

Specialists with at least three years experience after Board Certification in the field of obstetrics and gynaecology or in other specialties such as gynaecological oncology will be appointed as trainers by the BOS.
The roles and responsibilities of a trainer are identified in **annex 24.** The current list of training centres are shown in **annex 4.**

21. Recommended Books/Journals for reading

Refer **Annex 25** for recommended reading material.

Annex 1 - Curriculum – Selection Examination

Candidates should develop a comprehensive knowledge in the areas listed in the following Learning Modules. There are 12 Modules which are based on modifications and adaptations of the modules of the Part I Membership Examination of the Royal College of Obstetricians and Gynaecologists, Great Britain.

1. Anatomy

The student should be able to develop a comprehensive knowledge on:

- Surgical anatomy of the abdomen and pelvis;
- Structural and functional anatomy of the hypothalamus and pituitary, and the male and female reproductive organs;
- Structure and functions of the breast including changes in pregnancy and lactation;
- Structural and functional anatomical changes of the female reproductive tract during puberty, pregnancy and after the menopause;
- Functional anatomy of the pelvic floor, kidney and urinary tract.

2. Embryology

The student should be able to develop a comprehensive knowledge on:

- Development of the gametes, fertilization, implantation and embryonic development.
- Developmental abnormalities in the female especially in the female reproductive tract;
- Aetiology and histopathology of miscarriage, ectopic pregnancy and trophoblastic disease.

3. Genetics

The student should be able to develop a comprehensive knowledge on:

- Structure and function of chromosomes and genes;
- Chromosomal and genetic disorders;
- Screening and diagnosis of fetal anomaly;
- Genetic origins of cancer and DNA mutations.

4. Physiology

The student should be able to develop a comprehensive knowledge on:

- Cardiovascular, respiratory, urinary and gastrointestinal physiology; Basis of assessment of cardiovascular, respiratory, hepatic and renal functions;
- Distribution and composition of body fluids; Principles of fluid and electrolyte and acid-base balance in healthy pregnancy and pathological pregnancy;
- Fluid and electrolyte balance in the peri-operative period;
- Methods of measurement of clinically important physiological variables;
- Cellular physiology of the major organ systems in the non-pregnant and pregnant state;
- Physiology of wound healing;
- Haemopoiesis and iron metabolism; Blood transfusion; coagulation,
- Physiology of pregnancy; fetal physiology and its development with fetal growth;

- Luteoplacental shift and feto-maternal communication;
- Physiology of onset of parturition, myometrial contractility and cervical dilatation;
- Fetal physiology in late pregnancy and during labour, including scientific basis of methods of assessment of fetal wellbeing;
- Physiology of the third stage of labour;
- Physiology of the neonate including cardiovascular and respiratory changes at birth; Lactation and uterine involution;
- Physiology of the reproductive tract in men and women; Regulation of gametogenesis, fertilization and establishment of early pregnancy;
- Human sexuality and physiology of male and female sexual response.

5. Biochemistry and Molecular Biology

The student should be able to develop a comprehensive knowledge on:

- Structure and function of normal cell;
- Regulation of the cell cycle; Cell biology-including regulation of gene activation, DNA/RNA and cytoplasmic processing;
- Molecular biology of tumorigenesis and regulation of cell growth and division, Tumour markers,
- Proteins, peptides, amino acids; catabolism, proteomics, metabolism of proteins, carbohydrates and fats;
- Biochemistry of enzymes, vitamins and minerals, especially Fe and Ca; Cell signaling and second messengers; Acid-base balance;
- Biochemistry of prostaglandins and steroid hormones; Hormones, receptors and intracellular signaling; Second messenger systems;
- Placental transfer of nutrients and drugs, Placental metabolism, fetoplacental unit and its significance;
- Nutrition in pregnancy and lactation

6. Endocrinology

The student should be able to develop a comprehensive knowledge on:

- Mechanisms of hormone action and second messenger systems; Hormone types; Understanding of hypothalamus, pituitary, pancreas, thyroid and adrenal structure and function;
- Basis of perioperative care in common endocrinopathies (e.g. diabetes and thyroid disorders); Effects of anaesthesia and surgery on endocrine homeostasis and fluid balance;
- Endocrinology of pregnancy; the placenta as an endocrine gland; maternal recognition of pregnancy, endocrinology of the corpus luteum and early pregnancy;
- Diabetes in pregnancy; Pituitary, thyroid, adrenal and other endocrine disorders relevant to pregnancy;
- Endocrinology of parturition;
- Development and maturation of the fetal endocrine system;

- Endocrinology of lactation;
- Endocrinology of the H-P-O axis and its abnormalities; Puberty and growth; menstrual cycle;
- Menopause and endocrine effects on bone, vasomotor system etc.;
- Interactions between hormonal contraceptives and endocrine physiology; Hormone secreting and hormone dependent tumours in gynaecology.

7. Microbiology

The student should be able to develop a comprehensive knowledge on:

- Biology of micro organisms encountered in surgical practice;
- Principles of infection control and outbreak management;
- Biology of micro-organisms in the post surgical patient; Principles of antimicrobial prophylaxis and wound care;
- Infection in obstetric and gynaecological practice; Screening for infection;
- Laboratory diagnosis of infections in Obstetrics & Gynaecology;
- Fetal impact of maternal infection;
- Infective factors predisposing to pregnancy loss and ectopic pregnancy; HPV and other viral origins of cancer; Urinary tract infection.

8. Pathology

The student should be able to develop a comprehensive knowledge on:

- Pathological basis for risk factors, symptoms, physical signs and clinical investigation;
- Pathological classification of gynaecological and obstetric conditions;
- Trauma, infection, inflammation and healing of tissues;
- Teratogenic agents;
- Hyperplasia, metaplasia, dysplasia, neoplasia, atrophy;
- Shock, infarction and abnormal coagulation;
- Sepsis–localized and general-e.g. septicaemia;
- Causes and effects of cell damage;
- Haematological disorders;
- Osteopenia/osteoporosis;
- Pathological conditions in the genital tract
- Carcinogens, pathology, histology, and classification of gynaecological cancers and premalignant conditions;

9. Immunology

The student should be able to develop a comprehensive knowledge on:

- Organization of immune system;
- Hypersensitivity;
- Immunology of graft rejection and immune responses in infection, inflammation and trauma;
- Immunology of pregnancy and miscarriage.

10. Pharmacology

The student should be able to develop a comprehensive knowledge **on:**

- Pharmacokinetics and factors affecting drug action;
- Safe prescribing, avoiding drug errors, drug interactions, side/adverse effects;
- Properties and actions of drugs used during and after surgery, properties and effects of analgesic and anaesthetic agents in gynaecology and obstetric practice
- Effect of drugs on haemostasis and uterine bleeding;
- Principles of prescribing in pregnancy and lactation; Placental handling of drugs;
- Drugs used in pregnancy specific pathologies and complications of pregnancy-e.g. antihypertensives and other drugs in pre-eclampsia, steroids in pregnancy, use of anti-D immunoglobulin;
- Drugs used in the management of labour and postpartum period, their mechanisms, side effects etc.
- Pharmacological methods of providing contraception,
- Drugs in gynaecological conditions,
- Drug teratogenicity; Effects of chemotherapeutic agents on gonadal function;
- Drugs that interfere with fertility;
- Properties and actions of drugs used to treat miscarriage, ectopic pregnancy, gynaecological cancers and trophoblastic disorders;
- Principles underlying the treatment of bladder and pelvic floor problems and the impact of other drugs on bladder function.

11. Biophysics

The student should be able to develop a comprehensive knowledge on:

- Principles of electrocardiography, cardiotocography, ultrasound, Doppler, X-rays and MRI;
- Principles of laser, electro surgery and cryotherapy;
- Physics of Doppler, ultrasound and magnetic resonance imaging;
- Principles of radiotherapy;
- Principles of assessment of bladder function.

12. Audit, research and evidence based medicine

The student should be able to develop a comprehensive knowledge on:

- Principles of screening;
- Epidemiology and study designs;
- Statistical methods used in clinical research;
- Statistical significance and clinical significance;
- Ethical issues and regulatory requirements;
- Principles of evidence based medicine;
- Principles of clinical audit;
- Definitions of maternal, neonatal and peri-natal mortality statistics and their interpretation.

Annex 2 - Curriculum – MD (Obstetrics & Gynaecology) Programme

Trainees should gain a comprehensive knowledge of the following Learning Modules and achieve the respective learning outcomes. There are 31 Modules.

1. Basic Clinical Skills

The Trainee should be able to:

- Acquire knowledge, skills and attitudes necessary to assess women by means of clinical history taking; appropriate physical examination and investigations (where relevant);
- Plan and execute management;
- Acquire communication skills (with patients, relatives and colleagues);
- Keep records concisely, accurately and legibly, and protect and keep the data confidentially; Be an effective time manager;
- Effectively collaborate and work in a team;
- Effectively communicate verbally and non-verbally; Structure a consultation appropriately;
- Break bad news.

2. Teaching, Appraisal and Assessment

The Trainee should be able to:

- Recognize the importance of the role of the doctor as an educator within the multidisciplinary team and use medical education to enhance the care of patients;
- Balance the needs of service delivery with education;
- Teach trainees and other healthcare workers in a variety of settings to maximize effective communication and practical skills and to improve patient care;
- Encourage discussions with colleagues in clinical settings to share knowledge and understanding
- Identify learning theories, principles, needs and styles relevant to medical education;
- Gain adequate knowledge regarding new developments in medical education;
- Use appropriate and current curricula;
- Set objectives and structure of educational sessions;
- Prepare formal teaching sessions and use audiovisual aids effectively and encourage audience participation;
- Understand the principles of adult learning and facilitate the learning process;
- Encourage feedback of the teaching session and act upon feedback;
- Understand the skills and practices of a competent teacher and use appropriate teaching strategies in
- the workplace; Teach in small (<10) and large groups (>20) and at the bedside;
- Teach common practical procedures in obstetrics and gynaecology;
- Understand the principles of evaluation and use appropriate evaluation strategies and provide timely and effective formative feedback;
- Communicate professionally and motivate learners;

- Recognize and assist a trainee experiencing difficulty in making progress within the training programme including, where relevant, referral to other services;
- Define the roles of the various bodies involved in medical education;
- Participate in the organization of a programme of postgraduate education e.g. short course or multidisciplinary meeting;
- Improve patient education e.g. talking at support group meetings;
- Lead departmental teaching programmes including journal clubs;
- Contribute towards staff development and training, including mentoring, supervision, appraisal and workplace-based assessments;
- Allow learners to make contributions to clinical practice in keeping with their competence.

3. Information Technology

The Trainee should be able to:

- Search medical literature using Pub Med, Medline, Cochrane Data Base, WHO RHL and the
- Internet;
- Use IT for patient care and for personal development;
- Use databases, word processing techniques, statistical programmes and electronic mail;
- Adopt a proactive and enquiring attitude towards new technology;
- Understand the principles and be able to use computing systems for data collection, storage, retrieval, analysis and presentation; maintain confidentiality of data collected.

4. Standards, Audits and Clinical Governance

The Trainee should be able to;

- Understand quality improvement and management, and the principles of evidence-based practice,
- types of clinical trial/evidence classification and grades/strength of recommendations;
- Identify and formulate auditable clinical standards;
- Recognize the need for audit in clinical practice to promote standard setting and quality assurance;
- Formulate clinical guidelines and care pathways and protocols;
- Use patient feedback questionnaires, hospital sources and national reference data to carry out clinical audits;
- Interpret and use clinical audit cycles to improve patient care and services and risk management and formulate recommendations;
- Review evidence and contribute to the construction, evaluation, review and updating of local (and national) guidelines and protocols of good practice using the principles of evidence based medicine; Support audits being undertaken by junior medical trainees and within the multidisciplinary team; Listen to and reflect on the views of patients and relatives, dealing with complaints in a sensitive and cooperative manner;
- Contribute to local and national audit projects as appropriate;

- Critically appraise publications, multicentre trials, systematic reviews which address clinical questions;
- Discuss the relevance of evidence in the clinical situation and critically evaluate a care pathway, and apply conclusions from critical appraisal to clinical care;
- Recognize knowledge gaps and keep a logbook of clinical questions;
- Acknowledge and show regard for individual patient needs when using guidelines;
- Appreciate the advantages and disadvantages of guidelines and protocols, and use them appropriately;
- Recognize the need to practice outside clinical guidelines;
- Analyze feedback and comments and integrate them into the service;
- Act as an advocate for the service;
- Keep up to date with national reviews, key new research and guidelines of practice.

5. Risk Management

The Trainee should be able to:

- Understand the principles of risk management and their relationship to clinical governance and complaints procedures;
- Understand the basic measures of risk and uncertainty;
- Be aware of particular issues pertinent to the specialty and specifically to trainees;
- Understand potential sources of risk and risk management tools, techniques and protocols;
- Understand best practice, transparency and consistency;
- Recall side effects and contraindications of prescribed medications;
- Outline human factors theory and understand its impact on safety;
- Understand and carry out root cause analysis;
- Understand and be able to report and review critical incidents;
- Outline local procedures and protocols for optimal practice including early warning systems;
- Outline the hazards of clinical equipment in common use;
- Outline methods and associated problems of quantifying risk e.g. cohort studies;
- Outline the concepts and drawbacks of quantitative assessment of risk or benefit e.g. numbers needed to treat, numbers needed to harm;
- Explain how relative and absolute risks are derived and the meaning of the terms: predictive value, sensitivity and specificity, in relation to diagnostic tests;
- Use a reflective approach to practice with an ability to learn from previous experience;
- Participate in risk management;
- Access advice on occupational hazards from a range of sources;
- Access and analyze situations, services and facilities in order to minimize risk to patients, the public and colleagues;
- Monitor the quality of equipment and safety of working environment relevant to the specialty (personal, clinical and organizational settings);

- Adopt strategies to reduce risk;
- Discuss risks with patients;
- Document adverse / critical incidents;
- Investigate adverse / critical incidents; Root cause analysis, Assess risk, Formulate recommendations, Debrief staff and Prepare a report;
- Recognize limits of own professional competence and only practice within these;
- Recognize when a patient is not responding to treatment, reassess the situation, and encourage others to do so;
- Ensure the correct and safe use of clinical equipment, ensuring that faulty equipment is reported appropriately;
- Improve patients' and colleagues' understanding of the side effects and contraindications of therapeutic interventions;
- Sensitively counsel a colleague following a significant untoward event, to encourage improvements in the practice of individuals and the unit;
- Construct concise and applicable problem lists using available information;
- Understand processes for dealing with and learning from clinical errors, including the management of complaints procedures risk management incidents, near miss reporting, complaints management, litigation and claims management;
- Keep abreast of national patient safety initiatives;
- Be aware of how healthcare governance influences patient care, research and educational activities at a local, regional and national level;
- Ensure patient, user involvement;
- Apply quantitative data of risks and benefits of therapeutic intervention to an individual patient;
- Search and comprehend medical literature to guide reasoning;
- Demonstrate respect to and accept patients' views and choices;
- Seek advice, assistance when concerned about patient safety;
- Display eagerness to use evidence in support of patient care when evaluating risk;
- Communicate risk information, and risk benefit trade-offs, in ways appropriate for individual patients;
- To take responsibility for clinical governance activities, risk management and audit in order to improve the quality of the service;
- Show probity by being truthful and be able to admit error to patients, relatives and colleagues;
- Demonstrate the ability to act constructively when a complaint is made and use assessment, appraisal and reflection as insight to understand one's own development needs;
- Develop awareness of equity in healthcare access and delivery;
- Maintain a high level of safety awareness and consciousness at all times;
- Encourage feedback from all members of the team on safety issues and encourage discussion amongst colleagues on evidence-based practice;

- To take action when concerns are raised about performance of members of the healthcare team, and act appropriately when these concerns are voiced to you by others;
- Maintain a portfolio of information and evidence, drawn from own clinical practice;
- Engage with an open, no blame culture;
- Respond positively to outcomes of audit and quality improvement;
- Co-operate with changes necessary to improve service, quality and safety.

6. Research

The Trainee should be able to:

- Understand the difference between audit and research and their inter-relationship;
- Describe basic principles of qualitative, quantitative, biostatistical and epidemiological research methods;
- Apply statistics in scientific and medical practice;
- Understand the difference between population-based assessments and unit-based studies and be able to evaluate outcomes from epidemiological work;
- Identify a research topic;
- Conduct a literature search;
- Evaluate the limitations of different methodologies for collecting data;
- Design a study;
- Formulate a research question and a research project proposal (vide Annex 11);
- Apply for appropriate ethical approval of a research project;
- Conduct a study by collecting and managing data and carrying out appropriate statistical analyses, and present and discuss the results and give rational conclusions;
- Abide by the principles of Good Clinical Practice when conducting any research on human subjects;
- Ensure the rights, safety well being of trial subjects;
- Ensure the research is consistent with ethical principles;
- Ensure the trial data is credible (quality control);
- Ensure the research is scientifically valid;
- Demonstrate good verbal and written presentations skills;
- Write a scientific paper and dissertation (vide Annex 16);
- Realize the issues underlying plagiarism and how this relates to the duties of a doctor;
- Appreciate innovations resulting from research publications;
- Understand issues and potential solutions before acting on conclusions and recommendations of published literature;
- Critically appraise scientific publications including scientific papers, multicentre trials and systematic reviews;
- Use critical appraisal skills always when reading scientific literature;
- Get research into practice;
- Encourage other colleagues to take part in research.

