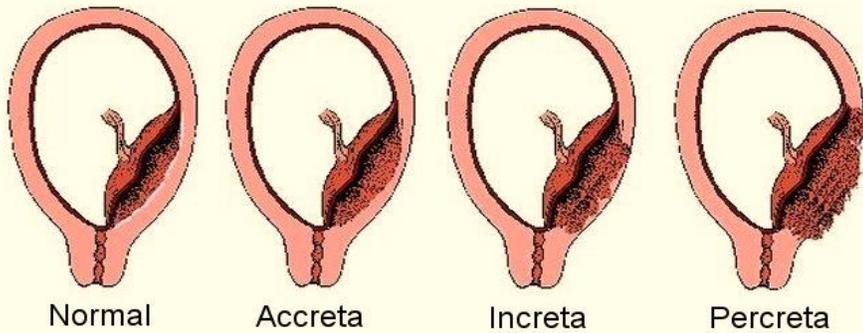


# STUDY GUIDE

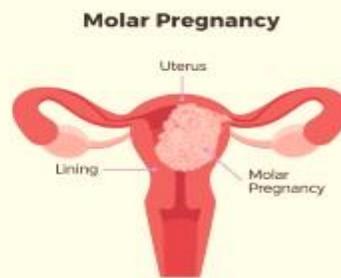
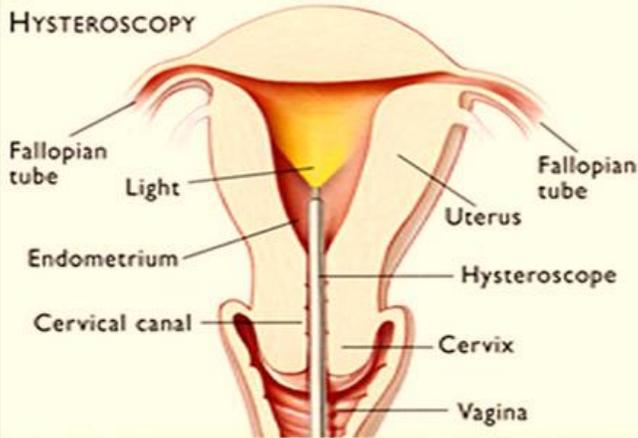
FOURTH YEAR MBBS

28<sup>TH</sup> JUNE - 28<sup>TH</sup> AUG 2021

DURATION: 9 WEEKS



# REPRODUCTIVE II MODULE



**LIAQUAT NATIONAL HOSPITAL AND MEDICAL COLLEGE**  
 Institute for Postgraduate Medical Studies & Health Science



**STUDY GUIDE FOR REPRODUCTIVE 2 MODULE**

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Module name: Reproductive System-II Year: Four Duration: 9 weeks (June – Aug 2021)

Timetable hours: Lectures, Case-Based Discussion (CBD), Clinical Rotations, Demonstrations, Skills, Self-Study

### MODULE INTEGRATED COMMITTEE

<b>MODULE COORDINATOR:</b>	<ul style="list-style-type: none"> <li>• Dr. Aisha Taj (Obstetrics &amp; Gynecology)</li> </ul>
<b>CO-COORDINATORS:</b>	<ul style="list-style-type: none"> <li>• Dr. Uzma Shabab (Obstetrics &amp; Gynecology)</li> <li>• Dr. Afifa Tabassum (DHPE)</li> </ul>

### DEPARTMENTS' & RESOURCE PERSONS' FACILITATING LEARNING

BASIC HEALTH SCIENCES	CLINICAL AND ANCILLARY DEPARTMENTS
<b>ANATOMY</b> <ul style="list-style-type: none"> <li>• Professor Zia-ul-Islam</li> </ul>	<b>FAMILY MEDICINE</b> <ul style="list-style-type: none"> <li>• Professor Faridah Amin</li> </ul>
<b>COMMUNITY MEDICINE</b> <ul style="list-style-type: none"> <li>• Dr. Saima Zainab</li> </ul>	<b>OBSTETRICS &amp; GYNECOLOGY</b> <ul style="list-style-type: none"> <li>• Professor Haleema Hashmi</li> <li>• Professor Zehra Naqvi</li> <li>• Dr. Aisha Taj</li> </ul>
<b>MICROBIOLOGY</b> <ul style="list-style-type: none"> <li>• Professor Shaheen Sharafat</li> </ul>	<b>PSYCHIATRY</b> <ul style="list-style-type: none"> <li>• Professor Ayesha Muqem Qureshi</li> </ul>
<b>PATHOLOGY</b> <ul style="list-style-type: none"> <li>• Professor Naveen Faridi</li> </ul>	<b>RADIOLOGY</b> <ul style="list-style-type: none"> <li>• Dr. Misbah Tahir</li> </ul>
<b>PHARMACOLOGY</b> <ul style="list-style-type: none"> <li>• Professor Nazir Ahmed Solangi</li> </ul>	<b>UROLOGY</b> <ul style="list-style-type: none"> <li>• Professor Aziz Abdullah</li> </ul>
	<b>RESEARCH &amp; SKILLS DEVELOPMENT CENTER</b> <ul style="list-style-type: none"> <li>• Dr. Kahkashan Tahir</li> </ul>
	<b>SURGERY</b> <ul style="list-style-type: none"> <li>• Professor Rufina Soomro</li> </ul>
<b>DEPARTMENT of HEALTH PROFESSIONS EDUCATION</b>	
<ul style="list-style-type: none"> <li>• Professor Nighat Huda</li> <li>• Dr. M. Suleman Sadiq</li> </ul>	<ul style="list-style-type: none"> <li>• Professor Sobia Ali</li> <li>• Dr. Sana Shah</li> <li>• Dr. Afifa Tabassum</li> </ul>
<b>LNH&amp;MC MANAGEMENT</b>	
<ul style="list-style-type: none"> <li>• Professor K.U. Makki, Principal LNH&amp;MC</li> <li>• Dr. Shaheena Akbani, Director A.A &amp; R.T LNH&amp;MC</li> </ul>	
<b>STUDY GUIDE COMPILED BY:</b> Faiza Ambreen , Department of Health Professions Education	

