

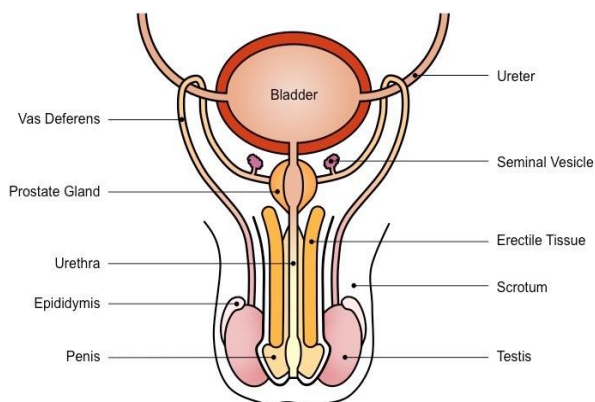


STUDY GUIDE

REPRODUCTIVE MODULE 2

FOURTH YEAR MBBS SEMESTER 7

13th Nov 2017 – 6th Jan 2018
Duration: 8 weeks



**LIAQUAT NATIONAL HOSPITAL
& MEDICAL COLLEGE**



STUDY GUIDE FOR REPRODUCTIVE 2 MODULE

S.No	CONTENTS	Page No.
1	Overview	3
2	Introduction to Study Guide	4
3	Learning Methodologies	5
4	Module : Reproductive 2	9
4.1	Introduction	10
4.2	Objectives and Learning Strategies	10
4.3	Objectives for Task Oriented Learning	17
5	Learning Resources	19
5.1	Additional Learning Resources	20
6	Assessment Methods	21
7	Semester Examination Rules and Regulations of JSMU	23
8	Modular Examination Rules and Regulations (LNMC)	26
9	Schedule	27
10	Appendix: A	28
11	Appendix: B	29

Module name: **Reproductive System-II**

Semester: **Seven**

Year: **Four**

Duration: **8 weeks (Nov 2017 - Jan 2018)**

Timetable hours: **Lectures, Case-Based Discussion (CBD), Clinical Rotations, Task Oriented Learning, Task Presentation, Demonstrations, Skills, Self-Study**

MODULE INTEGRATED COMMITTEE

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CO-COORDINATORS:	<i>Dr. Afifa Tabassum (DHCE)</i>

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COMMUNITY MEDICINE <ul style="list-style-type: none"> Professor Rafiq Soomro 	BIO-ETHICS <ul style="list-style-type: none"> Dr. Saleha Shahzad
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INTRODUCTION

WHAT IS A STUDY GUIDE?

It is an aid to:

- Inform students how student learning program of the semester-wise 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:

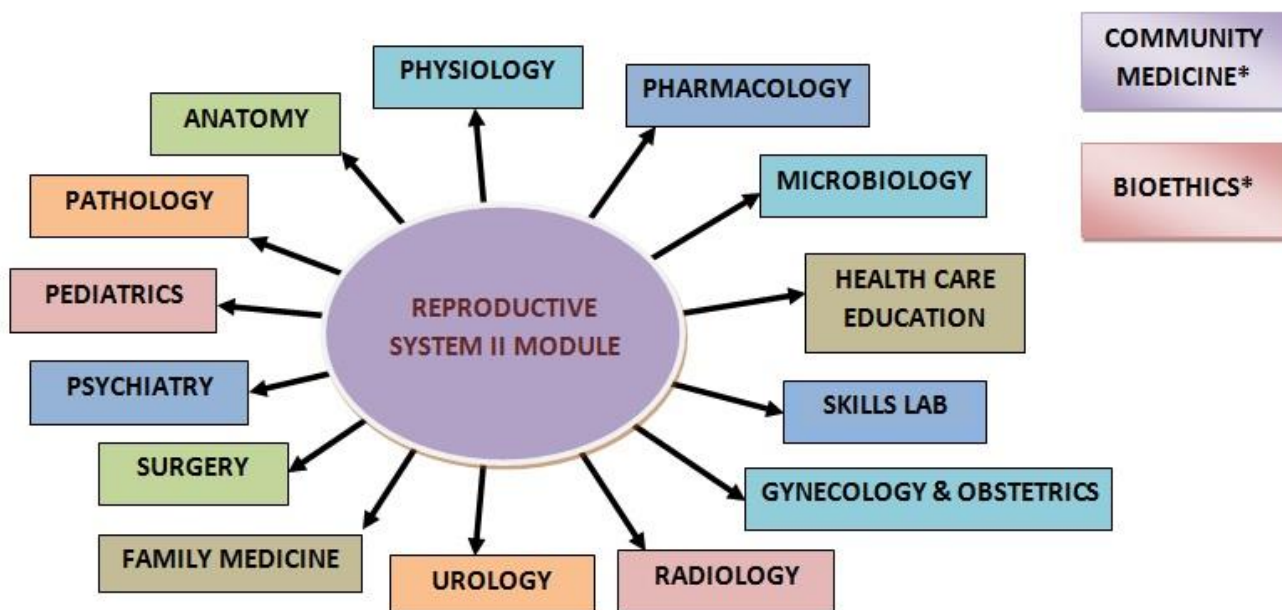
- Communicates information on organization and management of the module.
This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small 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.