7. Ethics and Legal Issues

The Trainee should be able to:

- Describe and explain the ethical principles of, respect for autonomy, beneficence & non maleficence, justice and equity;
- Understand the principles and legal issues surrounding informed consent;
- Understand that consent is a process that may culminate in, but is not limited to, the completion of a consent form;
- Give appropriate information and conduct a consultation to obtain consent in a suitable setting and at a suitable time; Discuss clinical risk;
- Only obtain consent for procedures where competence has been attained to perform the procedure; Inform a patient and seek alternative care where personal, moral or religious belief prevents usual professional action;
- Obtain consent in a manner that patients and relatives understand;
- Assess their comprehension having considered the patient's and the relatives'/care givers' level of understanding and mental state and the patient's needs as an individual;
- Adopt a patient-focused approach to decisions that acknowledge the rights, values and strengths of the public;
- Respect a patient's rights of autonomy even in situations where their decision might put them at risk of harm;
- Keep within the scope of authority given by a competent patient;
- Provide all information relevant to proposed care or treatment to a competent patient;
- Gain valid consent from patients, and ask for a second opinion, senior opinion, and advice from;
- Specialist Judicial Medical Officers in difficult situations of consent or capacity;
- Understand specific legal issues about consent in under 16 years old, (especially regarding parental consent and the Fraser Guidelines), and vulnerable adults;
- Understand the implications of the relevant sections including the section on Sexual Offences in the Penal Code of Sri Lanka;
- Obtain advice from Specialist Judicial Medical officers when necessary;
- Appreciate and respect diversity;
- Realize the implications of the legal status of the unborn child;
- Understand appropriateness of consent to post mortem examination;
- Outline the procedures for seeking a patient's consent for disclosure of identifiable information;
- Recognize the problems posed by disclosure in the public interest, without patient's consent;
- Decide when to involve social services, police, and how to do so;
- Seek advance directives when needed;
- Use written material correctly and accurately;
- Use and share information properly using appropriate strategies to ensure confidentiality, which is a patient's right;
- Develop awareness on situations when confidentiality might be broken;

- Understand the principles of data protection including electronic and administrative systems;
- Understand that interpreters and patient advocates must be aware of confidentiality issues;
- Develop awareness regarding the obligations for confidentiality following a patient's death;
- Understand the requirements of children, adolescents and patients with special needs;
- Act in the best interests of the patient and the public good;
- Understand the legislative framework within which healthcare is provided in Sri Lanka;
- Use sources of medical legal information;
- Understand disciplinary processes in relation to medical malpractice and the procedure to be followed in such cases;
- Follow the relevant procedures when substance abuse is suspected in a patient;
- Familiarize with and uphold the rights of children and vulnerable adults;
- Familiarize with and uphold the rights of disabled people to participate in healthy and rewarding employment;
- Practice in accordance with an appropriate knowledge of contemporary legislation;
- Conduct appropriately with ethically sound professionalism in challenging situations;
- Cooperate with other agencies with regard to legal requirements, including reporting to the Coroner,
- the police or the proper officer of the local authority in relevant circumstances;
- Incorporate legal principles in to day-to-day practice;
- Practice and promote accurate documentation within clinical practice for legal purposes;
- Seek advice from the employer, appropriate legal bodies (including defense societies), and the SLMC on medico-legal matters;
- Promote informed reflection on legal issues by members of the team;
- Issue maternity, birth, sickness and death certificates while being aware of the legal responsibilities;
- Identify the types of deaths that should be referred to the Coroner;
- Understand the principles of advance directives and living wills;
- Understand the implications when dealing with a mentally ill or mentally challenged person;
- Obtain advice from a Specialist Psychiatrist when necessary;
- Obtain suitable evidence, and realize whom to consult;
- Act with compassion at all times;
- Abide by the professional, legal, and ethical codes of the Geneva Declaration, SLMC, SLCOG, RCOG, and FIGO e.g. Fitness to Practice and any other codes pertaining to obstetrics and gynaecology;
- Understand prejudice and preferences within self, others, society and cultures;
- Develop awareness of the current legal situation when deciding to withhold or withdraw life prolonging treatment;

- Outline the main methods of ethical reasoning: case based reasoning, the justification of decision and moral judgment;
- To practice Value- Based Medicine;
- Recognize, analyze and know how to deal with unprofessional behaviour in clinical practice, taking into account local and national regulations;
- Develop open and non-discriminatory professional working relationships with colleagues' and realize the need to prevent bullying and harassment;
- Recognize the factors influencing ethical decision making, including religion, personal and moral beliefs, cultural practices;
- Use and promote strategies to ensure confidentiality e.g. anonymization;
- Counsel patients on the need for information distribution within members of the immediate healthcare team;
- Counsel patients, relatives, care givers and advocates (where relevant) tactfully and effectively when
- making decisions about resuscitation status, and withholding or withdrawing treatment;
- Demonstrate probity and the willingness to be truthful and to admit to errors;
- Encourage informed ethical reflection in others;
- To seek advice of peers, local clinical ethics committees, legal bodies, and the SLMC and SLCOG in the event of ethical dilemmas over disclosure and confidentiality or when making decisions about resuscitation status, and withholding or withdrawing treatment;
- Respect patient's requests for information not to be shared, unless this puts the patient, or others, at risk of harm;
- Share information about medical care with the patients, unless they have expressed a wish not to receive such information.

8. Core Surgical Skills

The Trainee should be able to:

- Obtain valid informed consent to surgical procedures and be aware of the procedure in special situations; e.g. Children, adults with incapacity and adults and children in emergency situations;
- Name and describe the use of common surgical instruments and sutures;
- Adequately describe regional anatomy and histology and general pathological principles;
- Describe commonly encountered infections, and adopt appropriate measures to prevent or control infection;
- Describe the possible complications of surgery and adopt appropriate measures to prevent or minimize them;
- Describe the early diagnosis and management of possible complications of surgery;
- Understand and describe the principles of nutrition; water, electrolyte and acid base balance and cell biology;
- Describe the appropriate use of blood and blood products;
- Interpret pre-operative investigations;
- Arrange pre-operative management;

- Recognize potential co morbidity;
- Explain procedures to patient;
- Advise patient on postoperative course;
- Choose appropriate operation;
- Exhibit technical competence at the skill level required;
- Make intraoperative decisions with due regard to degree of urgency, likely pathology and anticipated prognosis;
- Manage intra-operative problems;
- Recognize the need for and initiate collaboration with other disciplines, before, during and after surgery;
- Develop the ability to work under pressure and Recognize limitations.

9. Surgical Procedures

The Trainee should be able to:

- Carry out under indirect supervision; Marsupialization of Bartholin's abscess, Evacuation of uterus, Diagnostic laparoscopy, Sterilization, Polypectomy, First trimester therapeutic surgical termination of pregnancy (unless conscientious objection), Diagnostic hysteroscopy, Minor cervical procedures, Excision of vulval lesions, Laparotomy for ectopic pregnancy, Ovarian cystectomy for benign disease, Elective peritoneal adhesiolysis, Myomectomy, Abdominal Hysterectomy, Vaginal Hysterectomy;
- Choose appropriate instruments, sutures, drains and catheters;
- Know own limitations and when to seek help;
- Use diathermy, endoscopic and other equipment safely and efficiently;
- Think ahead during procedure, anticipate and prevent complications;
- Amend surgical procedure appropriately when necessary, following consultation;
- Work effectively with other members of the theatre team, showing leadership where appropriate.

10. Postoperative Care

The Trainee should be able to

- Describe the general pathological principles of post operative care;
- Make appropriate postoperative plans of management;
- Describe the principles of Fluid/electrolyte balance and the factors which influence wound healing;
- Conduct appropriate review of; fluid/electrolyte balance, catheter, surgical drainage & sutures; Describe postoperative complications related to obstetric, gynaecological and non-gynaecological procedures;
- Manage complications including primary haemorrhage, wound infection and thromboembolism; Recognize early and deal competently with unexpected complications; e.g. bladder injury or seek assistance when required e.g. Ureteric or bowel injury;
- Describe possible late postoperative complications, including secondary haemorrhage;
- Manage possible late postoperative complications, including secondary haemorrhage;

- Give psychological support for patients and relatives;
- Effectively communicate with patients and relatives;
- Document the surgical procedure with appropriate notes;
- Recognize the need and initiate collaboration with other disciplines when indicated;
- Effectively communicate with other healthcare professionals; Construct an appropriate discharge letter; Recognize limits and refer appropriately.

11. Contraception and Family Planning

The Trainee should be able to:

- Counsel and describe reversible, irreversible and emergency contraception and associated sexual health issues to women and their partners;
- Describe and explain modes of action, effectiveness, indications, contraindications and complications of reversible, irreversible and emergency contraception (EOC): to women and their partners;
- Counsel about contraceptive options (reversible and irreversible) and give adequate information to the women and their partners to enable them to make informed decisions and select the most
- appropriate method (– actions, safety, side effects, dispel myths & false concerns); Manage Emergency Contraception, Hormonal Contraception and Insertion of an IUCD;
- Deliver all methods of reversible and permanent contraception including different methods of female sterilization;
- Respect women's rights, dignity and confidentiality;
- Formulate and implement a management plan;
- Realize that the main reason for unplanned and unwanted pregnancies in Sri Lanka is an unmet need for contraception;
- Recognize groups vulnerable to have an unwanted pregnancy;
- Develop awareness for the need to Improve Availability, Access and Utilization of Contraceptive Services in Sri Lanka;
- Keep updated with contemporary contraceptive practice guidelines;
- Manage side effects and properly follow up the clients;
- Address and remove barriers for the provision of contraceptives; physical access, economic, psychological, cultural, availability of Information, administrative, bureaucratic and medical barriers;
- Promote IUCD as alternative for sterilization;
- Motivate, interact with client & intensively counsel to continue contraception;
- Emphasize non contraceptive benefits e.g. Combined Oral Contraceptives;
- Popularize correct use of EOC and Condoms;
- Improve knowledge of and involvement of the male partner; Stress value of contraception in preventing unwanted pregnancies.

12. Adolescent Health

The Trainee should be able to:

- Recognize the special features of adolescents in contrast to children and adults;
- Recognize special factors which influence adolescent behaviour and health, and the difficulties encountered in the management of adolescent disorders;
- Obtain a comprehensive and relevant history and carry out a complete examination of an adolescent
- using appropriate methods (which often differ from the methods used in the adult); Recognize heterosexual development by history, examination and relevant investigations;
- Identify, investigate and manage common adolescent disorders such as common menstrual disorders, abdominal pain e.g. Psychosexual/Irritable bowel syndrome, common causes of vaginal discharge, and pruritus vulvae;
- Identify a Sexually Transmitted Infection (STI) in an adolescent and recognize that adolescents carry a high risk for STI and advise adolescents on the importance of prevention and how to prevent STI; Identify and manage the causes of hirsutism and virilism;
- Identify and manage gynaecological malignancies in adolescents;
- Recognize adolescent sexuality and its implications;
- Explain the adverse effects (medical and social) of adolescent pregnancy especially in the young teenagers <17 years of age;
- Explain the value and role of contraception in adolescents and recognize the barriers for the use of contraceptives by adolescents;
- Advise and motivate sexually active adolescents to adopt a reliable and suitable method of contraception;
- Identify sexual abuse in an adolescent;
- Explain the probable problem/ s identified in an adolescent and propose the future plan of management and prognosis;
- Identify situations when an adolescent needs specialized care and refer her to an appropriate specialist when indicated;
- Counsel adolescents regarding any problem identified and promote good health.

13. Preconception and Early Pregnancy Care

The Trainee should be able to:

- Counsel and carry out preconception care;
- Interview a woman and carry out a complete general, systemic, non-pregnant abdominal and vaginal examination to detect or exclude any abnormality which could become an issue if she were to become pregnant;
- Manage if possible and optimize any co- morbid condition detected, prior to advising the woman to embark on a pregnancy;
- Refer appropriately when needed, for specialized assessment prior to advising the woman to embark on a pregnancy;
- Describe the epidemiology, aetiology, pathogenesis and clinical features of miscarriage,

- Trophoblastic disease and ectopic pregnancy;
- Describe medical management of ectopic pregnancy;
- Demonstrate adequate knowledge regarding indications and limitations of Investigations;
- Endocrine, anatomical, immunological, genetic, radiological, sonographical and bacteriological;
- Describe the different management options and the prognosis in women with miscarriage,
- Trophoblastic disease and ectopic pregnancy;
- Clinically assess miscarriage and ectopic pregnancy;
- Biochemically assess early pregnancy;
- Use ultrasonography for the diagnosis and management early pregnancy complications;
- Communicate the findings effectively to patients, their relatives and other health care professionals; Break bad news and appreciate and describe the possible long term consequences for the woman in a sensitive manner;
- Counsel patients in an acute and outpatient environment;
- Work with other healthcare professionals to achieve better patient outcomes;
- Refer for more complex or detailed evaluation with ultrasound or other imaging techniques when appropriate, recognizing limits of own competence;
- Carry out surgical, minimal access surgical and non-surgical management of miscarriage and ectopic pregnancy by appropriate techniques;
- Exhibit technical competence surgically, and make appropriate operative decisions.

14. Antenatal Care

The Trainee should be able to:

- Describe the purposes and practice of antenatal care;
- Recognize features of domestic violence;
- Describe the problems associated with teenage pregnancy;
- Detect drug and alcohol misuse in a pregnant woman;
- Manage normal pregnancy;
- Describe placental abnormalities and diseases;
- Describe genetic modes of inheritance, common genetic conditions the importance of screening and the diagnosis there of;
- Describe the epidemiology, aetiology, pathogenesis and diagnosis of the under mentioned conditions / factors; pregnancy-induced hypertension, haemorrhage, preterm prelabour rupture of membranes, multiple pregnancy, malpresentation, fetal growth restriction, fetal haemolysis, prolonged pregnancy, congenital malformation, social and cultural factors;
- Prevent or detect early and manage appropriately, and carry out the delivery to prevent or minimize complications arising out of the above conditions or factors;
- Describe immunology of pregnancy and immunological disorders affecting pregnancy;
- Carry out pregnant abdominal examination;
- Obtain an obstetric history and make appropriate relevant referral;

- Conduct booking visit and arrange appropriate investigations;
- Understand the positive and negative effects of screening on the individual;
- Manage and conduct follow-up visits where appropriate, the following conditions; fetal growth restriction, women after caesarean section, multiple pregnancy, antepartum haemorrhage, malpresentation, preterm labour, preterm prelabour rupture of the fetal membranes, prelabour rupture of the fetal membranes at term, reduced fetal movements, prolonged pregnancy, drug and alcohol abuse in pregnancy;
- Assess fetal wellbeing by interpretation of CTG.
- Carry out; Ulrasonographic examinations and interpret the findings, External cephalic version (ECV), Cervical cerclage;
- Counsel about; Screening for; Down syndrome, genetic disease, fetal abnormality, haemolytic disease, Infection, mode of delivery;
- Liaise with senior colleagues, midwives and other health professionals to optimize care of the woman;
- Refer appropriately for multidisciplinary specialist inputs;
- Empower and inform women to make appropriate choices for themselves and their families in pregnancy and childbirth;
- Identify and deal appropriately with domestic violence and have a working knowledge of child protection issues as they relate to the practice of obstetrics and gynaecology in Sri Lanka;
- Explain correctly and place in context; detection rates and limitations of anomaly screening, principles of screening for neural tube defects, Down syndrome and haemoglobinopathies, genetic disorders and their inheritance with examples such as Tay-Sachs disease, cystic fibrosis and thalassaemia, effects upon fetus and neonate of infections during pregnancy, including HIV, measles, chickenpox, rubella, cytomegalovirus, parvovirus and toxoplasmosis.

15. Maternal Medicine

The Trainee should be able to:

- Understand the epidemiology, aetiology, pathophysiology, clinical characteristics, prognostic features and management of the under mentioned conditions, the effect that pregnancy may have on them, and also their effect, in turn, upon the pregnancy;
- This will include both medical and obstetric problems; Essential hypertension, kidney disease, heart disease, liver disease, circulatory disorders, haemoglobinopathies, connective tissue diseases, impaired glucose tolerance & insulin-dependent diabetes, endocrinopathies, gastrointestinal disorders, pulmonary diseases, bone and joint disorders, psychiatric disorders, infectious diseases, neurological diseases including epilepsy;
- Describe the natural history of diseases and illnesses that run a chronic course and know their long term management plans;
- Assess and treat these conditions, liaise with colleagues in other specialties and to know when more expert help is required;

- Differentiate the normal changes in pregnancy from the abnormal;
- Diagnose, investigate and manage, with direct supervision the following; pregnancy-induced hypertension, thromboembolism, coagulation disorders, acute abdominal pain, asthma, infections in pregnancy, psychological disorders.

16. Management of Labour

The Trainee should be able to:

- Describe mechanisms of normal labour and delivery;
- Decide on the need for and manage Induction and augmentation of labour;
- Describe the mechanism of action of drugs acting upon the myometrium;
- Use the partograms;
- Manage fluid balance in labour;
- Prescribe and supervise the appropriate use of blood products;
- Manage women who decline blood products;
- Use protocols and guidelines appropriately;
- Manage prolonged labour;
- Manage labour after a previous lower segment caesarean section;
- Diagnose and manage preterm labour and prelabour rupture of membranes;
- Carry out cervical cerclage;
- Remove a cervical suture;
- Manage in-utero transfer;
- Prioritize labour ward problems and supervise the workload on a labour ward;
- Respect cultural/religious differences in attitudes to childbirth;
- Evaluate and manage clinical risk;
- Recognize personal limitations and the need to refer appropriately;
- Liaise with other staff and colleagues in other disciplines, clinical and non-clinical; Monitor fetal wellbeing and detect fetal compromise;
- Interpret a CTG;
- Carry out and interpret a fetal blood sample;
- Manage multiple pregnancy in labour;
- Manage labour in women with severe pre-eclampsia and eclampsia;
- Manage obstetric haemorrhage and maternal collapse;
- Advise on pain relief and monitor women with regional anaesthesia, analgesia and sedation; Manage In-utero fetal death;
- Counsel and consent for fetal post-mortem in cases of intrauterine fetal death;
- Deal sensitively with the issues regarding intrauterine fetal death;
- Keep accurate contemporaneous records;
- Ensure that adverse incidents are promptly reported and analyzed /investigated.