## **INTRODUCTION**

### **WHAT IS A STUDY GUIDE?**

It is an aid to:

- Inform students how student learning program of the module has been organized
- Help students organize and manage their studies throughout the module
- Guide students on assessment methods, rules and regulations

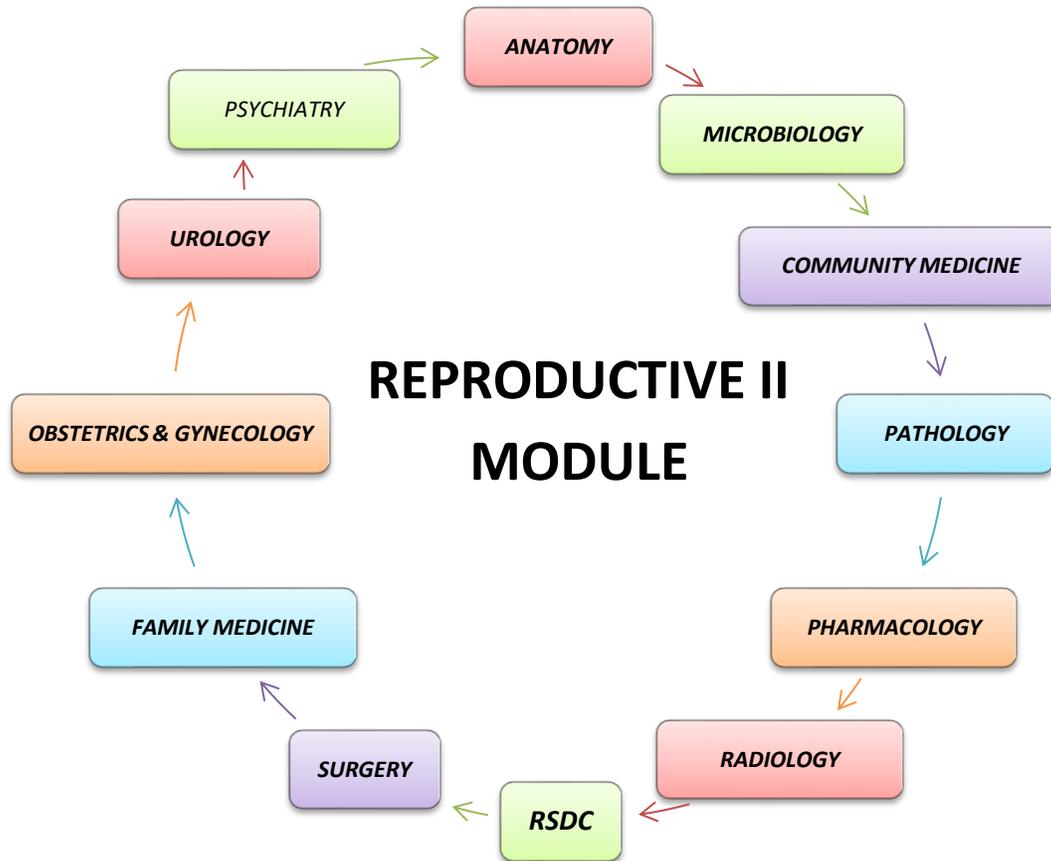
### **THE STUDY GUIDE:**

- Communicates information on organization and management of the module. This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small group teachings, clinical skills, demonstration, tutorial and case based learning that will be implemented to achieve the module objectives.
- Provides a list of learning resources such as books, computer assisted learning programs, web- links, journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous and semester examinations on the student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's achievement of objectives.
- Focuses on information pertaining to examination policy, rules and regulations.