CURRICULUM FRAMEWORK

Students will experience *integrated curriculum* similar to previous modules of all 6 semesters. In 7th semester 49 students of group A and B will experience ENT and 48 of Group C and D will experience Eye. Similarly in 8th Semester the groups will reciprocate i.e the later 48 students will experience ENT and 49 will experience Eye.

INTEGRATED CURRICULUM comprises system-based modules such as Eye/ENT, Orthopedics 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

Note: *Community Medicine & Bioethics Curriculum will run parallel in 7th and 8th Semester

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
- Task-Oriented Learning
 - Task Presentation

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 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.

TASK ORIENTED LEARNING:

What is Task Oriented Learning (TOL)?

In this module, objectives will be achieved by using multiple instructional strategies other than lectures only. **Task oriented learning** is being introduced to enhance students' learning and to get insight of the content necessary to move forward in to practical application of course materials. Students will be engaged in self directed learning as well as peers' collaboration and faculty led instructions

Process of TOL

Learning in this strategy will comprises of two stages

Stage 1: Pre-class learning in groups

Stage 2: In-class group focused active learning

Stage 1 (Pre-Class)	Stage 2 (In-Class)
Individual/group study and Group presentation preparation	Group presentation and assessment by facilitator followed by Q/A session

TOL process stage 1:

Students will be divided in 6 sub groups (8-9 members in each sub group). Students' group will be given task based on few objectives. These objectives will be posted on edmodo (For groupings see Appendix B).

Link for Edmodo: <https://www.edmodo.com/>

Class name: Reproductive Module 2

Class code: q7k9ak

Students will have defined time slots for achieving the objectives. They will be required to study the recommended authentic website (patient education websites are strictly NOT ADVISED!!!) and work in groups to develop presentations during allotted study hours.

TOL process stage 2:

The groups will then be required to present their PPT/Prezi in class to show their understanding of subject matter.

Time for group presentation: Each presentation should not exceed 10 minutes followed by five minutes discussion

Assessment

The group presentations and collaborative work will be graded on defined criteria (See Appendix A). Each student is to demonstrate active participation and effective contribution during the group activities. It is mandatory for the students to participate in this activity as their scores will contribute to **internal evaluation**.

SEMESTER 7 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.

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:

Introduction/Review		
Objectives	Teaching Strategy	Department
<ul style="list-style-type: none"> Describe the structure of male and female genital tract Identify the gross anatomical features of female external genitalia 	Interactive Lecture	Anatomy
<ul style="list-style-type: none"> Describe the gross anatomy of the female pelvic organs i-e ovaries, uterine tubes, the uterus with its supporting ligaments and the vagina 	Small Group Discussion	
<ul style="list-style-type: none"> Discuss clinical importance of female pelvis 	Interactive Lecture	
<ul style="list-style-type: none"> Explain the role of clinical pelvimetry 	Small Group Discussion	
<ul style="list-style-type: none"> Describe the function of male reproductive structures, hormones and their regulation 	Interactive Lecture	Physiology
<ul style="list-style-type: none"> Explain the role of Pampiniform Plexus 	Small Group Discussion	
<ul style="list-style-type: none"> Discuss the role of pituitary in controlling menstruation and ovulatory cycle Describe the process and regulation of the ovarian and uterine cycles 	Interactive Lecture	
<ul style="list-style-type: none"> Discuss androgens in detail Classify antiandrogens. Discuss their clinical uses / effects and adverse effects Classify and discuss pharmacological properties of estrogens Discuss antiestrogens in details along with pharmacological profile 	Cased-Cased Discussion	Pharmacology