17. Management of Delivery

The Trainee should be able to:

- Use appropriate protocols and guidelines;
- Carry out a normal delivery;
- Carry out a vacuum extraction;
- Carry out a forceps delivery without rotation;
- Manage shoulder dystocia;
- Manage a retained placenta by Intra Umbilical Vein Oxytocin/Manual Removal;
- Recognize and manage mal-presentations;
- Recognize and manage Cord prolapse;
- Carry out an uncomplicated caesarean section;
- Carry out a repeat caesarean section;
- Carry out a caesarean section in a woman with placenta praevia;
- Carry out a caesarean section with sterilization;
- Carry out acute emergency caesarean section;
- Carry out a rotational assisted delivery;
- Carry out a vaginal delivery of twins;
- Carry out an assisted vaginal breech delivery including second twin;
- Carry out Sterilization procedures;
- Understand principles of general anaesthesia;
- Monitor and manage a woman with regional anaesthesia;
- Manage an unconscious patient;
- Manage uterine rupture;
- Manage obstetric haemorrhage, third stage complications and maternal collapse;
- Make appropriate decisions in the choice of delivery in partnership with the mother and her partner;
- Appreciate the emotional implications for women, families and staff;
- Acknowledge and respect cultural diversity and the differences of others;
- Respect individual dignity and privacy;
- Respect confidentiality;
- Communicate clearly and effectively at times of stress;
- Prioritize tasks;
- Show leadership and manage the healthcare team;
- Realistic and recognize own competence level and have self awareness to call for help when necessary.

18. Postpartum Care

The Trainee should be able to:

- Manage obstetric haemorrhage and maternal collapse;
- Manage acute maternal collapse;
- Demonstrate skills in acute resuscitation;

- Manage the normal puerperium, counsel and provide appropriate contraception;
- Identify, investigate and appropriately manage abnormalities during the postpartum period;
- Diagnose and manage postpartum and postoperative complications;
- Recognize adverse sequelae of obstetric complications;
- Manage postpartum sepsis;
- Counsel women and manage damage to genital tract and perineum including anal sphincter trauma;
- Manage secondary postpartum haemorrhage;
- Manage puerperal psychiatric disorders;
- Display empathy with women and their families when puerperal problems arise; Understand the roles of other healthcare professionals (e.g. social workers, psychiatrists, physiotherapists,) and be able to appropriately refer for relevant multidisciplinary care;
- Appropriately manage immediate resuscitation of the neonate;
- Appropriately manage common neonatal problems;
- Recognize abnormalities in the newborn;
- Supervise breast feeding and manage problems of the breasts and breast feeding, and infant feeding; Liaise with paediatricians and the neonatal team.

19. Gynaecological Problems

The Trainee should be able to:

- Understand the epidemiology, aetiology, biological behaviour, patho-physiology, clinical characteristics, and prognostic features of the following conditions ; menstrual disorders, benign conditions of the genital tract, endocrine disorders, problems of the climacteric, acute and chronic pelvic pain, vaginal discharge, emergency gynaecological conditions, congenital abnormalities of the genital tract, paediatric gynaecological conditions, abnormalities of puberty;
- Diagnose investigate and manage the above conditions;
- Describe the natural history of diseases and illnesses that run a chronic course;
- Describe long term management plans for chronic conditions;
- Carry out transvaginal sonography including endometrial assessment;
- Recognize the need for appropriate referral for more complex or detailed evaluation with ultrasound or other imagine techniques; Carry out diagnostic hysteroscopy;
- Diagnostic laparoscopy including staging of endometriosis;
- (See Module 9 for other surgical competences)
- Communicate prognosis and counsel patients sensitively about the options available;
- Explain the nature, complications and adverse effects of medical and surgical treatments;
- Formulate and implement a plan of management and have the ability to modify this as necessary;
- Liaise with colleagues in other disciplines where required;
- Use appropriate referral pathways and local protocols if abnormal findings suspected.

20. Subfertility

The Trainee should be able to:

- Describe the epidemiology, aetiology, pathogenesis, clinical features, treatment and prognosis of male and female subfertility;
- Describe and discuss indications, limitations and interpretation of the following investigations; endocrine measurements (male and female), semen analysis, ultrasound, other imaging techniques, genetic analysis, operative procedures;
- Describe and discuss indications, techniques, limitations and complications of surgery in relation to; male and female subfertility, endometriosis, developmental disorders;
- Describe and discuss Indications, limitations and complications of assisted reproductive techniques; ovulation induction, IVF & ICSI, gamete donation, surrogacy;
- Demonstrate an adequate knowledge about legal and ethical issues related to Assisted Conception;
- Describe the natural history of conditions that run a chronic course;
- Have knowledge of long term management plans for chronic conditions;
- Take a history and examine a couple presenting with subfertility;
- Arrange basic investigations;
- Counsel couples about diagnosis and management options and legal and ethical issues; Carry out the following; Follicular Tracking, Assessment of tubal patency using the multiple
- methods available, Laparoscopic ovarian diathermy, In utero insemination; Appreciate the importance of psychological factors for women and their partners;
- Demonstrate respect for a woman's dignity and confidentiality;
- Use cost effective management modalities;
- Deal sensitively with issues relating to the welfare of the child;
- Liaise effectively with colleagues in other disciplines, clinical and non-clinical.

21. Sexual and Reproductive Health

The Trainee should be able to:

- Describe and explain sexual and reproductive health rights of an individual;
- Counsel women and their partners regarding sexual and reproductive health issues;
- Understand the laws relating to termination of pregnancy, sexually transmitted infections, (STIs), consent, child protection and the section on sexual offences in the Sri Lanka Penal Code;
- Recognize and manage the sexual healthcare needs of vulnerable groups, e.g. young people, asylum seekers, commercial sex workers, drug users, and prisoners;
- Describe the effect of addictive and self harming behaviour, especially substance misuse and gambling, on personal and community health and poverty;
- Respect women's rights, dignity and confidentiality;
- Formulate and implement a management plan;
- Take a history in relation to reproductive and sexual health needs, and risk assessment;

- Liaise with colleagues in other disciplines, clinical and non-clinical;
- Understand the need to respect cultural and religious beliefs as well as sexual diversity;
- Network with other providers in multidisciplinary team, for example; counselors, social workers, Genito-Urinary Medicine (GUM) specialists, contraception specialists, primary care workers, voluntary sector/ self-help groups;
- Describe prevention, transmission, and clinical features of common STI;
- Describe the National STI Screening Programme and local implementation in Sri Lanka; Understand local care pathways for multi-agency working and cross referrals for individuals with sexual health needs;
- Describe the anatomy and physiology of the human sexual response;
- Describe epidemiology, aetiology, pathogenesis, clinical features and prognosis of psychosexual / sexual problems;
- Recognize and manage the following; common clinical presentations of STIs in the female patient e.g. dysuria, discharge, genital ulcerations ,clinical presentations of complications of common STIs e.g. acute pelvic infection;
- Carry out appropriate microbiological investigations to investigate the common presentations of STIs;
- Recognize and manage the clinical presentations of non-STI genital infections e.g. bacterial vaginosis, genital candidiasis;
- Treat and arrange follow-up for patients with STIs as per local protocols / guidelines;
- Explain the principles of partner notification and epidemiological treatment for sexual contacts;
- Carry out an HIV risk assessment and discuss HIV transmission with patients;
- Give appropriate advice to an HIV positive woman about interventions available to reduce vertical transmission in pregnancy;
- Perform an HIV pre-test discussion and provide appropriate management for positive and negative results;
- Assess risk for Hepatitis A/B/C infections and arrange HAV and HBV vaccination appropriately for at risk groups according to local protocol;
- Liaise effectively with local colleagues for effective multi-agency working;
- Take a history from the couple – or individual - with a sexual/ psychosexual problem;
- Recognize, counsel and plan initial management of sexual/ psychosexual problems, and know when to refer;
- Appreciate the importance of psychological factors for women and their partners;
- Understand the psychosocial impact of STIs and living with HIV and AIDS including the support systems available for such patients; promote healthy lifestyles.

22. Post Reproductive Life Issues

The Trainee should be able to:

- Demonstrate appropriate knowledge, skills and attitudes in relation to management of post reproductive health issues including the menopause;

- Appreciate the influence of psychosocial and cultural factors on the presentation and management of post reproductive life issues using a woman and couple -centered approach;
- Apply the life cycle approach to understand the continuum of changes in a woman in relation to midlife and old age;
- Understand definitions, the local and global socio demographic applications, health economic implications, epidemiology, aetiology, pathogenesis, prevention, diagnosis, management options, treatment, controversies in the management, evolution of management, research and evidence, individual and national cost implications and cost effectiveness of the management of post reproductive life issues;
- Comprehend the importance of public education through school curriculum development, media and programs aimed towards prevention of pathophysiological changes, recognition of the symptoms related to post reproductive life;
- Understand the responsibility of the health care workers in recognizing the women at risk of developing complications of post reproductive life.

23. Gynaecological Oncology

The Trainee should be able to:

- Describe epidemiology, aetiology, diagnosis, prevention, screening, management, prognosis, complications, and anatomical considerations of premalignant and malignant conditions of;
- Vulva, vagina, cervix, uterus, fallopian tube, ovary;
- Describe the FIGO classifications for gynaecological tumours;
- Describe palliative and terminal care and relief of symptoms;
- Describe and explain indications and limitations in relation to screening and investigative techniques; cytology, colposcopy, diagnostic imaging, gastrointestinal endoscopy and minor procedures;
- Describe and explain indications, techniques, complications, and outcomes of; oncological surgery, radiotherapy, chemotherapy;
- Counsel about cervical cytology reports and results of other screening / diagnostic procedures;
- Carry out cervical colposcopy and biopsy under direct supervision;
- Recognize, counsel and plan initial management of premalignant conditions of; cervix, endometrium, vulva.
- Recognize, counsel and plan initial management of carcinoma of; cervix, endometrium, ovary, vulva;
- Show empathy with patients;
- Recognize the importance of psychological factors for patients and their families;
- Respect the patient's dignity and confidentiality;
- Explain clearly and openly treatments, complications and side effects of drug treatment, chemo and radiotherapy in a language appropriate for the patient;
- Deal sensitively with issues regarding palliative care and death;

- Liaise with colleagues in other disciplines, clinical and non-clinical;
- Appreciate cultural and religious issues, especially with respect to death and burial practices.

24. Urogynaecology and Pelvic Floor Problems

The Trainee should be able to:

- Describe the anatomy, physiology and pathophysiology of the pelvic floor and urinary tract; Describe epidemiology, aetiology, characteristics and prognosis of; urinary and faecal incontinence, urogenital prolapsed, urinary infection, lower urinary tract disorders, urinary disorders associated with other conditions;
- Describe and explain indications and limitations of investigations; microbiological examination of urine, quantification of urine loss, urodynamic investigations, videocystourethrography, urethrocystoscopy, imaging;
- Describe and explain Indications, techniques, limitations and complications of treatment; nonsurgical, drug, surgical;
- Take a urogynaecological history;
- Interpret investigations;
- Assess a woman for non-surgical management of utero-vaginal prolapse; Treat acute bladder voiding disorders;
- Counsel and plan initial management of overactive bladder symptoms and stress urinary incontinence;
- Carry out primary repair of anterior and posterior vaginal wall prolapse;
- Carry vaginal hysterectomy and repair;
- Carry out insertion of trans obturator tension free vaginal tape for urodynamic stress urinary incontinence;
- Treat a woman with an overactive bladder;
- Explain to a woman how to carry out pelvic floor exercises;
- Show empathy with patients;
- Appreciate the importance of psychological factors in patients;
- Respect patient's dignity and confidentiality;
- Explain clearly and openly treatment, complications and side effects of drugs and surgical treatment;
- Deal sensitively with issues regarding incontinence;
- Liaise effectively with colleagues in other disciplines, clinical and non-clinical.

25. Developing Professionalism

The Trainee should be able to:

- Describe and explain the roles and responsibilities of team members involved in delivering care;
- Describe and explain the concept of modern medical professionalism;
- Appreciate the relevance of professional bodies e.g. SLCOG, SLMA, SLMC, RCOG, SAFOG, AOFOG, FIGO;

- Understand how a team works effectively and ways of improving team working; dynamics and function, objective setting and planning, motivation and organization, respect;
- Understand team structures, roles, and responsibilities of the multidisciplinary teams within the broader health context relevant to obstetrics and gynaecology;
- Understand the contribution of mentoring and supervision to professional and personal development;
- Describe and explain the theories of motivation and demotivation;
- Communicate both verbally and in writing with patients, relatives and colleagues;
- Appreciate and be sensitive to the ways in which cultural and religious beliefs affect approaches and decisions, and to respond them respectfully;
- Break bad news appropriately and support distressed patients, the families of patients and colleagues;
- Use interpreters appropriately;
- Work effectively within a specialty team both as a team member as well as the team leader; Respect the opinions of others and enable individuals, groups and agencies to implement plans and decisions;
- Maintain and routinely practice critical self-awareness, including the ability to discuss strengths and weaknesses with supervisor, recognizing external influences and changing behaviour accordingly;
- Facilitate, chair and contribute to meetings;
- Deal with problems and difficult colleagues by re-building rapport and articulating own views; Demonstrate the ability to break bad news;
- To work in a clinical team;
- To manage time, prioritize and delegate safely as necessary;
- Recognize personal health as an important issue;
- Recognize good advice and continuously promote value-based non-prejudicial practices;
- Use authority appropriately and assertively; particularly with reference to the resolution of conflicts and disagreements;
- Recognize the importance of active participation in multi-disciplinary meetings;
- Identify factors that influence and inhibit team development including different leadership and working styles;
- Obtain and deal with feedback professionally;
- Use the tools and techniques for managing stress;
- Appreciate the limitations of own professional competence;
- Understand the roles played by all members of a multidisciplinary team;
- Understand the features of good team dynamics;
- Understand the principles of effective inter-professional collaboration to optimize patient or population care[
- Understand the principles of confidentiality that provide boundaries to communication. manage anger and aggression in self and colleagues;
- Appreciate the responsibility of the doctor in the management of physical and/or mental ill health in self and colleagues;

- Encourage staff to develop and exercise their own leadership skills;
- Communicate accurately, clearly, promptly and comprehensively with relevant colleagues by means
- appropriate to the urgency of a situation (e.g. telephone, email, letter etc), especially where responsibility for a patient's care is transferred e.g. at handover;
- Use the expertise of the whole multidisciplinary team as appropriately, ensuring when delegating responsibility that appropriate supervision is maintained;
- Participate in, and co-ordinate an effective hospital at night or hospital out of hours team where relevant;
- Communicate effectively with administrative bodies and support organizations;
- Employ behavioral management skills with colleagues to prevent and resolve conflicts, and enhance collaboration;
- Take the role of the team leader and manage the following areas; education and training of junior colleagues and other members of the healthcare team, deteriorating performance of colleagues e.g. stress, fatigue, high quality care, effective handover of care between shifts and teams;
- Encourage an open environment to foster and explore concerns and issues about the functioning and safety of team- working;
- Take part in multidisciplinary teamwork, including adopting a leadership role when appropriate but also recognizing where others are better equipped to lead;
- Foster a supportive and respectful environment where there is open and transparent communication between all team members;
- Ensure appropriate confidentiality is maintained during communication with any members of the team;
- Recognize the need for a healthy work/life balance for the whole team and only takes any leave after giving appropriate notice to ensure that covering arrangements are in place;
- Accept additional duties in situations of unavoidable and unpredictable absence of colleagues ensuring that the best interests of the patient are paramount;
- Negotiate with and influence colleagues and trainees, and bring together different professionals, disciplines and other agencies, to provide high quality healthcare;
- Give career guidance;
- Participate in recruitment;
- Respect the skills and contributions of colleagues;
- Plan and negotiate a contract;
- Choose the right job;
- Manage self and others;
- Recognize when personal health takes priority over work pressure;
- Learn from colleagues and personal experience and seeks advice appropriately;
- Develop a strategy, formulate a business plan and manage a project;
- Maintain the trust of patients, their relatives, colleagues, other members of the staff and trainees;
- Promote health and health improvement;

- Practice with professionalism including; integrity, compassion, altruism, continuous improvement, aspiration to excellence / perfection, respect cultural and ethnic diversity, regard to the principles of justice and equity.

26. Health Services in Sri Lanka

The Trainee should be able to:

- Understand the structure and the organization of the Institutional and field health services in Sri Lanka;
- Recognize the Minister of Health and the Deputy Minister of Health as the political leaders of the Ministry of Health (MoH) and the Secretary , the Additional Secretaries of MoH as the policy makers; Recognize the Director General of Health Services (DGHS) as the Head of the Department; Recognize the DGHS and the Deputy Directors (General Administration, Public Health Services,
- Medical Services, Laboratory Services, Management Development & Planning, Education Training & Research, Investigation, Bio Medical Engineering, Oral Health, Finance, Buildings & Logistics,) as the technical experts of the MOH;
- Recognize that both public and private sectors provide health care in Sri Lanka, with the public health sector providing nearly 60% of health care;
- Understand that Department of Health Services and the Provincial Health Sector encompass the entire range of preventive, curative, and rehabilitative health care provision in Sri Lanka;
- Recognize that alternative systems of medicine are also practiced in Sri Lanka, whilst allopathic system of medicine caters to the needs of the majority of the people of Sri Lanka;
- Recognize that the majority of the population has easy access to a reasonable level of health care facilities provided by both state and private sector in most parts of the country;
- Appreciate a health care unit can be found on an average not more than 1.4km from any home and an allopathic type government health care unit within 4.8 km.