**INTEGRATED CURRICULUM** comprises system-based modules such as Eye/ENT, Orthopedics, Dermatology, Genetics and Reproductive System-II which links basic science knowledge to clinical problems. Integrated teaching means that subjects are presented as a meaningful whole. Students will be able to have better understanding of basic sciences when they repeatedly learn in relation to clinical examples.

**LEARNING EXPERIENCES:** Case based integrated discussions, Task oriented learning followed by task presentation, skills acquisition in skills lab, computer-based assignments, learning experiences in clinics, wards.

## INTEGRATING DISCIPLINES OF REPRODUCTIVE SYSTEM II MODULE



### LEARNING METHODOLOGIES

The following teaching/learning methods are used to promote better understanding:

- Interactive Lectures
- Small Group Discussion
- Case- Based Discussion (CBD)
- Clinical Experiences
  - Clinical Rotations
- Skills session
- Case Based interactive learning (CBIL)

**INTERACTIVE LECTURES:** In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients' interviews, exercises, etc. Students are actively involved in the learning process.

**SMALL GROUP SESSION:** This format helps students to clarify concepts, acquire skills or desired attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

**CASE-BASED DISCUSSION (CBD):** A small group discussion format where learning is focused around a series of questions based on a clinical scenario. Students' discuss and answer the questions applying relevant knowledge gained previously in clinical and basic health sciences during the module and construct new knowledge. The CBD will be provided by the concerned department.

**CLINICAL LEARNING EXPERIENCES:** In small groups, students observe patients with signs and symptoms in hospital wards, clinics and outreach centers. This helps students to relate knowledge of basic and clinical sciences of the module and prepare for future practice.

- **CLINICAL ROTATIONS:** In small groups, students rotate in different wards like Medicine, Pediatrics, Surgery, Obs & Gyne, ENT, Eye, Family Medicine clinics, outreach centers & Community Medicine experiences. Here students observe patients, take histories and perform supervised clinical examinations in outpatient and inpatient settings. They also get an opportunity to observe medical personnel working as a team. These rotations help students relate basic medical and clinical knowledge in diverse clinical areas.

**SKILLS SESSION:** Skills relevant to respective module are observed and practiced where applicable in simulated-learning environment such as skills laboratory.

**SELF-DIRECTED STUDY:** Students' assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

**MODULE: REPRODUCTIVE 2****INTRODUCTION**

Reproductive health (RH) is a state of complete physical, mental and social well-being in all matters relating to the reproductive system. Reproductive Health is essential for peoples' overall well-being. Hence Reproductive health and specifically women's reproductive health is given prime importance at a global level.

Despite improvement in the reproductive health status of population in Pakistan, it is much below the desired Sustainable Development Goal target level. The maternal mortality ratio (MMR) for Pakistan is 178 per 100,000 live births majority resulting from preventable causes related to pregnancy and childbirth. Maternal health and newborn health are closely linked. The reported perinatal mortality rate of Pakistan is 64 per 1,000 births.

This module will address common Maternal and child health issues including safe motherhood, contraception, abortion, Infant health care, Sexually Transmitted Diseases and HIV/AIDS, infertility. It will also address the RH related issues of men.

**OBSTETRICS AND GYNAECOLOGIC INSTRUMENTS**

1. Bhutta ZA, Hafeez A, Rizvi A, Ali N, Khan A, Ahmad F, Bhutta S, Hazir T, Zaidi A, Jafarey SN. Reproductive, maternal, newborn, and child health in Pakistan: challenges and opportunities. *The Lancet*. 2013 Jun 28;381(9884):2207-18.
2. WHO, UNICEF, UNFPA, World Bank Group, and the United Nations Population Division. *Trends in Maternal Mortality: 1990 to 2015*. Geneva, World Health Organization, 2015
3. United Nations Population Division's *World Population Prospects*, 2016. Available from: <https://data.worldbank.org/indicator/SP.DYN.IMRT.IN>
4. Sheet WF. *Maternal Mortality*. World Health Organization webpage, World Health Organization. 2013;1.

**MODULE OBJECTIVES AND STRATEGIES**

By the end of Reproductive 2 module students should be able to:

**ANATOMY**

OBJECTIVES	TEACHING STRATEGIES
<b>Pelvis and Pelvimetry</b>	Interactive Lectures/ Small Group Discussion
Describe the structure of male and female genital tract	
Describe the gross anatomy of the female pelvic organs including: the ovaries, uterine tubes, the uterus, the broad ligament and the vagina	
Explain the role of clinical pelvimetry	