GYNECOLOGY		
Sexually Transmitted Infections		
<ul style="list-style-type: none"> Describe the etiology and pathophysiology of Sexually Transmitted Infections (STIs) 	Interactive Lecture	Microbiology
<ul style="list-style-type: none"> Identify, under microscope, the organisms involved in Sexually Transmitted Infections 	Practical	
<ul style="list-style-type: none"> Classify infections of the lower and upper genital tract in relation to their morphology & clinical effects 	Practical	Pathology
<ul style="list-style-type: none"> Describe etiology, pathophysiology, symptoms, signs, investigations and treatment plan for STIs in males and females (Epididymitis, orchitis, prostatitis (chlamydia, gonorrhoea, non-specific urethritis, genital herpes, genital warts, syphilis and HIV) 	Interactive Lecture	Urology
<ul style="list-style-type: none"> List the causes of vaginal discharge 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, Gonorrhea and Chlamydia trachomatis infection. Discuss steps for prevention and recurrence of vaginal discharge 	Task Oriented Learning followed by task Presentation	ObGyn
<ul style="list-style-type: none"> Explain the importance of pre and post HIV test Counseling Identify issues of confidentiality in dealing with a patient with STI 	Small group session	Family medicine
Pelvic Inflammatory Disease		
<ul style="list-style-type: none"> 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 	Interactive Lecture	ObGyn

Amenorrhea/Dysmenorrhae		
<ul style="list-style-type: none">• Define primary & secondary amenorrhea and oligomenorrhea• Explain the etiology, symptoms and signs, investigations and treatment options for primary, secondary amenorrhea and oligomenorrhea• Based on data provided, differentiate among the three types of amenorrhea• Interpret the hormone profile report for PCOS• Discuss etiology, pathophysiology, diagnosis, and management options for PCOS	Interactive Lecture	ObGyn
<ul style="list-style-type: none">• Define Primary & Secondary dysmenorrhea• Describe etiology, pathophysiology, symptoms, signs, investigations and treatment plan for primary & secondary dysmenorrhea• Justify treatment plan for primary and secondary dysmenorrhea based on etiology	Interactive Lecture	
Fibroids		
<ul style="list-style-type: none">• Differentiate among the various types of fibroids based on their etiology, symptoms, signs and pathophysiology• Justify selection of investigations for fibroid uterus• Justify management plans for Fibroids	Task Oriented Learning followed by task Presentation	ObGyn
Endometriosis and Adenomyosis		
<ul style="list-style-type: none">• Define Endometriosis and Adenomyosis• Differentiate between Endometriosis and Adenomyosis based on etiology, risk factors, clinical presentations and pathophysiology• Justify selection of investigations for Endometriosis and Adenomyosis• Diagnose Endometriosis and Adenomyosis based on history, examination findings and investigation reports• Discuss the medical and surgical treatment options for endometriosis	Interactive Lecture	ObGyn

Ectopic Pregnancy		
<ul style="list-style-type: none"> Define ectopic pregnancy Discuss differential diagnosis of acute abdomen in women Based on data provided (history, examination findings, investigation reports) diagnose ectopic pregnancy Discuss the treatment options for ectopic pregnancy including the criteria for medical treatment 	Interactive Lecture	ObGyn
Abortion		
<ul style="list-style-type: none"> 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 	Task Oriented Learning followed by task Presentation	ObGyn
Infertility		
<ul style="list-style-type: none"> Define Sub-fertility Based on data provided (history, examination findings, investigation reports) diagnose sub fertility in a male and female Discuss the causes of anovulation in women Interpret the reports of Semen analysis in male and hormone profile in female Discuss the treatment options for Sub fertility 	Interactive Lecture	ObGyn
<ul style="list-style-type: none"> Describe the psychosocial issues associated with infertility Describe ethical issues confronted by patients with infertility 	Interactive Lecture	Psychiatry
Tumors Of Lower Female Genital Tract		
<ul style="list-style-type: none"> Describe benign and malignant lesions of vulva and vagina 	Interactive Lecture	Pathology
<ul style="list-style-type: none"> List the risk factors, pathogenesis and morphological types of cervical carcinoma 	Interactive Lecture	