27. National Regional and Global Health Policies and Health Economics

The Trainee should be able to:

- Understand the broad aims of national health policy mainly with regard to maternal and child health;
- Recognize two broad health policies, (a) to further increase life expectancy by reducing preventable deaths due to communicable and non-communicable diseases (b) to improve the quality of life by reducing preventable diseases, health problems and disability; and also to emphasize the positive aspects of health through health promotion;
- Recognize the following as priority areas needing attention;
- Preventive healthcare, strengthening existing medical facilities, non equitable access to health care, inadequate quality of health care, ensuring the dignity of the individuals, providing basic health care free of cost, access to safe, effective, affordable and

acceptable methods of family planning, system efficiency and cost effectiveness, implementation of a national drug policy, mal-distribution of resources, interrelationship between governmental and private sector, poor research output, human resource development and emerging new health needs;

- Describe the mechanism of implementation of national and regional health policy;
- Describe all the millennium development goals and the current status of the MDG 4 and 5;
- Understand the difference between a 'pro-poor 'and a 'pro-rich' health policy, and how a 'pro-poor' health policy has helped Sri Lanka to achieve its targets;
- Recognize the global health policy as, collective global action to achieve the highest attainable standard of health and wellbeing for the world's people;
- Describe the global health initiative and the relevant UN agencies and stakeholders;
- Plan, organize, cost effectively budget and implement an action plan to establish a new obstetric unit.

28. Health Statistics and their Applications

The Trainee should be able to:

- Demonstrate an adequate knowledge regarding the value and the use of population demographics, birth rates, fertility rates, death rates and life expectancies with reference to Sri Lanka;
- Define and describe health statistics with reference to Sri Lanka; e.g. maternal mortality, peri-natal mortality, fetal deaths, still births, neonatal deaths, post neonatal deaths, low birth weight and preterm birth, and contraceptive prevalence;
- Recognize the value and the use of health statistics in monitoring, evaluating and comparing pregnancy outcomes and quality of care in-between hospitals, regions and countries;
- Describe the mechanisms used to obtain data, and monitor and evaluate health statistics in Sri Lanka as well as in other well resourced countries.

29. Endoscopy module for MD trainees in Obstetrics and Gynaecology

The trainee should be familiar with:

- Endoscopic anatomy and physiology of the peritoneal cavity, pelvic organs, tissue dissection planes and pelvic anatomical spaces, blood supply, innervation and their relationships to each other.
- The instruments, assembly and disassembly, sterilization and theatre organization.
- The management of specific post operative management, recognition of short and long term complications and appropriate follow up and appreciate the difference of these between open and endoscopic procedures.
- The principles of Robotic surgery and 3D laparoscopy and its advantages and limitations in relation to local practice.
- The trainee should be competent in:

- Appropriate patient selection, preoperative work up including inputs from other specialties (general surgery, urology and radiology, anesthesiology), counseling and obtaining informed consent and pre operative planning.
- Appropriate laparoscopic entry techniques and individualized port placement for different procedures, surgical ergonomics and staff safety.
- Patient positioning, patient safety measures and special anesthetic requirements for endoscopy.
- The principles of electro surgery, settings for each procedure, safe use of monopolar, bipolar, ultrasonic and laser and instruments with combined energy sources.
- Intracorporeal and extracorporeal suturing techniques, use of surgical meshes.
- The techniques of specimen retrieval by the use of morcellator, posterior colpotomy, bags and direct retrieval through ports.
- Recognition of alimentary tract, urinary tract, vascular and neurological complications upon entry, during the procedure and during exit.
-
- Trainees should have exposure to the following laparoscopic procedures:
- Salpingectomy, salpingotomy, salpingostomy, tubal sterilization, reversal of sterilization and tubal surgery.
- Diagnostic fertility procedures such as hydro chromotubation and diagnostic laparoscopy
- Ovarian cystectomy, ovarian diathermy, Oophorectomy and Oophoropexy
- Total laparoscopic hysterectomy, Supra cervical laparoscopic hysterectomy, Myomectomy, cornual resections and reconstructive surgery of the uterus
- Treatment of Endometriosis including adhesiolysis, dissection of pararectal and paravesical spaces, resection of recto vaginal septum endometriosis, vaginal endometriosis, bladder and ureteric endometriosis, discoid and segmental resection of bowel and rectal shaving.
- Total laparoscopic pelvic floor mesh repairs, sacro-colpopexy and sacro-uteropexy.
- Incontinence procedures such as Burch colposuspension and anterior compartment repair
- Laparoscopic Ureterolysis, Ureteric re-anastamosis and ureteric re-implantation
- Vesico-vaginal and uretero-vaginal fistula repair.
- Procedures for pelvic pain- Pre sacral neurectomy
- Treatment of malignancies- Pelvic lymphadenectomy, para aortic lymphadenectomy and radical hysterectomy
-
- Trainees should have exposure to the following hysteroscopic procedures:
- Diagnostic hysteroscopy, hysteroscopic guided biopsy, polypectomy and retrieval of IUCD
- Trans-cervical resection of fibroid, polyps and endometrium, resection of uterine synechiae and septa.

30. Ultrasound in Obstetrics and Gynaecology

Trainees should be able to perform an ultrasound examination in Obstetrics and Gynaecology competently.

- The Trainee should be able to:
    - use the ultrasound machine competently and independently (Machine presets, Probe orientation, Probe frequency , Gain, Depth, Zoom, Focus, Frame rate)
    - use the Doppler settings competently and independently (Colour zoom, Colour gain, PRF, Sample volume, Angle correction)

- The trainee should be able to perform the following in obstetrics:
    - Identify the features of normal gestational sac and confirm the location
    - Measure the gestational sac size and crown-rump length
    - Identify the early cardiac activity using B-mode
    - Identify fetal number
    - Diagnose early embryonic demise based on assessment of gestational sac size and/or crown-rump length.
    - Identify early cardiac activity and measure heart rate using M-mode. Ability to interpret heart rate in the clinical context.
    - Identify, assess and measure retained products of conception in women with incomplete miscarriages.
    - Correlate clinical, morphological and biochemical findings.
    - Evaluate adnexal in a systematic and effective way and to interpret the findings in a clinical context.
    - Identify the site and the number of corpus lutea.
    - Identify tubal and non-tubal ectopic pregnancy and examine for the presence of a yolk sac or an embryo.
    - Assess the amount and quality of fluid in the pouch of Douglas.
    - Perform and interpret Crown rump length, twin chorionicity, labelling of twins and Down syndrome screening markers
    - Perform and interpret standard fetal measurements and fetal growth(HC, BPD, AC, FL, EFW)
    - Perform and interpret assessment of Amniotic Fluid Volume (maximum vertical pool depth and AFI)
    - Perform and interpret ultrasound assessment of placental site
    - Perform and interpret fetal Doppler studies

- The trainee should be able to perform the following in gynaecology:
    - Use the transvaginal probe
    - Understand Anatomy, Physiology and ultrasound appearance of normal pelvic organs
    - Perform and interpret pathologies of the uterus, cervix
    - Perform and interpret pathologies of ovaries fallopian tubes and adnexae
    - Use of ultrasound in infertility

31. Professionalism

This module is conducted by the PGIM for trainees in all MD Programmes. Hence the content is will be made available during the course.

Please not that the completion of the course and the receipt of the certificate is a must before the MD Examination.

Annex 3 - Gynaecology Oncology Training - Pre MD (Stage 3)

Learning outcomes

Be able to investigate, diagnose, counsel, treat and manage women with gynaecological cancers.

Knowledge to be acquired (Appendix I)

Epidemiology, aetiology, diagnosis, prevention, screening, management, prognosis, complications and anatomical considerations of premalignant and malignant conditions of vulva, vagina, cervix, uterus, fallopian tube, ovary;

FIGO classification for gynaecological tumours;

Palliative and terminal care;

Relief of symptoms;

Community support roles;

Indications and limitations in relation to screening and investigative techniques; Cytology, colposcopy, gastrointestinal endoscopy, minor procedures;

Diagnostic imaging;

Indications, techniques, complications and outcomes of oncological surgery, radiotherapy, chemotherapy.

Clinical competency (Appendix II)

Take a history and perform an appropriate examination;

Perform cervical smear and counsel about cervical cytology reports;

Perform cervical colposcopy under direct supervision;

Recognize, counsel and plan initial management of premalignant conditions of; cervix, endometrium, vulva;

Recognize, counsel and plan initial management of carcinoma of cervix; endometrium; ovary; vulva.

Professional skills and attitudes

Show empathy with patients;

Recognize the important of psychological factors for women and their families;

Counsel patients regarding a diagnosis of gynaecological malignancy, screening tests and the subsequent management;

Demonstrate respect for the patient's dignity and confidentiality;

Has the ability to explain clearly and openly treatment, complications and adverse effects of drug treatment, chemo- and radiotherapy in language appropriate for the patients; Deal sensitively with issues regarding palliative care and death;

Is aware of the 'End of life' policy;

Demonstrates effectiveness in liaising with colleagues in other disciplines, clinical and nonclinical;

Demonstrate an awareness of cultural and religious issues especially with respect to death and burial practices.

Training support

Appropriate postgraduate education courses;
Multidisciplinary and clinical team meetings;
Palliative care courses or sessions (including in hospice);
Breaking bad News course;
Basic colposcopy course.

Evidence/assessment

Logbook;
Daily training record (DTR); ICU & Ward rounds, attending clinics, multidisciplinary meetings (MDM), theatre.

Appendix I: Details of knowledge to be acquired

Epidemiology, aetiology, diagnosis, prevention, screening, management, prognosis, complications and anatomical considerations of premalignant and malignant conditions of;

Vulva; preclinical phase of invasive carcinoma, Paget's disease, Basal cell carcinoma, Squamous cell carcinoma, Sarcoma;
Cervix; Human papilloma virus screening, preclinical phase of invasive squamous cell carcinoma, adenocarcinoma in situ, squamous cell carcinoma, adenocarcinoma, sarcoma, metastatic tumours;
Uterus; adenocarcinoma, sarcoma, leiomyosarcoma, trophoblastic disease, hydatidiform mole (complete, partial, invasive);
Ovary; epithelial tumours, germ cell tumours, sex chord stromal tumours, metastatic carcinoma;
Palliative and terminal care; relief of symptoms, pharmacological, alternative therapies; Hospice care;
Indications and limitations of screening and investigations techniques; cytology, cervical, other (endometrial, vaginal and peritoneal) colposcopy, cervix, vagina, vulva
Minor procedures; Directed cervical biopsy, cone biopsy of cervix, endocervical curettage; Diagnostic imaging; Ultrasonography (pelvis & abdomen), CT scan, Magnetic Resonance Imaging (pelvis, abdomen, other).

<u>Appendix II: Details of content areas to be observed or assisted</u>

Indications, techniques, complications and outcomes of;

Oncological surgery; radical hysterectomy, pelvic lymphadenectomy, radical vulvectomy, vaginal reconstruction, pelvic exenteration, feeding jejunostomy, gastrostomy, optimal debulking;
Surgery on the Urinary tract; Ureter (ureteroneocystostomy, end-to-end ureteral anastomosis), conduits (ileum, transverse colon, sigmoid colon), repair of Vesico-vaginal fistulae, hysteroscopy, open biopsies;
Gastrointestinal surgery; Resection, reanastomosis, colostomy;

Radiotherapy; therapeutic methods (interstitial, intracavity, external), complications (gastrointestinal tract, urinary tract, skin, bone marrow, kidneys, liver, central nervous system);
Chemotherapy; drug agents, adverse effects, monitoring.

GYNAECOLOGICAL ONCOLOGY-LOG BOOK

Skills						
	Observation		**Direct Supervision**		**Independent practice**	
	Date	Signature of trainer	Date	Signature of trainer	Date	Signature of trainer
Cervical cytology:						
Counsel about cytology reports						
Perform basic colposcopy examination						
Management of cervical intraepithelial neoplasia						
Manage premalignant conditions:						
Cervical						
Endometrial						
Lower genital tract						
Recognize, counsel and plan initial management of carcinoma of:						
Cervix						
Diagnosis						
Staging						
Treatment						
Post op						
follow up						
Endometrium						
Diagnosis						

Staging						
Treatment						
Post op						
follow up						
Others **Ovary**						
Diagnosis						
Staging						
Treatment						
Post op						
follow up						
Vulva						
Diagnosis						
Staging						
Treatment						
Post op						
follow up						
Choriocacinoma						
Diagnosis						
Staging						
Treatment						
Post op						
follow up						

Training courses or sessions		
Title	**Date**	**Signature of supervisor**
Basic colposcopy training		
Palliative care training		
Pain management		
Counseling and breaking bad news		

COMPLETION OF MODULE I confirm that all components of the module have been successfully completed:		
Date	**Name of supervisor**	**Signature of supervisor**

Annex 4 - Training Units

TRAINERS

The trainers shall be the Board Certified Consultants who are in charge of accredited obstetrics and gynaecology training units, with three years of service and experience following Board Certification as stated in the PGIM Ordinance.

TRAINING UNITS

Castle Street Hospital for Women, Colombo
De Soysa Maternity Hospital, Colombo
Colombo South Teaching Hospital
Colombo North Teaching Hospital
Sri Jayewardenepura Teaching Hospital
Teaching Hospital, Galle
Teaching Hospital, Kandy
Teaching Hospital, Peradeniya
Teaching Hospital, Jaffna
Teaching Hospital Anuradhapura
National Cancer Institute Maharagama
Teaching Hospital Batticaloa
Teaching Hospital Kurunegala
District General Hospital, Kalutara
District General Hospital, Ratnapura
District General Hospital, Badulla
District General Hospital, Matara

Annex 5 - Training portfolio - Instructions to trainees

INTRODUCTION

The Portfolio should be maintained from the time of entry to the training programme up to Board Certification (stage 1 to stage 6).

The trainee should maintain a Training Portfolio to document and reflect on his training experience and identify and correct any weaknesses in the competencies expected of him, and also to recognize and analyze any significant clinical events experienced, so that appropriate changes in management could be adopted in order to reduce the risks arising from such situations in the future. The supervisors/trainers are expected to review the candidate's progress at regular intervals. It is the responsibility of the trainee to obtain the signature of the trainer after these reviews.

The Training Portfolio should be submitted for evaluation at the ISTA at 9 and 18 months of training. **It will be finally evaluated at the Portfolio Viva at the point of Pre Board Certification Assessment.**

The Training Portfolio - Section I, should be maintained by the trainee during the Pre MD Training Programme (years 1 to 3). The Trainer needs to conduct regular assessments and certify that the Trainee has satisfactorily acquired the required competencies. The Log of clinical and other activities is the first component of the Training Portfolio – Section I (Pre MD).

The Training Portfolio - Section II, should be maintained by the trainee during Stage 5 and 6 (Post MD).

Pre MD Training Portfolio – Section I (Stage 1-3)

The trainee shall maintain a paper based training portfolio in the format given below. The documents shall be computer generated. The Portfolio shall be in the form of a ring binder so that additional sheets of paper could be inserted easily. It shall consist of four sections listed below:

1. **Personal details**
2. **Hospital data**
3. **Portfolio entries**
   - 3.1 **Specified Tasks which should be carried out / Log of clinical activities**
   - 3.2 **Reflective practice**
   - 3.3 **Details of academic activities and Teaching**
   - 3.4 **Log of clinical activities during rotational appointments**

3.5 Answers to essay questions, corrected and accepted by the resources persons, answered during study days (minimum two per year, minimum eight during the three year pre MD period)

4. **Certifications**

1. Personal Details

1.1. Family Name (Surname):

1.2. Fore names:

1.3. Address:

1.4. Contact telephone No:

1.5. Sex:

1.6. Date of Birth:

1.7. Date and University of Graduation:

1.8. Pre-Registration Appointments (Grade/Specialty/Hospital):

1.9. Post-Registration Appointments (Grade/Specialty/Hospital):

1.10. Date of passing Selection Examination 1:

1.11. Date of entry to training programme:

1.12. Pre-MD Appointments (Date/Unit/Hospital/Trainer):

Year 1 -

Year 2 -

Year 3 –

2. Hospital Data

	Registrar Year 1 (Circuit 1)	**Registrar Year 2 (Circuit 2)**	**Registrar Year 3 (Circuit 3)**
Name of the hospital			
Name of the trainer			
Obstetric Beds			
Gynaecology Beds			
Labour Beds			

Special Care Cots			
Number of trainers			
Number of Registrars			
Number of Senior Registrars			
Obstetrics Admissions/week			
Total Deliveries per year			
Caesarean Section Rate			
Instrumental Delivery Rate			
Maternal deaths			
Perinatal Mortality Rate			
Average Gynaecological admissions per week			
Average Obstetric major Surgery per month			
Average Gynaecological major Surgery per month			
Obstetric clinics per month			
Gynaecology Clinics per month			
Special Clinics (name) per month			

3. Portfolio entries

3.1 Log of clinical activities in Obstetrics and Gynaecology

The trainees should maintain log of clinical activities on a regular basis as a part of their portfolio to demonstrate adequate exposure to clinical training in order to develop skills and achieve relevant tasks. The trainer should decide on the competency Levels depending on the trainee's seniority in the training programme. Accordingly the minimum required competency level for each skill or task will vary. Following grid provides a guideline.

A – Acquire knowledge and skill using teaching aids such as models, audio-visuals, etc.
B – Observe the task when performed by the trainer.
C – Assist the trainer to perform the task.
D – Perform the task under the supervision of the trainer
E – Perform the task independently.

Signature of the Trainer

The signature of the trainer should be obtained periodically (at least once in two months). The trainer should ascertain as to whether the trainee has acquired the expected levels of competence in the modules outlined below and deficiencies should be addressed appropriately. The trainee should develop a document (an example is given below) for each of the following 18 modules. These documents must be updated regularly by the trainee.