**COMMUNITY MEDICINE**

OBJECTIVES	TEACHING STRATEGIES
<b>1. Introduction to Research</b>	Interactive Lectures
Define research	
Explain the importance of research	
Identify the high priority areas for health research	
List steps of research	
Describe the ethics of research	
<b>2. Introduction writing</b>	Interactive Lectures
Describe introduction writing	
Explain the components of introduction writing	Small Group Discussion
<b>3. Literature review &amp; reference writing</b>	
Describe the importance of literature review	
Identify different sources of literature	
Use databases to search literature	
Describe referencing and its various styles	
Use Endnote for referencing	Interactive Lectures
<b>4. Descriptive study designs</b>	
Explain the importance of epidemiologic study designs	
Classify epidemiologic study designs	
Describe the advantages and disadvantages of descriptive study designs	
<b>5. Analytical study designs</b>	
Explain the importance of Research study designs	
Classify study designs	
Describe the advantages and disadvantages of analytical study designs	

**FAMILY MEDICINE**

OBJECTIVES	TEACHING STRATEGIES
Discuss the use of various contraceptive methods with the patient	Small Group Discussion
Explain the importance of pre and post HIV test Counseling	
Identify issues of confidentiality in dealing with a patient with STI	

**GYNECOLOGY**

OBJECTIVES	TEACHING STRATEGIES
<b>1. Infections in Gynecology (PID,STIs)</b>	Interactive Lectures
Define Pelvic Inflammatory disease (PID)	
Explain the etiology of PID i.e. Sexually Transmitted Infections (STIs), Post delivery PID, Post-abortion PID and post-surgical PID	
Diagnose PID based on symptoms, signs and investigation findings	
Discuss the differential diagnosis of PID and its possible complications	
Discuss the management options for acute and chronic PID	
<b>2. Vulvo-vaginal infections</b>	Case- Based Discussion
List the causes of vaginal discharge(candida, bacterial vaginosis, trichomoniasis)	
Differentiate between a normal vaginal discharge (Leucorrhea) and pathological vaginal discharge on the basis of clinical history	
Describe symptoms, signs, investigations and treatment options for vaginal discharge due to Candidiasis, Bacterial vaginosis, Trichomoniasis, Gonorrhoea and Chlamydia trachomatis infection	
Discuss steps of prevention and recurrence of vaginal discharge	
<b>3. Benign tumors of the genital tract I (ovarian cysts, Polyps, fibroid)</b>	Interactive Lectures
Differentiate among the various types of ovarian cysts, polyps & fibroids based on their etiology, symptoms, signs and pathophysiology	
Justify the selection of investigations for ovarian cysts, polyps & fibroid uterus	
Justify the management plans for ovarian cysts, polyps & fibroid	
<b>4. Benign tumors of the genital tract II</b>	
<b>{Bartholin cysts, valvular warts, dermatosis &amp; dystrophies of vulva (including VIN &amp; VAIN)}</b>	Interactive Lectures
Identify the clinical features, and risk factors of various vulvovaginal conditions, on the basis of given data	
Justify the selection of investigations for various vulvovaginal conditions	

<b>5. Terminologies &amp; definitions related to menstrual disorders</b>	Interactive Lectures
<b>(Amenorrhea, Oligomenorrhea, Menorrhagia, dysmenorrhea, dyspareunia, Post-Menopausal Bleeding, Post Coital Bleeding, Pre-Menstrual Syndrome)</b>	
Define primary & secondary amenorrhea, oligomenorrhea, menorrhagia, dysmenorrhea, dyspareunia, post-menopausal bleeding, post-coital bleeding, pre-menstrual syndrome	
Explain the etiology, and symptoms and signs, of primary and secondary amenorrhea, and oligomenorrhea	
Based on the data provided, differentiate among the three types of amenorrhea	
Define primary & secondary dysmenorrhea	
Describe etiology, pathophysiology, symptoms and signs of primary & secondary dysmenorrhea	
<b>6. Sub-fertility</b>	
Define Sub-fertility	
Diagnose sub fertility in a male and female, based on the data provided (history, examination findings, investigation reports)	
Discuss the causes of anovulation in women causes, investigations, how to approach	
Interpret the reports of Semen analysis in male and hormone profile in female	
<b>7. Public health issues related to reproductive health</b>	
Discuss the maternal health situation in Pakistan	
Discuss the important causes of maternal mortality and morbidity	
Describe maternal health services	
Describe the levels of obstetric care including obstetric first aid, basic EmNOC, comprehensive EmNOC	
List the basic steps of counseling in reproductive health, with emphasis on family planning	
Discuss the role of contraception in population dynamics	
<b>8. Early pregnancy complications</b>	
List the most common pregnancy complications	
Describe their incidence and risk factors	
Identify the signs and symptoms of pregnancy complications, based on data provided (history, examination findings, investigation reports) .	
Discuss the medical management provided in response to pregnancy complications	
Describe maternal and fetal implications arising from the most prevalent pregnancy complications	
<b>9. Miscarriage &amp; Ectopic pregnancy</b>	Interactive Lectures
Define ectopic pregnancy	
Discuss differential diagnosis of acute abdomen in women	
Diagnose ectopic pregnancy, based on provided data (history, examination findings, investigation reports)	
Discuss the treatment options for ectopic pregnancy including the criteria for medical treatment	
Define abortion according to WHO criteria	
Differentiate among the various types of abortions based on data provided (history, examination findings, investigation reports)	
Describe the treatment options for each type of abortion	