Tumors Of Upper Female Genital Tract		
<ul style="list-style-type: none">Enumerate premalignant Uterine lesionsDiscuss pathogenesis, molecular markers and morphological subtypes of Endometrial carcinoma	Interactive Lecture	Pathology
<ul style="list-style-type: none">Discuss the uterine stromal and myometrial tumors	Small Group Discussion	
<ul style="list-style-type: none">Classify Ovarian tumorsList Subtypes of surface epithelial tumors and describe their pathogenesis	Interactive Lecture	
<ul style="list-style-type: none">List Germ cell tumors of ovary with their tumor makers	Interactive Lecture	
<ul style="list-style-type: none">Identify gross pathology and microscopic slides of malignant tumors of female genital tract	Practical	
OBSTETRICS		
Normal Pregnancy		
<ul style="list-style-type: none">Based on data provided, diagnose a case of pregnancyDiscuss the physiological changes during pregnancy in the pregnant woman	Interactive Lecture	ObGyn
<ul style="list-style-type: none">Discuss the incidence, types and causes of multiple pregnancyDescribe the signs and symptoms, diagnosis, investigations and management of multiple pregnancyDiscuss the difference between monochorionic and dichorionic pregnancies	Task Oriented Learning followed by task Presentation	ObGyn
<ul style="list-style-type: none">Take a detailed history from an Obstetric and Gynecologic real or simulated patient	Skills	
<ul style="list-style-type: none">Discuss psychopharmacology during pregnancy	Interactive Lecture	Psychiatry
Antenatal Care		
<ul style="list-style-type: none">Describe the importance and process of antenatal care	Interactive Lecture	ObGyn

<ul style="list-style-type: none"> • Differentiate between the terms screening and diagnosis and between screening and diagnostic tests • Discuss the purpose and advantages of prenatal diagnosis and explain the differences • List indications for prenatal screening and diagnosis especially for Down's syndrome and neural tube defects • Explain the basic procedures, advantages and disadvantages of diagnostic procedures including chorionic villous sampling, amniocentesis and chordocentesis 	Interactive Lecture	ObGyn
High Risk Pregnancy And Complications Of Pregnancy		
<ul style="list-style-type: none"> • Define high risk pregnancy • List the high risk factors which endanger the life of the mother or baby and can complicate pregnancy • Justify referral of a high risk pregnancy patient to a tertiary care facility • Discuss methods for improving maternal and perinatal mortality and morbidity 	Interactive Lecture	ObGyn
<ul style="list-style-type: none"> • List early and late complications of Pregnancy • Describe the pathogenesis of Eclampsia 	Interactive Lecture	Pathology
Rh Incompatibility		
<ul style="list-style-type: none"> • Define Rh Incompatibility and ErythroblastosisFetalis • Describe the pathophysiology of Rh Incompatibility Justify the steps of management and prevention of Rh Incompatibility 	Case-based discussion	ObGyn
<ul style="list-style-type: none"> • Discuss differential diagnosis of jaundice in neonates including physiological jaundice • Discuss pathophysiology and investigations for jaundice • Explain the management of hyperbilirubinemia in the neonatal period • Outline the clinical manifestations of acute bilirubin encephalopathy 	Interactive Lecture	Pediatrics

Normal Labor		
<ul style="list-style-type: none">• Define labor• Explain the stages of normal labor.• Describe the basic mechanisms of labor evaluation• Describe the 7 cardinal movements of labor• Explain the technique of proper delivery, traction, and handling of infant after delivery	Small Group Discussion	ObGyn
<ul style="list-style-type: none">• Perform per-abdominal examination of a pregnant female / mannequin according to prescribed steps	Skills	RSDC
<ul style="list-style-type: none">• Define Induction and Augmentation of labor• Explain indications, contraindication, advantages, disadvantages of Induction and Augmentation of labor• Discuss the monitoring and management of induced and augmented labor	Interactive lecture	ObGyn
<ul style="list-style-type: none">• Demonstrate the mechanism of labor on the model of mannequins and pelvis	Skills	
Fetal Surveillance		
<ul style="list-style-type: none">• Define Partograph and CTG• List the uses of partograph and CTG in the management of normal labor• Interpret normal and abnormal Partograph and CTG• Discuss the management of abnormal Partograph and CTG	Small Group Discussion	ObGyn
<ul style="list-style-type: none">• Describe the purpose and advantages of fetal surveillance• Discuss the different indications for fetal surveillance• Explain the methods of fetal surveillance (fetal kick count, ultrasound for fetal growth, biophysical profile and CTG)• Interpret CTG	Interactive lecture	
Abnormal Labour		
<ul style="list-style-type: none">• Define malpresentations and Malpositions and list the different types for each• Describe causes of Breech, Transverse lie and other malpresentations and malpositions• Describe the management options for each malpresentation and malposition	Small Group Discussion	ObGyn