Modules

- **Antenatal care and normal intrapartum procedures**

Take an antenatal history, Conduct booking, Advise on nutrition, investigations, Maintain partograms, Interpret CTG, Amniocentesis, Minor disorders in pregnancy, Clinical pelvimetry, others (specify)

- **Antenatal Obstetric Complications**

Malpresentation and malpositions, Polyhydramnios Oligohydramnios, Preterm labour, PROM, Abruption, placenta praevia, PIH and eclampsia, Rhesus negative mother, Cord prolapse,
Scarred uterus, tumours complicating pregnancy, VBAC, HELLP syndrome etc.

- **Medical disorders in pregnancy**

Rheumatic Heart disease, Congenital Heart Disease, Chronic Hypertension, Diabetes Mellitus, Renal disease, Thyroid disease, Anaemia, Haemoglobinopathy, DVT/Thromboembolism, Epilepsy, Bronchial Asthma, Malaria, STDs, Liver disease, Psychological disorders, Collagen disorders, Haemostatic disorders and Dermatological conditions.

- **Fetal Medicine**

FGR, Macrosomia, Hypoxia, DIU, Anencephaly, Hydrocephaly, Fetal hydrops, fetal malformations, Assessment of growth, Assessment of hypoxia etc.
(20) 11 Interpret CTG (60)

- **Intrapartum complications**

Diagnosis, Investigations, treatment of Fetal distress, Twin delivery, Breech delivery, Shoulder dystocia, Hand prolapse, Cord prolapse, Forceps delivery, Rotational forceps delivery, Lack of progress of labour, Vacuum extraction, PPH, Uterine inversion, Uterine rupture, etc.

- **Obstetric procedures**

Evaluate the problem, decision making, and perform, Caesarean section, Hysterotomy, Obstetric Hysterectomy, Repair vaginal tears, Repair cervical tears, Exploration of uterus,

B-Lynch & Compression Sutures, Ligation of Internal Iliac artery, Vulval haematoma, Cervical cerclage, External cephalic version, Internal podalic version etc.

- **Postpartum complications**

Evaluate the problem, diagnose, and manage, Secondary PPH, Puerperal sepsis, Psychological disorders, Resuscitation of newborn, venous thrombosis, NICU care, Problems of lactation, etc.

- **Ultrasonography**

Evaluate the problem, assessment, diagnosis of Miscarriage, Ectopic pregnancy, Gestational age, Placental site, Liquor volume, fetal growth, Biophysical Profile, fetal anomalies, Nuchal thickness, Doppler studies for hypoxia, Trans vaginal scanning. Etc.

- **Gynaecological disorders**

History, assessment, and management of Miscarriage, Ectopic pregnancy, Sepsis, Primary amenorrhoea, Secondary amenorrhoea, Anovulation, Abnormal uterine bleeding, Dysmenorrhoea, Dyspareunia, Endometriosis, Subfertility, Intersex/Hirsutism, Gestational trophoblastic tumours, Genital tract anomalies, Acute abdomen, Menopausal problems, etc.

- **Gynaecological Neoplasms**

History, assessment, and management of Myoma, Ovarian cyst, Vulval dystrophy, Endometrial hyperplasia, abnormal cervical smear, Ovarian malignancy, Endometrial carcinoma, Cervical carcinoma, Vulval carcinoma, Fallopian tube tumours, Polypi. Etc.

- **Gynaecological surgery**

History, Assessment, and developing Skills in Basic surgical techniques, Minor gynaecological surgery, Laparotomy, Surgery for ovarian tumour, Myomectomy, Diagnostic laparoscopy, Diagnostic hysteroscopy, Colposcopy, surgery for ectopic pregnancy, Radical vulvectomy, Radical hysterectomy, Ovarian malignancy, Surgery for bladder trauma, Surgery for bowel trauma, Surgery for ureteric injury, Tubal patency tests, Incisional hernia, Major Reconstructive surgery of the genital tract. Etc.

- **Gynaecological disorders**

History, Assessment, and Treatment of Pelvic sepsis, Endometriosis, Anovulation, Menorrhagia, HRT, Ectopic pregnancy, Hirsutism, Galactorrhoea, Trophoblastic tumour, Ovarian malignancy. Etc.

- **Module: Contraception**

History, and Assessment of clients for Natural methods, COC pill, DMPA, IUCD, Barrier methods, Emergency contraception, subdermal implants, sterilization. Etc.

- **Subfertility & Assisted reproduction**

Pre-conceptional assessment of a couple, Detection of ovulation, Ovulation induction, Assess stimulation, Management of hyperstimulation, HSG, Surgical management of tubal obstruction, Examination of mal partner, Treatment of seminal fluid abnormalities, IUI, Sperm preparation techniques, Assessment before ART, IVF/ICSI. Etc.

- **Urogynaecology/Pelvic floor dysfunction**

History/examination, Cystometry, Urethrocystoscopy, Pelvic floor exercises, Medical treatment, Manchester repair, Vaginal hysterectomy and repair, Colposuspension, Vault repair, Kelly's Repair (04), Burch & other techniques, TVT, Anal sphincter repair. Etc.

- **Research Methodology**

Basics in research, Prepare a proposal, Use of computers, Statistical packages, Medline, Cochrane data base, WHO-RHL, Appraise publications, Prepare Presentations, Medical audit. Etc.

- **Module: Counselling**

Pre-pregnancy, Fetal anomaly, Obstetric complications, Perinatal deaths, Miscarriage, Malignancy, Subfertility, Psychosexual dysfunction, Preoperative and Post-operative, Sterilization, Violence against women, etc.

- **Module: Miscellaneous**

Prepare duty rosters, Maternal & Perinatal meetings, Clinico-pathological conferences, Risk management, Audit meetings, Case discussions, Journal clubs, Student teaching, Staff teaching, etc.

Example -Antenatal care and normal intrapartum procedures

Tasks and skills	Year	Skill level achieved	Signature of the consultant	Comments of the trainer
Take an antenatal history	1st year 1st 3 months			
	1st year 2nd 3 months			
	1st year 3rd t 3 months			
	1st year 4th 3 months			
	2nd year 1st 3 months			
	2nd year 2nd 3 months			
	2nd year 3rd 3 months			
	2nd year 4th 3 months			
	3rd year 1st 3 months			
	3rd year 2nd 3 months			
	3rd year 3rd 3 months			
	3rd year 4th 3 months			
Advise on nutrition	**The trainee should develop similar columns and rows for all the skills and tasks identified in the above 18 modules. They are encouraged to be more innovative and creative in documenting their exposure to the clinical activities during their pre MD training.**			
Antenatal investigations				
Maintain partogram				
Interpret CTG				
Clinical pelvimetry				
Minor disorders in pregnancy				

3.2 Reflective Practice

Include a section of reflective practice on **ten significant clinical scenarios** experienced by you **(Minimum** of two in Stage 1, four in Stage 2 and two in Stage3, altogether ten**)**

An example of the format of Reflective Practice documentation is given below:

- Briefly describe the clinical scenario
- Which areas need to be reflected on? (Tick all relevant boxes)

Obtaining Data from patient	
Investigations	
Diagnosis	
Decision making	
Management	
Clinical skills	
Communication	
Team working	

- Identify and explain any possible lapses in the above and why they may have occurred.
- What have you have learnt from this experience?
- What learning needs / required changes in the management process have you identified from the above and what action if any, have you taken?
- Considering current best available evidence, justify what should be done in a similar situation in the future.

An example of Reflective Practice documentation

- **Briefly describe the clinical scenario**

A Case of *Death in Utero* due to Hyperglycaemia in Pregnancy

Date ……. BHT No……

A 35 year old woman in her 3rd pregnancy having one previous unexplained neonatal death of a 3Kg baby delivered normally and a two year old daughter weighing 2.5 Kg at birth, delivered by elective caesarean section (CS) at 38 weeks of gestation, was admitted for elective CS at 38 weeks of gestation . The previous CS had been due to hyperglycaemia in pregnancy treated with soluble insulin and hypertension in pregnancy treated with methyl dopa. Her blood pressure and the blood sugar levels had been normal after the CS. At 12 weeks of gestation in the current pregnancy, a post lunch post prandial blood sugar (PPBS) had been 109 mg/dl at the local clinic. Thereafter she had received routine antenatal care. From 33 weeks gestation she had received antenatal care in the Teaching Hospital Unit. After admission to hospital, the fetal heart sounds were not detected on routine auscultation in the evening, although the mother claimed that she had felt fetal movements up to an hour previously. A *death in utero* was confirmed by ultrasound scan. An urgent random blood sugar was found to be 347 mg/dl. As all her subsequent PPBS values

remained very high, soluble insulin therapy was commenced. She had a repeat CS as she did not establish spontaneous labour by 40 weeks gestation.

- **Which areas need to be reflected on? (Tick all relevant boxes)**

Obtaining Data from patient	
Investigations	
Diagnosis	
Decision making	
Management	
Clinical skills	
Communication	
Team working	

- **Identify and explain any possible lapses in the above and why they may have occurred.**

  Only a PPBS had been carried out at the first antenatal visit possibly due to proper data not being obtained from the patient regarding the previous pregnancies and the medical officer's a lack of knowledge about the National Guidelines on Screening for hyperglycaemia in Pregnancy.

  Repeat screening for hyperglycaemia in pregnancy had not been carried out in spite of a previous history of hyperglycaemia in pregnancy treated with soluble insulin.

  An elective repeat CS had been planned, without any obstetric justification.

  Induction of labour was not considered after two weeks of the *Death in Utero*, probably due to a fear of the use prostaglandins in a scarred uterus

- **What have you have learnt from this experience?**

  Medical Officers (including Specialists in Teaching Hospitals) who undertake antenatal care should update themselves with regard to current best practices and be aware of and follow National Guidelines which are available.

- **What learning needs / required changes in the management process have you identified from the above and what action if any, have you taken?**

  I discussed this case with the medical staff and the medical students and stressed the need to be updated with regard to current best practices and follow National Guidelines which are available in the unit. I have presented the case for discussion at the weekly postgraduate discussion which is attended by the specialists too.

- **Considering current best available evidence, justify what should be done in a similar situation in the future**.

At the first antenatal visit the Medical Officer interviewing the patient should be able to obtain all the relevant data from the patient to enable a thorough risk assessment and appropriate referral for tertiary care in such high risk patients.

The National Guideline on Screening for and Management of Hyperglycemia in Pregnancy should be followed, and commencing from the first antenatal visit at least a 75 g Glucose Challenge Test (GCT), irrespective of the fasting state, should be carried out.

If the above is negative, screening with a 75 g Oral Glucose Tolerance Test (OGTT) should be carried out at approx. 24 weeks and also repeated later if considered necessary.

If hyperglycemia is detected, the appropriate management should be carried out as per the National Guidelines to prevent a *Dea*th *in Utero* due to maternal hyperglycemia.

With good control of the maternal hyperglycaemia, Induction of labour at 38 weeks with monitoring of the uterine contractions could be considered if there is no other contraindication for vaginal delivery.

Summary of discussion with Trainer

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Signature of Trainee Signature of Trainer

Date:

3.3 Details of Academic Activities

Add a separate section for each of the following areas of academic activities:

- Papers Presented (Title, Meeting, Date) – Minimum 1 during pre MD period
- Audits- 1 per year
- Information Technology
- Ethics and Medico-legal Issues
- Record of attendance at essential courses /Training Programmes /Scientific meetings Attended
- Record of experience obtained in tutorials, journal clubs, Clinico-pathological
- Conferences and audits
- Continuing Professional Development and Details of CPD Points Collected
- Awards/Prizes
- Teaching (undergraduates / nurses /midwives)

3.4 Log of clinical activities during rotational appointments

3.5 Answers to essay questions, corrected and accepted by the resources persons, answered during study days (minimum two per year, minimum eight during the three year pre MD period)

4. Certifications

Assessment of the Trainee's progress by the Educational supervisor.

These assessments should be based on the trainee's Portfolio and a combination of the following:

- Mini Clinical Evaluation Exercises (Mini-CEX)
- Case-Based Discussions (CBD)
- Objective Structured Assessments of Technical Skills (OSATS)
- Peer Team Ratings (Multisource feedback)
- Direct Observation of Procedural Skills (DOPS)
- Acute Care Assessment Tool (ACAT)
- Audit Assessment
- Teaching Observation
- Communication and counseling

Comments of Trainee:

Signature of Trainee:

Comments of Trainer 1:

Signature of Trainer 1:
…….
Comments of Trainer 2:

Signature of Trainer 2:
……..
Comments of Trainer 3:

Signature of Trainer 3:

Date of submission:

Decision of the Board of Study: Accepted / Recommend

Post MD Training Portfolio – Section II (Stage 5 and 6)

Introduction

Candidates who are successful at the MD (Obstetrics and Gynaecology) Examination have to complete a further 24 – month period in-service training: a 12 month period in Sri Lanka as a Senior Registrar and another 12 month period at a center abroad. During this 24 month period, the trainee has to document progress and maintain a comprehensive record in the form of a Training Portfolio. This will enable the Trainee to reflect on his training experience and identify and correct any weaknesses in the competencies expected, and also recognize and analyze any significant clinical events experienced, so that appropriate changes in management could be adopted in order to reduce the risks arising from such situations in the future. The Trainer needs to conduct regular assessments and certify that the Trainee has satisfactorily acquired the required competencies. This Training Portfolio will be used to evaluate the trainee's competence to practice independently as a Specialist in Obstetrics and Gynaecology at the Pre Board Certification Assessment.

Objectives

To be appointed as a Specialist in Obstetrics and Gynaecology to practice independently in Sri Lanka following completion of the 24–month Post MD in-service training the Trainee should:

- have administrative and organizational skills
- be able to clearly document and prioritize problems
- be able to function as an effective member in the health delivery team
- have acquired the essential knowledge, skills and competencies related to obstetrics and gynaecology and relevant subspecialties
- be able to address Ethical and medico-legal issues
- be able to communicate effectively
- have the skill to counsel patients appropriately
- have appropriate attitudes
- be able to carry out and also supervise research and clinical audits
- be committed to continuous professional development
- be able to disseminate knowledge effectively
- have adequate knowledge of the English Language
- have adequate knowledge and skills in Information Technology

The trainee shall maintain a paper based training portfolio in the format given below. The documents shall be computer generated. The Portfolio shall be in the form of a ring binder so that additional sheets of paper could be inserted easily to different sections.

1. Hospital data
2. Log of Procedures carried out
3. Reflective Practice
4. Teaching (undergraduates / postgraduates/ nurses midwives)
5. Research and Audit
6. Information Technology
7. Ethics and Medico-legal Issues
8. Professional Development
9. Certifications

1. **HOSPITAL DATA**

	Post MD Year 1	Post MD Year 2	Post MD Year 3
Name of the hospital			
Name of supervisor			
Obstetric Beds			
Gynaecology Beds			
Labour Beds			
Special Care Cots			
Number of trainers			
Number of Registrars			
Number of Senior Registrars			
Obstetrics admissions/week			
Total deliveries per year			
Caesarean Section Rate			
Instrumental delivery rate			
Maternal deaths			
Perinatal Mortality Rate			
Average Gynaecological admissions per week			
Average Obstetric major Surgery per month			
Average Gynaecological major Surgery per month			
Obstetric clinics per month			
Gynaecology clinics per month			
Special Clinics (name) per month			

1. LOG OF SURGICAL PROCEDURES PERFORMED INDEPENDENTLY (Skill Level D/E but for laparoscopic operative procedures Level C is acceptable)

A –acquire knowledge and skill using teaching aids such as models, audio-visuals, etc.
B – observe the task when performed by the trainer.
C – assist the trainer to perform the task.
D – perform the task under the supervision of the trainer
E –perform the task independently.

2.1 Surgical procedures

(Trainee should document the following, using the given procedure headings)

	Procedure	(Minimum number)
1.	TAH & BSO	(20)
2.	VH & R	(10)
3.	Non – descent VH	(02)
4.	Manchester repair	(02)
5.	Ovarian cystectomy	(10)
6.	Laparotomy for gynaecological malignancies	(10)
7.	Myomectomy	(04)
8.	Cervical Circlage	(05)
9.	Surgery for stress incontinence	(05)
10.	Complicated caesarean sections/hysterectomy (Fibroid uterus/3 Previous CS/Severe adhesions/ Major Degree Placenta Praevia/Placenta Accreta/ Upper segment CS/CS in 2nd stage)	(10)
11.	Low Forceps delivery	(10)
12.	Vacuum delivery	(10)
13.	Third/fourth degree perineal Repair	(03)
14.	Condom Catheter Tamponade	(03)
15.	Internal iliac artery ligation	(02)
16.	Laparotomy for ectopic, endometriosis, PID	(10)
17.	Diagnostic Laparoscopy	(10)
18.	Laparoscopic sterilization	(05)
19.	Laparoscopic ectopic pregnancy management	(03)
20.	Laparoscopic endometriosis management	(03)

Resection of endometrial tissue
Cystectomy

21. Total Laparoscopic Hysterectomy (03)
22. Laparoscopic assisted vaginal hysterectomy (03)
23. Laparoscopic cystectomy and cyst aspiration (03)
24. Diagnostic hysteroscopy (10)
25. Colposcopy and cervical biopsy (10)
26. Large Loop Excision of Transformation Zone (01)

Example of entry of surgical procedures performed

1. Diagnostic Laparoscopy

No	Name	Age	Parity	BHT No / Hospital	Indication	Date of Surgery	Signature of Supervisor
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
25							

3. REFLECTIVE PRACTICE

Learning to reflect on and learn from difficult clinical situations in which you have been directly involved, is a vital part of continuous professional development in being a good doctor. This is an integral part of clinical risk management which requires the recognition and analysis of significant clinical situations so that appropriate changes in management could be adopted to reduce the risks arising from such situations in the future.