<b>10. Gestational Trophoblastic diseases/ neoplasia (GTD/GTN)</b>	
Discuss the definition, etiology, risk factors and the classification of GTN	
Describe the principles of management of its benign and malignant varieties	
<b>11. Poly-Cystic Ovary Syndrome (PCOS)</b>	
Interpret the hormone profile report for PCOS	
Discuss the etiology, pathophysiology, diagnosis, and management options for PCOS	
<b>12. UTI in Gynaecology (cystitis, Lower Urinary Tract Symptoms)</b>	
Based on data provided, diagnose UTI in pregnant women	Small Group Discussion
Discuss the principles for their effective investigation and treatment	
<b>13. Instruments in Gynaecology</b>	
· Identify the following instruments:	
i. Cusco speculum	
ii. Sims speculum	
iii. Ayers spatula	
iv. Instruments of DNC & MVA	
• Discuss their uses	
<b>14. Hysteroscopic X-Rays &amp; Laparoscopic views of different disorders</b>	
· Identify the hard and soft copy views of:	
i. X rays and contrast X-rays	
ii. Laparoscopic views (adnexal mass, ruptured and unruptured ectopic pregnancy, PID and TO mass, endometriosis, pelvic adhesions),	
iii. Hysteroscopic views (endometrial polyp, normal uterine cavity, submucous fibroid, septate uterus) including Colposcopic views of cervix.	
Gynaecological history taking	

## **OBSTETRICS**

OBJECTIVES	TEACHING STRATEGIES
<b>1. Pregnancy; diagnosis &amp; physiological changes</b>	Interactive Lectures
Based on data provided, diagnose pregnancy	
Discuss the physiological changes during pregnancy both in the fetus and in the pregnant woman.	
<b>2. Antenatal care &amp; Assessment</b>	
Discuss the importance of routine prenatal laboratory investigations, prenatal diagnostic options (IPS, Quad screen, amniocentesis, CVS) and fetal ultrasound assessment	
Explain the process of antenatal care and investigations (GDM screening, Rh prophylaxis, GBS screening, term cervical assessment) and its importance in ensuring maternal health and normal fetal growth and well-being	
<b>3. Normal Labor</b>	Interactive Lectures/Small Group Discussion
Define labor	
Explain the stages of normal labor	

Describe the basic mechanisms of labor evaluation	Interactive Lectures/Small Group Discussion
Describe the seven cardinal movements of labor	
Explain the technique of delivery, traction, and handling of infant after delivery	
<b>4. Induction of labor</b>	
Define Induction and Augmentation of labor	
Explain indications, contraindications, advantages and disadvantages of Induction and Augmentation of labor	
Discuss the monitoring and management of induced and augmented labor	
Define Partograph and CTG,	
List the uses of partograph and CTG in the management of normal labor	
Discuss the management of abnormal partograph and CTG	
Interpretation of normal and abnormal CTG & Partogram	Interactive Lectures
<b>5. Postpartum Care</b>	
Define puerperium	
Describe signs and symptoms, and management of normal and abnormal puerperium, including puerperal pyrexia and puerperal sepsis	
Recognize the risk factors for depression (postpartum blues) and the role of psychosocial support	Small Group Discussion
Identify the capacity of mother to take care of her newborn	
<b>6. Lactation management and breast care</b>	
Discuss the benefits & complications of breastfeeding for the baby, mother, family, and country	Interactive Lectures
Discuss the role of counseling by health care provider about breast feeding at term	
Explain the significance of self-breast examination and clinical examination	
<b>7. Fetal growth retardation</b>	Interactive Lectures
Define the terms IUGR, SGA, low birth weight and very low birth weight infant	
Describe the evaluation, investigation and management of a fetus with IUGR	Interactive Lectures
<b>8. Fetal mal-presentation and malposition I</b>	
Define mal-presentation & malposition	
List the different types of mal-presentation & malposition	
Describe the causes of Breech, Transverse lie and other mal-presentations and mal-positions	
Describe the management options for mal-presentation and malposition	
<b>9. Fetal mal-presentation and malposition II (Obstructed labor)</b>	
Define obstructed labor	
List the main causes of obstructed labour	
Describe how each cause contributes to the development of this complication	
Describe the clinical signs of obstructed labour and the common maternal and fetal complications that result from uterine obstruction	
Describe the management of obstructed labour	Interactive Lectures
<b>10. Analgesia &amp; anesthesia in obstetrics</b>	
Describe analgesic techniques used in labor and cesarean delivery	
Describe different anesthetic options used in labor and cesarean delivery including the risks and benefits of general anesthesia, spinal anesthesia, epidural anesthesia, pudendal nerve block, and narcotics in obstetrics	