<ul style="list-style-type: none"> Identify different types of Breech presentations, Transvers lie, Face and Brow presentations and malpositions on the mannequins and pelvic Models 	Skills	ObGyn
IUGR And Small For Gestational Age (SGA)		
<ul style="list-style-type: none"> Define the terms IUGR, SGA, Low birth weight in neonates Describe the evaluation, types of IUGR , investigation and management of a neonate with IUGR List the complications and long term outcome of a neonate with IUGR 	Interactive Lecture	Pediatrics
Care of Newborn		
<ul style="list-style-type: none"> Discuss routine care of newborn Discuss the initial steps in resuscitation of newborn babies Discuss ventilatory assistance in newborns Discuss when & how to support heart in newborn babies 	Skills	Pediatrics
<ul style="list-style-type: none"> Distinguish between primary & secondary apnea Discuss pulmonary circulation & asphyxia Identify primary signs utilized for evaluating newly born babies during resuscitation Define the APGAR score and its purpose 	Interactive Lecture	
<ul style="list-style-type: none"> Discuss the advantages of breastfeeding for the baby, mother, family, and country Counsel the mother about advantages of breast feeding 	Small Group Discussion	ObGyn
<ul style="list-style-type: none"> Summarize postnatal diagnosis of the commonest congenital abnormalities 	Interactive Lecture	Pediatrics
Puerperium		
<ul style="list-style-type: none"> Define puerperium Describe signs and symptoms of normal and abnormal puerperium and its management (including for puerperal pyrexia and puerperal sepsis) 	Interactive Lecture	ObGyn
<ul style="list-style-type: none"> Discuss the clinical presentation of post-partum depression 	Interactive Lecture	Psychiatry
Gestational Trophoblastic Disease		
<ul style="list-style-type: none"> List gestational trophoblastic diseases Differentiate between Partial and Complete hydatidiform mole 	Small Group Discussion	Pathology

Breast Cancer		
<ul style="list-style-type: none"> Recognize the various risk factors in development of breast cancer Differentiate between Hereditary and Sporadic breast cancer in terms of pathogenesis Classify various morphological types of DCIS and Invasive carcinoma in terms of morphology and prognosis 	Interactive Lecture/practical	Pathology
<ul style="list-style-type: none"> Identify prognostic & predictive factors in breast cancer and their importance in breast cancer management Recognize the stages of breast cancer 	Interactive Lecture	Pathology
<ul style="list-style-type: none"> List molecular subtypes of breast cancer 	Small Group Discussion	
<ul style="list-style-type: none"> Explain the different surgical options for management of the breast tumor 	Interactive Lectures	Surgery
Male Genital System		
<ul style="list-style-type: none"> Describe male breast pathologies 	Interactive Lecture	Pathology
<ul style="list-style-type: none"> Classify Testicular tumors Discuss the pathogenesis and risk factors of Germ cell tumors 	Interactive Lecture	
<ul style="list-style-type: none"> List the risk factors and discuss the pathogenesis of Prostatic carcinoma Recognize the morphological patterns and grading system for prostatic carcinoma 	Interactive Lecture	
<ul style="list-style-type: none"> Identify gross pathology & microscopic slides of benign lesions & tumors of MGT 	Practical	
<ul style="list-style-type: none"> Discuss the management of testicular tumors 	Interactive Lectures	Urology
Contraception		
<ul style="list-style-type: none"> Discuss in detail mechanism of action, effects clinical uses and toxicity of progestins Explain antiprogestins in detail Discuss clinical uses and adverse effects of antiprogestins Enlist different combinations of hormonal contraceptives Explain their mechanism of action, clinical uses and potential toxicities 	Interactive Lecture	Pharmacology
<ul style="list-style-type: none"> Discuss the use of various contraceptive methods with the patient 	Small Group Discussion	Family medicine