Reflective practice enables you to describe what happened and why, justify or identify any possible lapses in your management, what you have learnt from this experience and, most importantly, what you would do differently next time, considering current best available evidence.

Use at least four case scenarios in year four (Stage 5) and document as per example and instructions described in the Pre MD Portfolio.

4. TEACHING

Undergraduates / postgraduates / nurses / midwives under supervision
(Minimum of 6 sessions)

Topic	Date	Audience	Assessment Satisfactory/Unsatisfactory	Signature of Trainer

==========

5. AUDIT, CLINICAL RISK MANAGEMENT & GOVERNANCE

	Grade / Marks	Date	Signature of Trainer	Review Date	Signature of Trainer
Scientific writing					
Critically Appraise a Scientific Paper					
Perform an Audit					
Prepare or Revise a Guideline or Care pathway					
Organizing Risk Management Meetings					

==========

6. INFORMATION TECHNOLOGY

	Date	Assessment Satisfactory/Unsatisfactory	Signature of Trainer
Use of computer software - MS Office - SPSS - Epi Info			
Internet, World Wide Web & E mail			
Literature Search using PubMed Cochrane Data Base WHO-RHL Google Scholar			

7. Ethics and medico legal issues (Minimum of 1 patient per issue)

Issue	Topic	Date	Assessment Satisfactory/Unsatisfactory	Signature of Trainer
Clinical Judgment of management				
Obtain Valid Informed Consent - Management plan				
Obtain Valid Informed Consent - Procedure				
Obtain Valid Informed Consent - Postmortem examination				
Ability to Discuss Clinical Risk				
Ability to Counsel Adverse Events (Morbidity & Mortality)				

8. PROFESSIONAL DEVELOPMENT

	Date	Assessment Satisfactory/Unsatisfactory	Signature of Trainer
Responsibility and initiative			
Reliability regarding patient care			
Team work ability			
Leadership skills			
Communication and rapport with patients			
Communication with colleagues			
Relationship with the other professionals			

Documentation and organizational skills			
Issuing signed certificates			
Written communications			
Participation in SLCOG Activities and hands on workshops			

==========

9. CERTIFICATIONS

Guidelines to trainers on assessment of professional development
Assessment of Generic skills (administration, documentation, attitude, feedback from other staff)

Trainers should always accentuate the positive comments and have a critical yet constructive approach for progression.

Mini Clinical Evaluation Exercises (mini-CEX)
The trainer observes and assesses the Trainee directly, during the process of history taking, clinical examination, formulating management plans and communicating with patients. Results should be fed back and discussed immediately after the assessment.

Direct Observation of Procedural Skills (DOPS) and Objectives structured Assessment of Technical Skills (OSAT)
These evaluate the trainee undertaking a practical procedure. The trainee receives immediate feedback to identify strengths and areas for development.

Case-based Discussions
Case discussions with Trainees.
- Relevant to knowledge criteria and competences
- Assess clinical decision making, knowledge and application of knowledge.
- Each case-based discussion should involve slightly different clinical situations in the area to be tested.
- Discussion should focus on the information that would be given to the patient and recorded in the notes

Acute Care Assessment Tool (ACAT)

The ACAT allows feedback from a senior doctor on the trainee's performance on the Acute Medical Take or other acute shift.

Patient Survey (PS)

Patient Survey assesses the patient's view of the doctor. It assesses their interpersonal and communication skills and professionalism by concentrating on their performance during the consultation.

Audit Assessment

This assesses a trainee's competence in completing an audit. The Audit Assessment can be based on review of audit documentation or on a presentation of the audit at a meeting.

Teaching Observation

The Teaching observation is provides structured formative feedback to trainee on their competence at teaching. The Teaching Observation can be based on any formal teaching by the trainee that has been observed by the assessor.

Feed back

This process of 'multisource feedback' is intended to provide information for both the Trainee and the Trainer about the Trainees relationships with staff and patients etc. It is only one element of the information that helps the Trainer to assess whether the Trainee is progressing well.

Peer Team Rating (PTR) forms

Not a confidential document and the trainee should be aware of the contents.

The selected assessors should include at least three senior medical colleagues, a senior midwife/nurse on the labour room, a nurse from the antenatal ward/clinic and the gynaecology ward/clinic, a member of the theatre team, other appropriate staff including midwives/nurses from other areas, staff from the specialist clinics that the trainee has been working in, and anaesthetic and paediatric colleagues.

Annex 6 - Common Teaching/Learning Activities

There will 34 Study Days spread over 30 months.
Each Study Day will commence with Lecture/s and will be followed by Tutorials / Case Based Discussions / Learning Sessions or a Workshop and answer of at least one essay question. There will be another 2 Study Days for a Mock Examination which will include answer of questions. At least two such answers/year (eight during the four years of local training) which were accepted by the study day resource persons should be included in the training portfolio.

There will be 1 -2 Study Days per month and the Study Days will be completed 4 months prior to the MD O & G Examination.

Study Day	Lecture Topics	Duration
1	Ethics in Obstetrics & Gynaecology	1 hr
	Research, Audit & Evidence Based Medicine	1 hr
	Identification of a Research Topic & PICO Questions	1 hr
	Epidemiology, Study Designs & Basic Research methodology	1 .5 hrs
	Literature Search , Writing citations & references	0.5 hrs
2	Ethical Issues in Research & Good Clinical Practice	1 hr
	2 X 2 Contingency Table & Screening / Diagnostic Tests	1.5 hrs
	Sample Size Calculation & Statistical Tests	1.5 hrs
Study Day	**Lecture Topics**	**Duration**
3	Formulating a Research Project Proposal	1 hr
4	Scientific Writing – I	1 hr
5	Medical Ethics & Professionalism	2 hrs
6	Counseling	2 hrs
7	Labour & its Complications	2 hrs
8	Pre- conceptional & Antenatal Care	2 hrs
9	Data Presentation & Analysis	1 hr
10	Scientific Writing – II	1 hr
11	Maternal Medicine	2 hrs

12	Obstetric Ultrasonography	2 hrs
13	Maternal Deaths, Near Misses and the process of Inquiring into Maternal Death in Sri Lanka	2 hrs
14	Critical Appraisal of Publications	1 hr
15	Gynaecological Ultrasonography	2 hrs
16	Medico- Legal Issues & Informed Consent	2 hrs
17	Clinical Audit , Clinical Governance & Risk Management	2 hrs
18	Laparoscopic Anatomy of the Pelvis and Potential Spaces	2 hrs
19	The Role of the Obstetrician & Gynaecologist in Achieving the Sustainable Development Goals - 2030	2 hrs
20	Postnatal Care of Mother & New Born	2 hrs
21	Pelvic Floor Dysfunctions	1.5 hrs
22	Health Statistics & their application	2 hrs
23	Mental Health Issues in Pregnancy & Puerperium	2hrs
24	Antenatal & Intrapartum Fetal Monitoring	2hrs
25	Early Pregnancy Complications	2 hrs
26	Subfertility & Assisted Reproduction	2 hrs
27	Caesarean sections	2 hrs
28	Post Reproductive Health Care	2 hrs
29	Fetal Medicine	2hrs
30	Liver Disease in Obstetrics	2 hrs
31	Thyroid Disease in Obstetrics & Gynaecology	2 hrs
32	Gynaecological Neoplasms	2 hrs
33	Sexual & Reproductive Health Rights and Adolescent Health Care	2 hrs
34	Health Services in Sri Lanka & The Role of The Family Health Bureau	2 hrs
		Total 69 hrs
35	Mock Examination	6 hrs
36	Mock Examination	6 hrs

Study Day	Topics for Tutorials / Case Based Discussions / Leaning Sessions	Duration
7	Management of Normal & Abnormal Labour and Induction of Labour	4.5 hrs
8	Gynaecological Surgical Procedures - I	4.5 hrs
13	Obstetric Haemorrhage and Hypertension in Pregnancy	4.5 hrs
24	Informed Consent, Safe Surgery, Infection Control, Management of Septicaemia	4.5 hrs
25	Gynaecological Surgical Procedures - II	4.5 hrs
26	Reproductive Endocrinology	4.5 hrs
27	Contraception	4.5 hrs
28	Controversies / Dilemmas in Gynaecological Care	4.5 hrs
29	Assessment of Fetal Growth & Pre Term Birth	4.5 hrs
30	Challenges in Obstetric Care	4.5 hrs
31	Medical Disorders Complicating Pregnancy	4.5 hrs
32	Gynaecological Neoplasms	4.5 hrs
33	Thrombo-embolic Disease in Obstetric & Gynaecology	4.5 hrs
34	Enhanced Recovery, Intra Operative & Post Operative Care	4.5 hrs
		Total 63 hrs

Study Day	Topics for Workshops	Duration
1	Literature Search , Writing citations & references	2 hrs
2	Randomized Controlled Trials	2.5 hrs
3	Formulating a Research Project Proposal - I	5.5 hrs
4	Formulating a Research Project Proposal - II	5.5 hrs
5	Basic Surgical Skills	4.5 hrs
6	Counseling – I	4.5 hrs
9	Data Presentation & Analysis	5.5 hrs
10	Writing a Dissertation	5.5 hrs
11	Reflective Practice	4.5 hrs
12	Ultra Sound Scanning – I	4.5 hrs

14	Critical Appraisal of Publications	5.5 hrs
15	Ultra Sound Scanning – II	4.5 hrs
16	External Cephalic Version , Instrumental Vaginal Delivery, Assisted Vaginal Breech Delivery, Management of Shoulder Dystocia , Cord Prolapse & Retained Placenta	4.5 hrs
17	Counseling – II	4.5 hrs
18	Laparoscopic Surgery	4.5 hrs
19	Resuscitation of a Collapsed Patient	4.5 hrs
20	Neonatal Resuscitation & Care	4.5 hrs
21	Urodynamic Assessments	4.5 hrs
22	Management of urological injuries and bowel injuries	4.5 hrs
23	Teaching, Appraisal and Assessment	4.5 hrs
		Total 88.5 hrs
Tutorials / Case Based Discussions / Learning Sessions or a Workshop at the completion of lectures of each study day		**220 hrs**
Notational learning hours		**300**

(The topics of study days may be updated by the BOS based on education requirements)

Annex 7 - Progress Report - Pre MD Stages 1 and 2 At 6, 12, 18 and 24 month

Name of the trainee: **Name of the trainer:**

Institution: **Period covered:**

Please use, when appropriate, the portfolio maintained by the trainee and a combination of work based assessments such as multisource feedback (MSF), objective structured assessment of technical skills (OSATS) mini-clinical evaluation exercise (Mini-CEX), direct observation of procedural skills (DOPS), case-based discussions (CbD), acute care assessment tool (ACAT), patient survey (PS), audit assessment and teaching observation to arrive at your judgment.

The Trainer shall use the following guideline and grading scheme to assess the trainee's progress during Stage 1 of training.

Marking Guide: Excellent (5) ≥70, Very good (4) =60-69%, Pass (3) =50-59%, Borderline (2) =40-49% Fail (1) = < 40 %

An overall minimum grade of a "pass" is required for acceptance of the progress report.

(Please tick [√] in appropriate cages)

Training modality	Excellent	Very Good	Pass	Borderline	Fail
Clinical skills :- History taking					
Clinical skills :- Examination					
Clinical decision making					
Use of diagnostic tests					
Procedural / Technical skills					
Doctors-patient relationship					
Communication skills					
Staff relationships					
Professional responsibility					
Participation in research activities					
Participation in Seminars, Case presentations/audits etc					

Punctuality					
Attitudes					

Overall grade (select one): Excellent (5)/Very Good (4) / Pass (3)/ Borderline (2) / Fail (1)

General / Specific comments and action taken to improve (especially when the Grade awarded is borderline or fail):

Signature of Trainer: - Date:-

Designation:-

Annex 8 - Progress Report on Trainees–Pre MD Stage 3
Peripheral Obstetrics and Gynaecology /Gynaecological Oncology

Name of Trainee :
Specialty: Peripheral Obstetrics and Gynaecology /Gynaecological Oncology
Period of Training :
Hospital and Unit :

Please use the portfolio maintained by the trainee and a combination of work based assessments such as multisource feedback (MSF), objectives structured assessment of technical skills (OSATS), mini-clinical evaluation exercise (Mini-CEX), direct observation of procedural skills (DOPS), case-based discussions (CbD), acute care assessment tool (ACAT), patient survey (PS), audit assessment and teaching observation to arrive at your judgment.

The Trainer shall use the following guideline and grading scheme to assess the trainee's progress during Stage 2 of training. It is essential that justification/reasons are stated if a Grade of excellent or fail is given.

Marking Guide: Excellent (5) ≥70, Very good (4) =60-69%, Pass (3) =50-59%, Borderline (2) =40-49% Fail (1) = < 40 %
An overall minimum grade of a "pass" is required for acceptance of the progress report.

(Please tick [√] in appropriate cages)

Training modality	Excellent	Very Good	Pass	Borderline	Fail
Clinical skills :- History taking					
Clinical skills :- Examination					
Clinical decision making					
Use of diagnostic tests					
Procedural / Technical skills					
Doctors-patient relationship					
Communication skills					
Staff relationships					
Professional responsibility					
Participation in research activities					

Participation in Seminars, Case presentations/audits etc.					
Punctuality					
Attitudes					

Overall grade (select one): Excellent Very Good Pass Borderline Fail

General / Specific comments and action taken to improve (especially when the Grade awarded is borderline or fail):

Signature and name of the Supervisor: .....

Date: ……..

Annex 9 - Progress Report on Trainees – Post MD Stage 5 - SR Training (Local)
(At Six months and Twelve Months)

Name of Trainee :
Specialty:
Period of Training :
Hospital and Unit :

The Trainer shall use the following guideline and grading scheme to assess the trainee's progress during Stage 2 of training. It is essential that justification/reasons are stated if a Grade of excellent or fail is given.

Marking Guide: Excellent (5) ≥70, Very good (4) =60-69%, Pass (3) =50-59%, Borderline (2) =40-49% Fail (1) = < 40 %

An overall minimum grade of a "pass" is required for acceptance of the progress report.

Please use the portfolio maintained by the trainee and a combination of work based assessments such as multisource feedback (MSF), objectives structured assessment of technical skills (OSATS), mini-clinical evaluation exercise (Mini-CEX), direct observation of procedural skills (DOPS), case-based discussions (CbD), acute care assessment tool (ACAT), patient survey (PS), audit assessment and teaching observation to arrive at your judgment.

	Excellent	Very good	Pass	Borderline	Fail
Theoretical knowledge					
Clinical decision making					
Clinical skills					
Operative skills					
Ability to cope with emergencies and complications					
Thinks independently and rationally					
Seek appropriate consultations					
Ability to follow instructions					
Quality of documentation					
Dedication to work					
Professional attitudes					

Reliability					
Availability/punctuality					
Communication skills					
Doctor-patient relationship					
Relationship with colleagues					
Relationship with other staff					
Supervises and help juniors					
Teaching of medical students/junior staff					

Overall grade (select one): Excellent (5)/Very Good (4)/Pass (3)/Borderline (2)/Fail (1)
General / Specific comments and action taken to improve (especially when the Grade awarded is borderline or fail):

Signature and name of the Supervisor: .....

Date: ……..

Annex 10 - Progress Report on Trainees–Post MD Stage 6 (Overseas Training)

Pleases submit a progress report to the PGIM every Six months

Name of Trainee:

Period of Training:

Hospital and Unit:

The Trainer shall use the following guideline and marking scheme to assess the trainee's progress during Stage 6 of training. It is essential that justification/reasons are stated if a mark of excellent or poor is given.

Marking Guide: Excellent (5) ≥70, Very good (4) =60-69%, Pass (3) =50-59%, Borderline (2) =40-49% Fail (1) = < 40 %

An overall minimum grade of a "pass" is required for acceptance of the progress report.

Please use the portfolio maintained by the trainee and a combination of work based assessments such as multisource feedback (MSF), objectives structured assessment of technical skills (OSATS), mini-clinical evaluation exercise (Mini-CEX), direct observation of procedural skills (DOPS), case-based discussions (CbD), acute care assessment tool (ACAT), patient survey (PS), audit assessment and teaching observation to arrive at your judgment.

	Excellent	Very good	Pass	Borderline	Fail
Theoretical knowledge					
Clinical decision making					
Clinical skills					
Operative skills					
Ability to cope with emergencies and complications					
Thinks independently and rationally					
Seek appropriate consultations					
Ability to follow instructions					
Quality of documentation					
Dedication to work					
Professional attitudes					
Reliability					
Availability/punctuality					
Communication skills					
Doctor-patient relationship					

Relationship with colleagues					
Relationship with other staff					
Supervises and help juniors					
Teaching of medical students/junior staff					

Overall grade (select one): Excellent / Very Good / Pass / Borderline / Fail
General / Specific comments and action taken to improve (especially when the Grade awarded is borderline or fail):

Signature and name of the Supervisor:

Postal address and email:

Date:

Annex 11 - In-Service Training Assessments (ISTA)
At Nine and Eighteen months During Stage 1 & 2

Name of Trainee:

Name of Trainer:

Training centre:

The Evaluators shall use the following guideline and marking scheme to assess the trainee's progress during Stage 1 and 2 of training. It is essential that justification/reasons are stated if a mark of excellent or fail is given.

Excellent ≥ 70 %, Very Good = 60–69 %, Pass ≥ 50 - 59%, Borderline = 40 -49%, Fail <40 %

Please use the portfolio and progress reports maintained by the trainee and a combination of work based assessments such as multisource feedback (MSF), objective structured assessment of technical skills (OSATS), mini-clinical evaluation exercise (Mini-CEX), direct observation of procedural skills (DOPS), case-based discussions (CbD), acute care assessment tool (ACAT), patient survey (PS), audit assessment and teaching observation to arrive at your judgment.
Following the final marks are agreed the trainee and the trainer together should be interviewed for clarification and comments.