<b>11. Instruments related to obstetrics</b>	Small Group Discussion
Identify the following instruments & Discuss their uses :	
i. Instruments of C/section	
ii. Outlet forceps	
iii. Vacuum	
iv. Episiotomy scissors	
v. Fetoscope	
<b>12. Infections in pregnancy (rubella, chicken pox)</b>	Interactive Lectures
Discuss the prevention, investigation, diagnosis, prognosis and/or management of Infections in pregnancy	
<b>13. Multiple Pregnancy</b>	CBL
Discuss the incidence, types and causes of multiple pregnancy	
Describe the signs and symptoms, diagnosis, investigations and management of multiple pregnancy	
Discuss the difference between monochorionic and dichorionic pregnancies	
Obstetrics history taking	Small Group Discussion
<b>14. Antepartum hemorrhage</b>	Interactive Lectures
Discuss the clinical presentation of Antepartum hemorrhage	

### PATHOLOGY

OBJECTIVES	TEACHING STRATEGIES
<b>1. Pelvic Inflammatory Disease (PID)</b>	Interactive Lectures & Small Group Discussion
Define Pelvic Inflammatory Disease	
Name the microorganisms causing PID	
Discuss the risk factors, pathophysiology, morphology and clinical presentation and complication of Pelvic Inflammatory Disease	
<b>2. Sexually Transmitted Infections (STIs) in females</b>	
Define sexually transmitted infections (STI)	
Name the microorganisms causing STIs	
Discuss the risk factors, pathophysiology, morphology and clinical presentation of STIs	
<b>3. Non-neoplastic and neoplastic conditions of vulva and vagina</b>	Interactive Lectures
Discuss the morphology, pathogenesis and clinical presentation of Bartholin cyst, Lichen Sclerosis, Squamous Cell Hyperplasia, Condyloma Acuminatum, Papillary Hidradenoma and Extramammary Paget Disease, vulvar intraepithelial neoplasia and vulvar carcinoma	
Explain the pathogenesis and morphology of vaginal intraepithelial neoplasia and squamous cell carcinoma, Embryonal rhabdomyosarcoma	
<b>4. Non-neoplastic and neoplastic conditions of cervix</b>	
Explain the infections of cervix including acute & chronic cervicitis and Endocervical Polyps	
Explain risk factors, pathogenesis and morphology of cervical intraepithelial lesions and cervical carcinoma	
Elaborate the role of HPV in cervical cancer, cervical screening methods and pap smear	
<b>5. Endometrial Hyperplasia &amp; Functional Endometrial Disorders</b>	
Define dysfunctional uterine bleeding (DUB)	
Classify abnormal uterine bleeding according to age group and etiology	

Discuss the etiology, pathogenesis, morphology and clinical features of Abnormal uterine bleeding and Anovulatory Cycle	
Explain the etiology, pathogenesis, morphology and clinical features of acute and chronic Endometritis, Endometriosis and Adenomyosis and Endometrial Polyps	
Classify Endometrial hyperplasia	
Discuss the etiology, pathogenesis, morphology and clinical features of Endometrial hyperplasia	
<b>6. Tumors of Uterine corpus (Benign and Malignant endometrial tumors)</b>	
Classify tumors of uterus/endometrium	Interactive Lectures/Small Group Discussion
Discuss the etiology, pathogenesis, morphology and clinical features of Carcinoma of the Endometrium, Tumors of Endometrial Stroma & mixed Mullerian tumors.	
<b>7. Ovarian Tumors – I (Tumors of ovary &amp; fallopian tube)</b>	
Classify Ovarian tumors	
Discuss the etiology, pathogenesis, morphology and clinical features of Serous tumors, Mucinous tumors, Endometrioid tumors, Clear cell tumors, Transitional cell tumors, Adenosarcoma and Malignant mixed Müllerian tumor, and tumors of fallopian tube	
<b>8. Ovarian Tumors – II</b>	
Discuss the etiology, pathogenesis, morphology and clinical features of Sex Cord-Stromal Tumors, Teratoma, Dysgerminoma, Yolk sac tumor, Mixed germ cell tumors and Metastatic Cancer	Interactive Lectures/Small Group Discussion
<b>9. Testicular Tumors</b>	
Classify testicular tumors	
Discuss the etiology, pathogenesis, morphology and clinical features of various types of testicular cancer	
<b>10. Disorders of early and late Pregnancy/ Placenta; pre- eclampsia &amp; eclampsia</b>	
Explain the etiology, pathogenesis, morphology and clinical features of: Spontaneous abortion, Ectopic pregnancy, Twin Placenta, Abnormalities of placental insertion, the disorders of placenta viz. Placenta Previa, Placental Abruption, Placental Insufficiency, Placental Infarcts, Placenta Accreta, Placental infection, Preeclampsia and eclampsia	Interactive Lectures
<b>11. Gestational Trophoblastic Diseases</b>	
Discuss the etiology, pathogenesis and morphology of hydatiform mole including complete mole, partial mole and invasive mole	
Explain the pathogenesis and morphology of choriocarcinoma and placental site trophoblastic tumor	
<b>12. Carcinoma of Breast</b>	
Classify Breast tumors	Interactive Lectures/Small Group Discussion
Discuss the etiology, pathogenesis, morphology and clinical features of various types of breast cancer	
<b>13. Mastitis, duct ectasia, fat necrosis, non proliferative &amp; proliferative breast diseases</b>	
Name non proliferative and proliferative breast lesions	Interactive Lectures
Discuss the etiology, pathogenesis, morphology and clinical features of all non-proliferative and proliferative breast diseases including mastitis, duct ectasia, fat necrosis, fibrocystic change, proliferative breast lesions with and without atypia	
<b>14. Infections of lower and upper female genital tract</b>	
Classify infections of the lower and upper genital tract in relation to their morphology & clinical effects	Interactive Lecture