Imaging Modalities in ObGyn		
<ul style="list-style-type: none">List the indications for the different imaging modalities in the investigation of the Reproductive SystemName different radiologic examinations of the reproductive systemIdentify major radiologic signs of disease of the reproductive system	Interactive Lecture	Radiology
Ethics		
<ul style="list-style-type: none">Describe human rights, rights of patient and duties of physiciansList the importance of rights of patientsCorrelate health and human rightsDiscuss the role of health professionals	Small Group Discussion	Bioethics
<ul style="list-style-type: none">Define informed consentEnumerate the types of consentDiscuss the five essential elements that make up an informed consent	Small Group Discussion	
Domestic and Sexual Violence		
<ul style="list-style-type: none">Identify patients at increased risk for domestic and sexual violence.Describe the medical and psychosocial management of a victim of sexual assault	Interactive Lectures	Psychiatry
Community Medicine		
<ul style="list-style-type: none">Define research and its componentsDiscuss the purpose and advantages of research, literature review and role of gray literatureExplain the role of search engines in data base searchClassify study designsDescribe the types of descriptive study designs along with advantages and disadvantagesDescribe the types of analytical study design and explain the case-control study design along with its advantages and disadvantages and measure of associationExplain the cohort study design along with its advantages and disadvantages and measure of association	Interactive Lectures / Small Group Discussions	

- | | | |
|--|--|--|
| <ul style="list-style-type: none">• Describe the types of experimental study designs along with advantages and disadvantages• Discuss the components of research methodology (including study setting, target population, sample technique and sample size etc.)• Explain the sample size calculations• Calculate sample sizes on different sample size softwares• Discuss the process and importance of ethical review• Describe types, tools and statistical tests used in data analysis• Justify selection of a statistical test based on prescribed criteria• Apply statistical tests based on prescribed criteria on the given datasets• Differentiate between Vancouver and Harvard style of reference writing and name the tools for reference writing• Define the essential components of report and steps in report writing and discuss evaluation of report writing | | |
|--|--|--|

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



Objectives for Task Oriented Learning (TOL)

By the end of the session students should be able to:

Task 1:
VAGINAL DISCHARGE
<ul style="list-style-type: none"> List the causes of vaginal discharge 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, Gonorrhea and Chlamydia trachomatis infection. Discuss steps for prevention and recurrence of vaginal discharge

Task 2
FIBROIDS
<ul style="list-style-type: none"> Differentiate among the various types of fibroids based on their etiology, symptoms, signs and pathophysiology Justify selection of investigations for fibroid uterus Justify management plans for Fibroids

Task 3
MULTIPLE PREGNANCY
<ul style="list-style-type: none"> 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

Task 4
ABORTION
<ul style="list-style-type: none"> 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

LEARNING RESOURCES

<i>SUBJECT</i>	<i>RESOURCES</i>
ANATOMY	A. <u>GROSS ANATOMY</u> 1. K.L. Moore, Clinically Oriented Anatomy B. <u>EMBRYOLOGY</u> 1. Keith L. Moore. The Developing Human 2. Langman's Medical Embryology
COMMUNITY MEDICINE	<u>TEXT BOOKS</u> 1. Community Medicine by Parikh 2. Community Medicine by M Ilyas 3. Basic <i>Statistics</i> for the Health Sciences by Jan W Kuzma
OBGYN	<u>TEXT BOOK</u> 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
PATHOLOGY/MICROBIOLOGY	<u>TEXT BOOKS</u> 1. Robbins & Cotran, Pathologic Basis of Disease, 9th edition. 2. Rapid Review Pathology, 4th edition by Edward F. Goljan MD
	<u>WEBSITES:</u> 1. http://library.med.utah.edu/WebPath/webpath.html 2. http://www.pathologyatlas.ro/
PHYSIOLOGY	A. <u>TEXTBOOKS</u> 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
PEDIATRICS	<u>TEXT BOOK:</u> Basis of Pediatrics (8 th Edition Pervez Akbar)

ADDITIONAL LEARNING RESOURCES

<u>Hands-on Activities/ Practical</u>	Students will be involved in Practical sessions and hands-on activities that link with the Reproductive Module to enhance learning.
<u>Museum</u>	Models available in the museum are a rich learning resource for quick review of anatomy and related educational activities
<u>Skills Lab</u>	Skills acquisition in a simulated environment in the skills lab involving experiential learning will ensure patient safety and will also help to build confidence in approaching the patients
<u>Internet Resources</u>	Students will use easily accessible internet resources with added time flexibility to enrich and update their knowledge and its application