Practical Skills	Max. Marks	Allocated Marks	Justification/Reasons
1.Clinical Interview	**20**		
2.Clinical Examination	**20**		
3.Selection of appropriate investigations	**20**		
4.Interpretation of investigations	**20**		
5.Clinical judgment and decision making	**50**		
6.Obtaining informed consent for management plan	**20**		
7.Communication skills Especially with patients	**20**		
8.Professionalism	**20**		
9.Organization and efficiency	**20**		
10.Preoperative management	**20**		

11.Ability to choose appropriate operation	**20**		
12.Surgical competence including appropriate intra-operative decision making & management of intra-operative problems	**50**		
13.Appropriate Postoperative care	**10**		
14.Appropriate follow-up	**10**		
15.Documentation & maintenance of records	**50**		
16.Risk management	**20**		
Academic Skills	**Max. Marks**	**Allocated Marks**	**Justification/Reasons**
1.Theoretical knowledge	**20**		
2.Participation in academic discussions	**20**		
3.Ability to think independently and rationally	**20**		
4.Fluency in English and Powers of expression (oral and written)	**No marks are given. Feedback to be given to the Trainee**		

Total Marks (Out of 450) = ----------

To Pass the ISTA trainee should receive a minimum mark of 225 (50%)

…… …… ……

Signature of Evaluator 1 ***Name*** ***Date***

…… …… ……

Signature of Evaluator 2 ***Name*** ***Date***

Annex 12 - PGIM PTR assessment of registrars/senior registrars

PTR FORM B

PGIM PTR ASSESSMENT OF REGISTRARS/ SENIOR REGISTRARS

Confidential

Dear Colleague,

You have been your invited to participate in Peer Team Rating of this doctor. PTR is a tool for multi source feedback 360^0 assessment. We value your independent and honest rating of our trainees.

Please indicate your profession by filling in one of the following circles

O Consultant	O Registrar	O SHO or HO
O Allied Health Professional	O Senior Registrar	O Nurse
O Clerical or Secretarial Staff	O Other specify……..	

Your scoring should reflect the performance of this trainee against that which you would reasonably expect at his/her stage of training and level of experience. Please feel free to add any other relevant comments about this doctor's strengths and weaknesses.

Please place form in the attached self addressed envelope and return to the Trainer named on the envelope.

DO NOT return to the trainee concerned.

THE PTR IS NOT AN ASSESSMENT OF KNOWLEDGE OR PRACTICAL SKILLS

Name of trainee: **Specialty:** **Date:**	**Strongly Disagree** **1 2 3 4 5**	**Strongly Agree**
1. Attitude to staff: Respects and values contributions of other members of the team	**1 2 3 4 5**	
2. Attitude to patients: Respects the rights, choices, beliefs and confidentiality of patients	**1 2 3 4 5**	
3. Reliable & punctual	**1 2 3 4 5**	
4. Communication skills: communicates effectively with patients and staff	**1 2 3 4 5**	
5. Team player skills: Approachable, Supportive and accepts appropriate responsibility	**1 2 3 4 5**	
6.Leadership skills: Takes responsibility for own actions and actions of the team	**1 2 3 4 5**	
7. Honesty and Integrity: do you have any concerns?	Yes	No
8. What is your overall rating of trainee's professionalism? **Very poor** **Extremely good** **1 2 3 4 5 6 7 8 9 10**		
Comments Name: Signature: Date:		

Annex 13 - Format of Detailed Project Proposal - MD Obstetrics and Gynaecology

Section 1

1. Name of trainee:
2. Name(s) of supervisor(s):
3. Training centre:

Section 2

1. Project title:
2. Introduction:
    a. Background and justification
    b. Literature Review
3. Objectives of study:
4. Research plan:
    a. Design
    b. Setting
    c. Method
    d. Sample size and sampling techniques
    e. Outcome measures
    f. Statistical analyses and plan of presentation of results
    g. Ethical considerations
    h. Work plan and time lines
5. References:
6. Funding for study:
7. Signature of trainee:

Section 3

Recommendation of supervisor(s):

Signature of Supervisor 1 Signature of Supervisor 2

Date Date

Section 4

Date of submission to PGIM Date of approval by BOS Signature of Secretary BOS

Annex 14 - Assessment of the Detailed Project Proposal by Reviewers

Name of Trainee :

Training Centre :

Supervisor :

Name of Reviewer :

Designation : Official Address:

Tel/Fax:

Email:

Title of Project:

.....

.....

The two reviewers appointed by the BOS shall use the following guideline and marking scheme to assess the project proposal of the candidate

1. **Title and Introduction:** Rationale (Justification)–problem identified and quantified. Hypothesis and expected outcome, impact and relevance of the study. Comments:

   .....

   .....

   Marks (10):

2. **Literature Review:** Adequacy (evidence of a systematic search for related. similar, relevant studies)Comments:

   .....

   .....

   Marks (10):

3. **Objectives:** Clearly defined. Relevant and stated in measurable terms. Comments:

   .....

   ....

   Marks (10):

4. **Method:** Appropriate study design to address the objectives with clear detailed description of subjects, sampling technique and sample size, interventions, data collection and management. The study should be, internally valid and reproducible. Where specific details are available in the literature, reference should be made to the original papers, and comments kept to a minimum. If modifications have been made to the published techniques, these should be described in full. Appropriate statistical tests planned should be mentioned and ethical issues addressed Comments:

   .....

   .....

   Marks (30):

5. **Ethical considerations/institution from where ethical approval will be /has been obtained:** Comments:

   .....

   ....

   Marks (10):

6. **References:** According to the Vancouver system and relevant to the study. Properly documented in the Bibliography and appropriately cited in the text. Comments:

   .....

   ..... ……

   Marks (10):

Recommendation of reviewer:

Total Marks (Out of 80):

To be eligible to proceed to stage 2 and commence data collection, the trainee should score 50 % (40 marks) or more. If a pass grade is not obtained the trainee should resubmit the proposal within three months after attending to the recommended amendments and improvements for re-assessment by the same pair of reviewers until a pass grade is obtained.

Final Judgment: Pass/Fail

If a pass grade is not obtained, what corrections are required? (Attach a separate sheet of paper if necessary)

.....

.....

Additional Comments:

.....

Signature: **Date: ……**

Recommendation of the BOS:

Signature of Chairperson/Secretary:

Date: ……..

Annex 15 - Instructions to Dissertation Supervisors

- The dissertation for the MD OG is based on a 1-2 year research project.
- Acceptance of the dissertation is a requirement to sit the MD examination
- The trainee should write up the project work as a dissertation conforming to the format approved by the Board of Study in OG.
- The supervisor should guide the student in planning and designing, carrying out the research and in presentation of the work.
- The supervisor should obtain recommendation of the research proposal from a reviewer.
- The supervisor should forward Progress Report(s) in the prescribed form at the end of 3 months after the trainee commences work on the research project and 3 months after completing the project work.
- The objective of the dissertation is to prove the trainee's capability to plan, carry out and present his / her own research. The purpose of this training is to ensure maturity, discipline and scholarship in research.
- The dissertation should comprise the trainee's own account of his / her research.
- It must contribute to existing knowledge of infective diseases relevant to Sri Lanka and afford evidence of originality as shown by independent, critical assessment and/ or discovery of new facts in the area under study.
- It should be satisfactory as regards literary presentation.
- The dissertation should be certified by the supervisor as suitable for submission.
- General Comments on the contents: The objectives should be clearly stated and should be feasible to achieve within the time frame. Other published work relevant to the problem (both international and local) should be comprehensively covered and critically evaluated. An appropriate study design and method should be used to achieve the objectives stated. The results should be appropriately analyzed, interpreted and presented effectively. The discussion should include comments on the significance of results, how they agree or differ from published work. If they differ, the probable reasons for these differences need to be discussed. Theoretical / practical applications of the results, if any should be given. The conclusions should be valid and be based on the results obtained on the study.
    - Ethics: The candidate should confirm and document that procedures followed were approved by the Ethical Committee of the institution where the work was carried out and ethical approval was obtained by a recognized Ethical Review Committee.
- The trainee is required to make a short (10 min.)presentation of the project proposal in August / September of their year 1 training to obtain a feedback from other trainers and invitees, regarding feasibility, appropriateness of study design and method and statistical considerations, prior to commencement of the project.
- Prior to submission of the dissertation, the trainee will be required to make a short (15 – 20 minutes) presentation of the project once completed, to the BOS members and other invitees. This will give the trainee an opportunity to discuss his / her work and

obtain feedback from peers and colleagues. It will not be used for evaluation in any form. The supervisors will also be invited for these presentations.

- The trainee will be questioned on the dissertation at the viva-voce examination.
- If at any time the supervisor is not satisfied with the work progress of the trainee, the trainee should be made aware of the deficiencies and corrective measures suggested. This should be conveyed in writing to the trainee with a copy to the BOS. In such instances, a follow-up report should be forwarded within three months or earlier if necessary to the BOS.

Annex 16 - Dissertation supervisors consent form

1. **Name of Supervisor:**
2. **Address:**
3. **Email:**
4. **Phone Number:**
5. **Training Centre:**
6. **Name of trainee:**
7. **Title of Project:**
8. **Place where the Research Project will be carried out :**

I consent to supervise the above mentioned trainees' Research Project and Dissertation

Signature of Supervisor: ……

Date: ……

Annex 17 - Dissertation Progress Report

To be forwarded by the supervisor to the BOS at the end of Year 1, Year 2 and Year 3 of training.

- Name of trainee:
- Training Centre:
- Supervisor:
- Title of project:
- Description of work carried out to date:

(To be filled in by trainee): Brief description of progress in conducting the research project and dissertation writing

.....

.....

.....

.....

Supervisor's comments

6. Is the work on schedule? Yes/No
7. Progress in dissertation writing: satisfactory/unsatisfactory
8. Constraints (if any):
9. Recommendation of supervisor:

Signature: **Date:**

---

10. **Recommendation of the BOS:**

Signature of Secretary: ……. Date: …….

Annex 18 - Dissertation Submission Format

General instructions

It is essential to start writing the dissertation early and in all cases before the data collection is completed. At the same time, you should make arrangements to have your manuscript word processed. Your supervisor should be consulted before you start to write and thereafter at regular intervals. It is much easier to make corrections if the draft is double-spaced and printed on only one side of the paper.

The past tense should be used. To avoid exceeding the given word limit, it is suggested that an approximate running total is kept. The metric system and the International System (SI) of units should be used whenever possible.

Length

An ideal length of text is approximately 5000 words, which equals to about 20 pages. With figures, references, etc., the total length is likely to be in the region of 30-40 pages.

Number of copies

Three copies should be submitted to the Director/PGIM, spiral-bound in the first instance. One will be retained in the PGIM, two copies will be sent to the examiners. After acceptance (and necessary corrections), all three copies should be bound in hard covers (black) with the author's name, degree and year printed in gold on the spine. The front cover should carry the title, author's name and year printed in gold. In addition a soft copy should be submitted in a CD following acceptance. One copy will be returned to the student, one retained by the supervisor, and the third housed in the PGIM library.

Layout

The dissertation should be word-processed and printed single-side only, on A4-size photocopying paper.

Layout of typescript

There should be 1.5" on left-hand and top margins, and 1.0" on right-hand and bottom margins. It is especially important that the left-hand (binding) margin is of the regulatory size.
Line spacing should not be less than 1.5.
Lettering should be in Times New Roman, font size 12.
All pages should be numbered consecutively throughout, including appendices. Page numbers should be inserted in the bottom right hand corner.

Tables, diagrams, maps and figures

Wherever possible, these should be placed near the appropriate text. Tables should be numbered in continuous sequence throughout the dissertation. Maps, graphs, photographs, etc., should be referred to as Figures. Each of these should also be numbered in a continuous sequence. Colour should be avoided in graphic illustrations (unless it is essential) because of the difficulty of photographic reproduction; symbols or other alternatives should be used instead.
Notes

Notes, if essential, should be inserted, in reduced font, at the foot of the relevant page. If too voluminous for this to be practicable, they should be placed in an Appendix. Notes may be typed in single spacing.

Abbreviations

Where abbreviations are used, a key should be provided.

Preliminaries

The preliminaries precede the text. They should comprise the following:

1. Title page

Title of dissertation

Author's name

MD (Obstetrics and Gynaecology)

Post Graduate Institute of Medicine

University of Colombo

Date of submission

2. Statement of originality: The work presented in the dissertation should be the trainee's own and no part of the dissertation should have been submitted earlier or concurrently for any other degree. The statement should be signed by the author, and countersigned by the supervisor.
3. Abstract: Should be structured (introduction, objectives, method, results, conclusions) Should not include figures, tables, graphs or references should be limited to 500 words or less
4. Table of contents: The table of contents immediately follows the abstract and lists in sequence, with page numbers, all relevant divisions of the dissertation, including the preliminary pages.
5. List of tables: This lists the tables in the order in which they occur in the text, with the page numbers.
6. List of figures: This lists all illustrative material (maps, figures, graphs, photographs etc) in the order in which they occur in the text, with the page numbers.
7. Acknowledgments:

Text

The dissertation should be divided into clearly defined chapters. Chapters may be subdivided and a decimal number system can be helpful to identify sections and subsections. Topics of the sections should not be mixed, e.g. Results should not appear in the Materials and Methods.

Section 1–Introduction: The current position and the reasons for carrying out the present work (Rationale /Justification and problem/s identified and quantified.) Hypothesis and expected outcome, impact and relevance of the study should be stated. Generally, only a few references should be cited here.

Section 2–Literature Review: This section should be reasonably comprehensive, and most of the references to be quoted normally occur here. The relevant references dealing with the general problems should be reviewed first and this should be followed by a detailed review of the specific problem. The review is in many cases approached as a historical record of the development of knowledge of the subject.

Section 3–Objectives: Clearly defined, general, specific and any subsidiary objectives should be stated.

Section 4–Materials and Methods: Appropriate study design to address the objectives with clear detailed description of subjects, sampling technique and sample size, interventions, data collection and management. The study should be, internally valid and reproducible. Where specific details are available in the literature, reference should be made to the original papers, and comments kept to a minimum. If modifications have been made to the published techniques, these should be described in full. Appropriate statistical tests planned should be mentioned and ethical issues addressed.

Section 5–Results: Presentation of data should be done in a logical sequence commencing with the basic / baseline characteristics of the subjects. Summarize the data with a figure, table or graph when appropriate. Present appropriate statistical analyses and interpretations. Each figure, table or graph should be complete and clear without reference to the text. Concise explanations in legends and explanation of abbreviations are needed. The text should complement the figure, table or graph not simply describe them but should give valid interpretations of the results. Complete (raw) data should not be included but should be contained in tables in an Appendix if needed. Only data from the present study should be included and in particular no comparison should be made at this stage with results from other studies.

Section 6–Discussion: Interpret and explain the results so as to provide answers to the study question(s). Comment on the relevance of these answers to the present knowledge of the subject. Consider alternate interpretations. Comment on interesting or unexpected observations and about the method. Critically compare the results with results and conclusions of other published studies within and outside the country, and explain possible reasons for any differences observed. Comment on unexpected outcomes. Comment on further follow-up research required on the subject.

Section 7–Limitations: Any inherent and / or inadvertent limitations / biases and how they were dealt with should be described.

Section 8-Conclusions and recommendations**:** Based of the results of the study and to address the objectives.

References

These are given so that the reader can refer to the original papers for further study. Uniformity is essential, but errors and inconsistencies are very common and authors are advised to check the

references most carefully. Examiners will mark students down for inconsistencies in their references, either omissions or failure to follow the recommended format as given in the following section.

References are very important and must be complete and accurate. All literature referred to should be listed in a consistent form and style, and must contain sufficient information to enable the reader to identify and retrieve them.
There are different styles of citing sources, listing references and compiling a bibliography. The Vancouver style is widely accepted in scientific writings, and is recommended for MD (Obstetrics and Gynaecology) dissertation.

List all references that are cited in the text, using the Vancouver System.

Type the references double - spaced in the Vancouver style (using superscript numbers and listing full references at the end of the paper in the order in which they appear in the text). Online citations should include date of access. Use Index Medicus for journal names. If necessary, cite personal communications in the text but do not include in the reference list. Unpublished work should not be included.

References should be listed in the following style:
The arrangement of the references at the end of the dissertation should be in numerical order as they are cited in the text.
The order of the items in each reference should be:

e) For journal references: name(s) of author(s), title of paper, title of journal, year, volume number, and page numbers.
f) For book references: name(s) of author(s), title of book, edition, volume, town of publication, publisher. year, chapter and/or page number Authors' names should be arranged as follows:

Smith CO, James DE, Frank JD

Where an author's name is repeated in the next reference it should also be spelt out in full. The title of the paper is then included, without quotation marks the journal title should be unabbreviated, *in italics*, and be followed by year; **volume number in bold** (the issue /number): and the first and last page numbers.

1 Mathiesen ER, Ringholm L, Damm P. Still birth in diabetes pregnancy. Clinical Obstetrics and Gynaecology 2011; **25**(1)**:** 105 – 111.

2 Lestrud S. Broncho Pulmonary Dysplasia. In: Nelson Text Book of Pediatrics. 18th Ed, Vol 1: Saunders, Elsevier New Delhi, India. 2008. 1840-1841

3 World Health Organization. Priority Medicines for Mothers and Children 2011. Department of essential medicines and pharmaceutical policies. Geneva, World Health Organization 2011 (WHO/EMP/MAR/2011.1).

Websites

Author's name (if available) must be listed first, followed by the full title of the document in italics, the date of publication or last revision (if available), the full http address (URL). And the date accessed in parentheses.