**PHARMACOLOGY**

OBJECTIVES	TEACHING STRATEGIES
<b>1. Drug used in pregnancy &amp; Lactation</b>	Interactive Lecture
Discuss the drugs that are safe & the drugs that are contraindicated in pregnancy & lactation	
<b>2. Androgens &amp; antiandrogens</b>	Small Group Discussion
Discuss classification, basics & clinical pharmacology of Androgens & Anti-androgens	
<b>3. Progestins, Anti-progestins, Estrogens &amp; Anti-estrogens</b>	
Discuss classification, kinetics & dynamics, basic & clinical pharmacology of Progestins, Anti-progestins,estrogens & anti-estrogens	
<b>4. Contraceptives drugs</b>	Interactive Lecture
Discuss the classification, kinetics and dynamics of different hormonal contraceptive drugs.	

**PSYCHIATRY**

OBJECTIVES	TEACHING STRATEGIES
<b>1. Management of Male &amp; Female sexual and reproductive dysfunction</b>	Interactive Lectures
Describe the psychosocial issues associated with infertility	
Describe ethical issues confronted by patients with infertility	
<b>2. Sexual and Domestic Violence</b>	
List characteristics of people at increased risk for sexual assault	
Describe the medical and psychosocial management of a victim of sexual assault	
<b>3. Psychopharmacology in pregnancy</b>	
Discuss psychopharmacology during pregnancy	
<b>4. Post-partum depression</b>	
Discuss the clinical presentation of post-partum depression	

**RADIOLOGY**

OBJECTIVES	TEACHING STRATEGIES
<b>Role of ultrasound</b>	Interactive Lecture
Describe the role of	
i. Ultrasound for the evaluation and diagnosis of different disorders in Gynae/Obs	
ii. Point of care ultrasound (POCUS) in Gynae and Obs	
iii. Doppler ultrasound in Gynae and Obs including antepartum fetal surveillance in the normal and high risk pregnancy & evaluation of fetal growth restriction	

**RESEARCH & SKILLS DEVELOPMENT CENTER**

OBJECTIVES	TEACHING STRATEGIES
To take a pap smear	Small Group Discussion

**SURGERY**

OBJECTIVES	TEACHING STRATEGIES
Discuss the clinical presentation of benign and malignant breast tumors	Interactive Lecture

**UROLOGY**

OBJECTIVES	TEACHING STRATEGIES
<b>1. STIs in males: MGT including epididymitis, orchitis, prostatitis</b>	Interactive Lectures
Describe the etiology, pathophysiology, symptoms and signs, investigations and treatment plan for STIs in males (viz. Epididymitis, orchitis, prostatitis, gonorrhoea, non-specific urethritis, genital herpes, genital warts, syphilis and HIV)	
<b>2. Male sexual dysfunction</b>	
Explain the anatomy and physiology of Penile Erection	
Classify the causes of Erectile Dysfunction	
Discuss the various investigations for diagnosis of erectile dysfunction	
Discuss the treatment options for Erectile dysfunction including penile implant	
<b>3. Male Infertility</b>	
Define infertility	
Describe the stages of spermatogenesis and fertilization	
List the causes of male infertility	
Discuss steps of evaluation of male infertility including history, examination and investigations	
Describe the treatment options for the common conditions causing male infertility	
<b>4. Testicular tumors</b>	
Discuss the clinical presentation of different types of testicular tumors	

**Apart from attending daily scheduled sessions, students too should engage in self-study to ensure that all the objectives are covered**