ASSESSMENT METHODS:**Theory:**

- **Best Choice Questions (BCQs)** also known as MCQs (Multiple Choice Questions) are used to assess objectives covered in each module.
 - A BCQ has a statement or clinical scenario followed by four options (likely answer).
 - Students after reading the statement/scenario select ONE, the most appropriate response from the given list of options.
 - **Correct answer carries one mark, and incorrect 'zero mark'. There is no negative marking.**
 - Students mark their responses on specified computer-based/OMR sheet designed for LNHMC.
- **EMQs:**
 - An EMQ has:
 - An option list of 5-15 which may be nerve supply, functions, diagnosis, investigations etc
 - A Lead In –Statement/Question
 - Two to four Stems or Clinical Scenarios
 - For each stem or clinical scenario, the student should choose the most appropriate option from the option list.
 - A single option can be used once, more than once or not at all.
 - Correct answer carries one mark and incorrect 'zero mark'. There is **NO** negative marking.
 - Student mark their responses on a specified computer-based sheet for EMQs.

OSPE/OSCE: Objective Structured Practical/Clinical Examination:

- Each student will be assessed on the same content and have same time to complete the task.
- Comprise of 12-25 stations.
- Each station may assess a variety of clinical tasks, these tasks may include history taking, physical examination, skills and application of skills and knowledge
- Stations are observed, unobserved, interactive and rest stations.
- Observed and interactive stations will be assessed by internal or external examiners.
- Unobserved will be static stations in which there may be an X-ray, Labs reports, pictures, clinical scenarios with related questions for students to answer.
- Rest station is a station where there is no task given and in this time student can organize his/her thoughts.

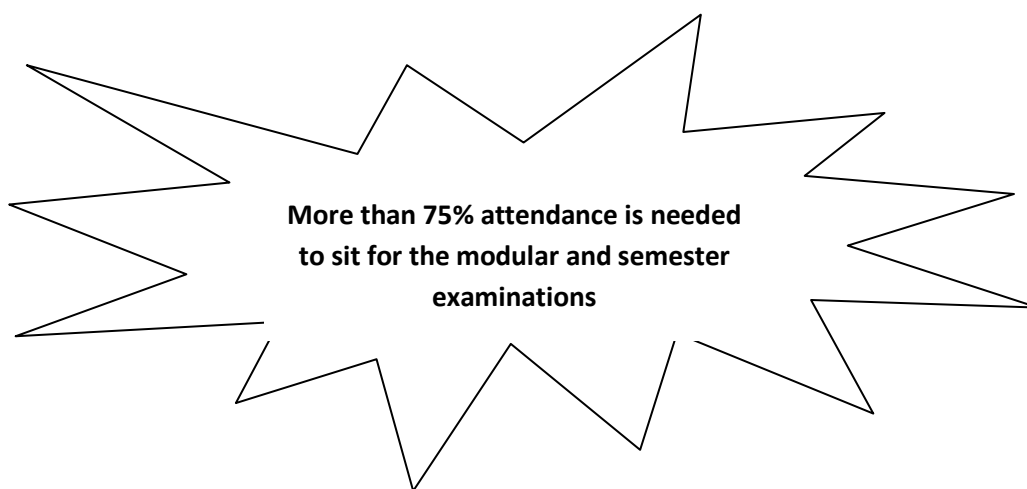
Internal Evaluation

- During the module, students will be assessed to determine achievement of module objectives.
- **Module Examination:** will be scheduled on completion of each module. The method of examination comprises theory exam which includes BCQs, EMQs and OSPE/OSCE (Objective Structured Practical Examination/Objective Structured Clinical Examination).
- 20% marks of internal evaluation will be added in theory of JSMU semester exam. That 20% will include class tests, assignments and the modular exam which all have specific marks allocation.

Example : Number of Marks allocated for Semester Theory and Internal Evaluation			
Semester	Semester Examination Theory Marks	Internal Evaluation (Task Presentation + Assignments + Modular Eaam	Total (Theory)
	80%	20%	100%

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



SEMESTER EXAMINATION RULES & REGULATIONS OF JINNAH SINDH MEDICAL UNIVERSITY (JSMU)

- In one academic year there will be two semesters. The semester duration is approximately sixteen/seventeen weeks.
- Each semester may have two to three modules from two to eight weeks duration.

JSMU EXAMINATIONS:

- **JSMU** will schedule and hold Semester Examinations on completion of each semester.
- In one academic year, there will be two semester examinations and one Retake Examination.