Examples:

1 National Institute for Health and Clinical Excellence. Induction of Labour NICE Clinical Guideline 70, 2015. available at http://www.nice.org.uk/CG070fullguideline (Accessed 21 October 2015)

2 Hofmeyr JG. Antenatal corticosteroids for women at risk of preterm birth: RHL Commentary (last revised 2 February 2015) The WHO Reproductive Health Library 2015, Geneva, World Health Organization www.who.int/rhl. (Accessed 21 October 2015)

3 Crowther CA, Hardin JE. Repeat doses of prenatal corticosteroids for women at risk of preterm birth for preventing neonatal respiratory disease. Cochrane Data Base of Systematic Reviews 2015, Issue 3. Art .No: CD003935. DOI: 10.1002/ 14651858. CD003935 pub 2. (Accessed 21 October 2015)

Annex 19 - Dissertation Assessment and Marking Scheme

Two examiners will be appointed by the BOS to assess and award a mark independently out of 120 using the marking system described below. The final mark for the dissertation out of 120 shall be the mean of the sum of the marks given by each examiner.

1. Title
2. Author's name and address
3. **Abstract (15 marks)**
4. Table of contents
5. List of tables
6. List of figures
7. Introduction
8. Objectives
9. Review of literature
10. **Materials and methods (25 marks)**
11. **Results (30 marks)**
12. **Discussion (including limitations) (30 marks)**
13. **Conclusion and recommendations (05 marks)**
14. Acknowledgements
15. **References (05 marks)**
16. **The overall presentation (10 marks)**

Total Marks (Out of 120):

To be eligible to appear for the PBCA, the **trainee should score 50 % (60 marks) and or more and qualify ("Pass" Grade).** If a pass grade is not obtained the trainee should resubmit the dissertation at a prescribed date after attending to the recommended amendments and improvements for re-assessment by the same pair of examiners until a pass grade is obtained.

Name of the Examiner:

Signature:

Date:

Annex 20 - Marking Scheme for Assessment of the Pre MD Training Portfolio Done at 9 and 18 months at ISTA

Name of trainee:

Training Centre:

Supervisor:

Period of Training:

Marking guide:

	grade
Fail	1
Borderline	2
Pass	3
Good pass	4
Excellent pass	5

Areas to be evaluated:

1. Documentation: Clarity, Brevity, Correct sequence, Focused presentation
2. Surgical skills: Number, different types, competency
3. CPD Activities: Workshops, Seminars, Conferences
4. Reflective Ability
5. Teaching (undergraduates/ nurses /midwives)

For the portfolio to be accepted at least a Pass Grade (3) should be obtained.

Signature of Examiner 1: ……. Signature of Examiner 2: ……..

Date:

Annex 21 - Post MD Training in Obstetrics and Gynaecology

Local Post MD Training

The trainee should review his portfolio with the trainer and plan out the completion of deficiencies. He / She should take part in administrative work with the consultant, learn to play the lead in the labour ward, perform audits, organize risk management, multi disciplinary, and other relevant clinical and educational meetings, take a leading role in postgraduate and undergraduate teaching, understand the necessities for overseas placement and prepare accordingly , take part in CPD and other activities of the professional associations, maintain and introduce new evidence based practices in the unit, take part in research, make presentations at academic meetings and take part in other academic activities.

Overseas Post MD Training

Trainee shall present the portfolio to the overseas trainers and plan relevant training. He/she should maintain the portfolio with constant dialogue with the trainers. Trainees are expected to understand socio-cultural differences while working in overseas centres and adjust accordingly. Trainees are encouraged to look for training & educational opportunities which are not available in Sri Lanka, participate in audits, research, risk management, drills and other standard practices. They are expected to remember at all times that they have a role of an ambassador from Sri Lanka and strive to maintain the dignity and status of the postgraduate programme and the country.

Annex 22 – Application for approval of the overseas training appointment

Full Name : ----------

Date of Birth : ----------
Postal Address : ----------

E –mail Address : ----------
Date of passing MD : ----------
IELTS : ----------
MRCOG Part I: ----------

Training Accepted for MRCOG Part II : ----------
Current Post : ----------
Details of the overseas training post
.....
.....

Please submit the above information with detailed curriculum vitae to the examination department of the PGIM.

Signature of the trainee:

Date: ……

Annex 23 - Marking Scheme for Pre Board Certification Assessment

A pair of examiners shall conduct the Pre Board Certification Assessment at the end of two years Post MD training and award marks independently. The trainee should provide evidence in support of the activities given in the assessment sheet below.

Areas of assessment	***mark***	***Justification/Reason if any***
Portfolio evaluation		
1. Log of Procedures carried out (100)		
2. Reflective Practice (150)		
3. Teaching (50)		
4. Information Technology (50)		
5. Ethics and Medico-legal Issues (75)		
6. Professional Development (75)		
Publications and presentations		
1. Full research papers in peer reviewed Journals (except the paper accepted in lieu of the dissertation) (50 x4 papers)		
2.Other research publications (30x4 papers		
3. Audits (25x2 audits)		
4. Oral presentations (20x4 presentations)		
5. Other presentations during the training programme (10x5 presentations)		
Total out of 1000		

The examiners must ascertain that the trainee is not deficient in any of the areas mentioned below when using the marking scheme.

1. Subject expertise (which is encompassed by the log of procedures)
2. Teaching
3. Research & Audit (which is encompassed by the dissertation / published paper, the audits and any other research publications or presentations)
4. Ethics & Medico-legal issues
5. Information technology
6. Life-long learning
7. Reflective practice

To Pass the PBCA a candidate should obtain 60% (600 marks) or more out of the Total 1000 Marks

Comments (use a separate sheet of paper, if any):

Examiner 1: Name and signature: Examiner 2: Name and signature:

Date: …….

Annex 24 - Roles and Responsibilities of a Trainer

The roles and responsibilities of a trainer are multiple:

A. MD trainer
B. Academic Appraiser
C. Supervisor of a research project
D. Reviewer/assessor of a research project
E. Supervisor of the Training Portfolio
F. Role model
G. Examiner

A. <u>As a MD trainer, he/she should</u>

1. Be involved in teaching and ensure trainees learn on the job.
2. Allocate time for trainees to discuss academic as well as personal issues.
3. In instances of unsatisfactory behavior, attitude or problems of the trainee, first warn the trainee and if the situation persists, inform the Director PGIM and Board of Study so that remedial action can be taken. Communications on such issues should be copied to the trainee's academic appraiser.
4. Consult the Board of Study and inform the academic appraiser of the trainee, if a trainee is required to repeat any duration of a clinical appointment or any other appointment.
5. Send progress reports to the BOS, every six months.
6. Supervise the leave arrangements of trainees. (Warn the trainees if in excess and remind them that leave is not a right but a privilege, but give their due)
7. Encourage trainees to participate in continuing medical and professional development activities such as time to visit the library, participate in other clinical meetings, workshops, critical appraisal of journal articles etc.
8. Encourage presentations by the trainees in clinical meetings, CPD activities etc.
9. Conduct workplace based assessments – DOPS and Mini Clinical Examinations as indicated in the portfolio guidelines.
10. Inform the BOS if more than 2 weeks of leave is to be taken by you.
11. arrange for cover up of leave for training purposes (since this may be different from work cover up)
12. Inform the BOS and give adequate time for the trainee to be moved to another training site if more than 1 month leave is to be taken, since off site cover is not acceptable in such a situation.
13. Handover the required letters of release/ attest to the satisfactory completion of portfolio of the trainees on completion of an appointment by the trainee (it might be difficult for them to come later)
14. Give constructive feedback continuously, which will help the trainees to improve both academically and professionally. Feedback on negative aspects of a trainee should be dealt with in a confidential manner.
15. Provide a pleasant and disciplined environment in the work place for the trainee to work.

B. <u>As an academic appraiser</u>, the trainer should

1. Have regular meetings with the trainees.
2. Be accessible to the trainee and give your contact number and convenient times for meetings.
3. Develop an approachable, friendly relationship so that trainees are not hesitant to contact you in times of need.
4. Supervise the entries and ensure regular updates of your trainee's portfolio.

C. <u>As a supervisor of a research project</u>, the trainer should

1. Be realistic and ensure the trainee gets hands on experience to do research on his or her own.
2. Not have too many goals which will burden the trainee who will find it difficult to finish the project within 4 months.
3. Make sure that trainees submit duly filled forms and suggest the name of a reviewer to review the project proposal.
4. Assist and advice trainees regarding obtaining funds in time for project commencement.
5. Correct the trainee's presentation and writing (including spelling and grammar) before it is presented or sent to the reviewer or submitted for evaluation.
6. Encourage them to publish or present in national and international scientific sessions.

D. <u>As a reviewer and assessor of a research project dissertation</u>, the trainer should

1. Review the work done in the Sri Lankan context.
2. Write a detailed report including the corrections and changes that a trainee has to attend to.
3. Complete the review within the allocated time, otherwise trainees will face difficulties in attending to the corrections.
4. Remember that a delay in submission of your assessor report will delay the procedure of sending all the dissertations to the foreign examiner by the PGIM.

E. <u>As a role model</u> the trainer should

1. Be exemplary in your dealings with colleagues of other disciplines and all personnel in the health care team.
2. Always be punctual.
3. Be sympathetic to the trainees appreciating that they too have problems.
4. Avoid criticizing other trainers and training sites.

F. <u>As an examiner</u> the trainer should

Read and abide by the guidelines of the PGIM document.

Annex 25 - Learning resources

Recommended Books/Journals for reading – Selection and MD Examination

Selection Examination

There are several learning resources available. A few examples are listed below:

- **Basic Sciences for Obstetrics and Gynaecology: Core Material for MRCOG Part 1, (1st Ed), Oxford Specialty Training: Basic Science**
- **Basic Science in Obstetrics and Gynaecology: A Textbook for MRCOG Part 1 (**4th Ed),-Phillip Bennett, Catherine Williamson,ISBN-13: 978-0443102813 by Austin Ugwumadu, ISBN-13: 978-0199535088
- **British National Formulary**, ISBN: 978-0857110848
- **Clinical Gynecologic Endocrinology and Infertility (7th Ed), Mark A Fritz and Leon Speroff, ISBN: 978-0781779685**
- **Clinical Pharmacology and Therapeutics: Lecture Notes (9th Ed), Gerald A McKay and Matthew R Walters, ISBN: 978-1118344811**
- **Essential Medical Genetics (6th Ed), Edward S Tobias, Michael Connor and Malcolm Ferguson Smith, ISBN: 978-1405169745**
- **Ganong's Review of Medical Physiology (24th Ed),Kim E Barrett, Susan M Barman, Scott Baitano, Heddwen L Brooks, ISBN: 978-0071780032**
- **Harper's Illustrated Biochemistry (28th Ed), Robert K Murray, Victor W Rodwell, David Bender, Kathleen M Botham, P Anthony Weil, Peter J Kennelly, ISBN: 978-0071625913**
- **Larsen's Human Embryology (4th Ed), Gary C Schoenwolf, Steven B Bleyl, Philip R Brauer, Philippa H Francis-West, ISBN: 978-0443068119**
- **Last's Anatomy – Regional and Applied (12th Ed), Chummy S Sinnatamby, ISBN: 978-0702033957**
- **Medical Microbiology (7th Ed), Patrick R Murray, Ken S Rosenthal and Michael A Pfaller, ISBN: 978-0323086929**
- **MRCOG Part One: Your essential revision guide (2nd Ed), Alison Fiander, Baskaran Thilaganathan, ISBN: 978-1904752561**
- **Revision Notes for the MRCOG Part 1 (Oxford Specialty Training: Revision Texts), Arisudhan Anantharachagan, Ippokratis Sarris and Austin Ugwumadu, ISBN: 978-0199592333**
- **Robbins Basic Pathology (8th Ed), Vinay Kumar, Abul K Abbas, John C Aster, ISBN: 978-1437717815**
- **SBAs for the Part 1 MRCOG, Andrew Sizer, Neil Chapman, ISBN: 978-1906985585**
- **Statistics at Square 1** (9th Ed), T D V Swinscow and M J Campbell, ISBN: 978-0727915528

Leaning Resources - MD Examination

There are several learning resources available. A few examples are listed below:

- **Bonney's Gynaecological Surgery (11th Ed),Tito Lopes, Nick Spirtos, Raj Naik, John M Monaghan, ISBN: 9781405195652**
- **Munro Kerr's Operative Obstetrics (12th Ed) by Thomas F. Baskett, Andrew A. Calder, ISBN-13: 978-0702051852**
- **Clinical Gynecologic Oncology (8th Ed),Philip J DiSaia MD and William T Creasman, ISBN: 9780323074193**
- **Contraception Your Questions Answered (6th Ed), John Guillebaud, Anne MacGregor, ISBN-13: 978-0702046193**
- **De Swiet's Medical Disorders in Obstetric Practice (5th Ed), Raymond Powrie, Michael Greene, William Camann, ISBN: 9781405148474**
- **Dewhurst's Textbook of Obstetrics and Gynaecology (8th Ed), D Keith Edmonds, ISBN: 978-0470654576**
- **EMQs for MRCOG Part 2: A Self-Assessment Guide (2ndEd), K and M Palanivelu, L Ramalingam, ASIN: B012NOIOPI**
- **Gynaecology (4th Ed), Robert W Shaw, David Luesley, Ash K Monga, ISBN: 9780702031205**
- **High Risk Pregnancy: Management Options (4th Ed), David K James, Philip J Steer, Carl P Weiner, Bernard Gonik, ISBN: 9781416059080**
- **Handbook of Obstetric Medicine, Fifth Edition (5th Ed), Catherine Nelson-Piercy, ISBN-13: 978-1482241921**
- **Instruments and Procedures in Obstetrics and Gynecology, (1st Ed), Kiran Agarwal, Puri R, Malhotra N, ISBN: *9351521370***
- **Intrapartum Care for the MRCOG and Beyond (2nd Ed) T. Baskett, S. Arulkumaran, ISBM: 9781107717978**
- **Introduction to Research Methodology for Specialists and Trainees, (3rd Ed) P.M.S.O'Brien, Broughton-Pipkin, Royal College of Obstetricians and Gynaecologists**
- **Management of Infertility for the MRCOG and Beyond, (3rd Ed), Siladitya Bhattacharya, Mark Hamilton, ISBN-13: 978-1107678576**
- **Menopause for the MRCOG and Beyond (2nd Ed), Margaret Rees, ISBN: 9781904752448**
- **Neonatal-Perinatal Medicine (9th Ed), Richard J Martin MB FRACP, Avroy A, Fanaroff MB FRCOP, FRCP CH, Michele C Walsh MD MS, ISBN: 9780323065450**
- **Obstetric Ultrasound: How, Why and When (3rd Ed), Trish Chudleigh, Baskaran Thilaganathan, ISBN-13: 978-0443054716**
- **Obstetrics and Gynaecology – An evidence-based text for MRCOG (2nd Ed), David M Luesley, Philip N Baker, ISBN: 9780340990131**
- **Atlas of Pelvic Anatomy and Gynecologic Surgery, (4th Ed), Baggish & Karram, ISBN :9780323225526**

- **Shaw's Textbook of Operative Gynaecology, (7th Ed), John Shepherd, Marcus E. Setchell, ISBN-13: 978-8131211601**
- **Te Linde's Operative Gynecology, Eleventh Edition, by Howard W Jones III MD, John A Rock MD, ISBN-13: 978-1451177367**
- **Comprehensive Gynecology (6th Ed), Gretchen M Lentz, Rogerio A. Lobo, David M Gershenson, Vern L. Katz, ISBN-13: 978-0323069861**
- **Operative Laparoscopy & Hysteroscopy (1st Ed) Cohen, S.M, ISBN 13: 9780443089503**
- Operative Obstetrics **(2nd edition), Larry C Gilstrap, F Gary Cunningham, J Peter Vandorsten, ISBN: 9780071212618**
- **OSCEs for the MRCOG Part 2: A Self-Assessment Guide (2nd Ed), Antony Hollingworth, Janice Rymer, ISBN: 9781444121841**
- Oxford Specialty Training**: Training in Obstetrics & Gynaecology, Ippokratis Sarris, Susan Bewley, Sangeeta Agnihotri ISBN: 9780199218479**
- Progress in Obstetrics & Gynaecology series**, John Studd, Seang Lin Tan, Frank A Chervenak**
- **Handbook of Obstetric Medicine, Fifth Edition (** 5th Ed), Catherine Nelson-Piercy, ISBN-13: 978-1482241921

Journals

- **American J of Obstetrics & Gynecology**
- **Best Practice & Research Clinical Obstetrics & Gynaecology**
- **British J of Obstetrics & Gynaecology**
- **British Medical J**
- **Ceylon Medical J**
- **International J Obstetrics & Gynecology**
- **J of Obstetrics & Gynecology**
- **Obstetrics & Gynaecology Survey**
- **Obstetrics, Gynaecology and Reproductive Medicine**
- **Recent Advances in Obstetrics & Gynecology**
- **Sri Lanka J of Obstetrics & Gynaecology**
- **The Obstetrician & Gynaecologist**

Other resources

- **Atlas of Pelvic Surgery online edition: http://www.atlasofpelvicsurgery.com**
- **British National Formulary**
- **Geneva foundation for medical education and research:www.gfmer.ch**
- **Global library of women's medicine:www.glowm.com**
- **International continence society:www.ics.org**
- **NICE guidelines**
- **RCOG Green-top Guidelines**
- **RCOG Scientific Impact Papers**
- **StratOG – RCOG Learning platform**

- **The Obstetrician & Gynaecologist *(TOG)***

(Depending on new available information, additional learning resources may be provided by the respective trainers/BOS. The trainee too should have the ability to decide on additional learning resources required based on educational needs.)