**LEARNING RESOURCES**

<b>SUBJECT</b>	<b>RESOURCES</b>
<b>ANATOMY</b>	<b>A. <u>GROSS ANATOMY</u></b> 1. K.L. Moore, Clinically Oriented Anatomy <b>B. <u>EMBRYOLOGY</u></b> 1. KeithL. Moore. The Developing Human 2. Langman’s Medical Embryology
<b>COMMUNITY MEDICINE</b>	<b><u>TEXTBOOKS</u></b> 1. Community Medicine by Parikh 2. Community Medicine by M Ilyas 3. Basic <i>Statistics</i> for the Health Sciences by Jan W Kuzma
<b>OBGYN</b>	<b><u>TEXT BOOK</u></b> 1. Obstetrics by Ten Teachers, Louise C. Kenny, Jenny E. Myers 2. Gynaecology by Ten Teachers, Louise Kenny, Helen Bickerstaff 3. Hacker & Moore’s Essentials of Obstetrics and Gynecology 4. Textbook of Gynecology, Rashid Latif Khan 5. Fundamentals of Gynaecology, Dr Arshad Chohan
<b>PATHOLOGY/MICROBIOLOGY</b>	<b><u>TEXTBOOKS</u></b> 1. Robbins & Cotran, Pathologic Basis of Disease,9 <sup>th</sup> edition. 2. RapidReviewPathology,4 <sup>th</sup> edition by Edward F. Goljan MD <b><u>WEBSITES:</u></b> 1. <a href="http://library.med.utah.edu/WebPath/webpath.html">http://library.med.utah.edu/WebPath/webpath.html</a> 2. <a href="http://www.pathologyatlas.ro/">http://www.pathologyatlas.ro/</a>
<b>PHYSIOLOGY</b>	<b>A. <u>TEXTBOOKS</u></b> 1. Textbook Of Medical Physiology by Guyton And Hall 2. Ganong’s Review of Medical Physiology 3. Human Physiology by Lauralee Sherwood 4. Berne & Levy Physiology 5. Best & Taylor Physiological Basis of Medical Practice
<b>PEDIATRICS</b>	<b><u>TEXT BOOK:</u></b> Basis of Pediatrics (8 <sup>th</sup> Edition Pervez Akbar)

**ASSESSMENT METHODS:**

- **Best Choice Questions(BCQs)** also known as MCQs (Multiple Choice Questions)
- **Objective Structured Practical/Clinical Examination (OSPE or OSCE)**

**BCQs:**

- A BCQ has a statement or clinical scenario of four options (likely answers).
- **Correct answer carries one mark, and incorrect 'zero mark'. There is NO negative marking.**
- Students mark their responses on specified computer-based sheet designed for LNHMC.

**OSCE:**

- All students rotate through the same series of stations in the same allocated time.
- At each station, a brief written statement includes the task. Student completes the given task at one given station in a specified time.
- Stations are observed, unobserved, interactive or rest stations.
- In unobserved stations, flowcharts, models, slide identification, lab reports, case scenarios may be used to cover knowledge component of the content.
- Observed station: Performance of skills /procedures is observed by assessor
- Interactive: Examiner/s ask questions related to the task within the time allocated.
- In Rest station, students in the given time not given any specific task but wait to move to the following station.

**Internal Evaluation**

- Students will be assessed comprehensively through multiple methods.
- 20% marks of internal evaluation will be added to JSMU final exam. That 20% may include class tests, assignment, practicals and the internal exam which will all have specific marks allocation.

**Formative Assessment**

Individual department may hold quiz or short answer questions to help students assess their own learning. The marks obtained are not included in the internal evaluation

**For JSMU Examination Policy, please consult JSMU website!**

**More than 75% attendance is needed  
to sit for the internal and final  
examinations**

**LNH&MC EXAMINATION RULES & REGULATIONS**

- Student must report to examination hall/venue, 30 minutes before the exam.
- **Exam will begin sharp at the given time.**
- No student will be allowed to enter the examination hall after 15 minutes of scheduled examination time.
- Students must sit according to their roll numbers mentioned on the seats.
- **Cell phones are strictly not allowed in examination hall.**
- If any student is found with cell phone in any mode (silent, switched off or on) he/she will be not be allowed to continue their exam.
- No students will be allowed to sit in exam without University Admit Card, LNMC College ID Card and Lab Coat
- Student must bring the following stationary items for the exam: Pen, Pencil, Eraser, and Sharpener.
- Indiscipline in the exam hall/venue is not acceptable. Students must not possess any written material or communicate with their fellow students.

**SCHEDULE:**

WEEKS	4TH YEAR	MONTH
WEEKS 1 -9	REPRODUCTIVE SYSTEM II MODULE	28 <sup>th</sup> June 2021
		28 <sup>th</sup> Aug 2021
WEEKS 1-9	NEUROSCIENCES II MODULE	30 <sup>th</sup> Aug 2021*
		Oct 2021*
PRE PROF. EXAMINATION*		

\*Final dates will be announced later