MBBS Fourth year:

- **Semester VII examination** is scheduled on completion of EYE, Orthopedics and **Reproductive System-II** modules.
- **Semester VIII examination** is scheduled on completion of ENT/EYE, Dermatology, Plastic Surgery & Burns, Neuro-Sciences-II & Psychiatry, Genetics and Rehabilitation modules.

Examination Protocols:

- In each semester, module will be assessed by theory paper comprising MCQs and EMQs. For example semester 7 will have separate theory paper of EYE, Orthopedics and **Reproductive System-II** modules.
- There will be one OSPE (Objective Structured Practical Examination)/OSCE (Objective Structured Clinical Examinations) which will cover all three modules of semester seven.

1. Theory

- Theory paper will comprise of 80 one best type MCQs and 20 EMQs.
- Time duration for theory paper will be 120 minutes.
- Students will mark their responses on JSMU specified response sheets assessed by computer software.
- It will carry out 80% contribution in theory results of the Semester.
- There is no negative marking.

2. OSPE/OSCE:

- It may comprise between 12- 25 stations. Each station will carry 10 marks.

3. JSMU Grading System

- It will be based on GPA – 4 system

Marks obtained in Percentage range	Numerical Grade	Alphabetical Grade
80-100	4.0	A+
75-79	4.0	A
70-74	3.7	A-
67-69	3.3	B+
63-66	3.0	B
60-62	2.7	B-
56-59	2.3	C+
50-55	2.0	C
<50 Un-grade-able	0	U

- A candidate obtaining GPA less than 2.00 (50%) is declared un-graded (fail).
- Cumulative transcript is issued at the end of clearance of **all** modules.

4. Retake Examination

- Retake examination will be held after each semester examination as per meeting held on 12 April 2017 (Ref.No.JSMU/REG/2017/-314)
- Retake examinations are for those students who fail in semester examinations, and those who have passed semester examinations with GPA less than 3.0 may reappear in respective retake examination to improve grades.
- The format of the retake examination is exactly the same as in semester examinations.
- Retake examination will be conducted 3 weeks after declaration of results.

5. Promotion to next class

- Students who pass both semester examinations are promoted from first year to second year.
- Students who fail the MBBS first year semester retake examination will be promoted to second year.
- Students will be promoted from **second year to third year and onward only** if they have passed the semester examinations of that year.
- Clearance of all modules and their components of semester one to four are mandatory for promotion from second year to third year (as per PMDC rules).
- As per PMDC rules any candidate failing to clear a module or its component in four (1+3) attempts is not allowed to carry out further medical education.
- Clearance of all modules and their components of semester/s are mandatory for promotion from third year onward.

MODULAR EXAMINATION RULES & REGULATIONS (LNH&MC)

- 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	4 th Year SEMESTER 7	MONTH
WEEK 1	OPHTHALMOLOGY	16 th Oct 2017
WEEK 2		
WEEK 3		
WEEK 4		8 th Nov 2017
	MODULAR EXAM	10 th Nov 2017
WEEK 1	REPRODUCTIVE SYSTEM-II	13 th Nov 2017
WEEK 2		
WEEK 3		
WEEK 4		
WEEK 5		
WEEK 6		
WEEK 7		
WEEK 8		6 th Jan 2018*
	MODULAR EXAM	4,5 Jan 2018*
WEEK 1	ORTHOPEDICS	Jan 2018*
WEEK 2		
WEEK 3		
WEEK 4		
WEEK 5		Feb 2018*
	MODULAR EXAM	Feb 2018*
PREPARATORY LEAVE		
	SEMESTER EXAM	March 2018*

*Final dates will be announced later

APPENDIX: A**LIAQUAT NATIONAL MEDICAL COLLEGE****FOURTH YEAR MBBS, SEMESTER VII REPRODUCTIVE SYSTEM-II MODULE****Criteria: Group Task Presentation**

Speaker/Group: _____

Assignment: _____

This criteria is designed to clarify the grading process for Group Oral Presentations	Not Acceptable	Poor	Average	Good	Excellent
	0	1	2	3	4
Content					
1. Objective were achieved during the presentation					
2. Information in presentation is clear and organized.					
3. Material presented was derived from authentic sources					
4. Queries answered appropriately					
Collaboration					
5. Every member of the group contributed to the presentation.					
6. Smooth transition of group members from one presenter to another during presentation.					
Presentation Style/ Professionalism					
7. Appropriate interaction with audience members.					
8. Readiness to present at scheduled time.					
9. Presentation completed within assigned time					

Marks obtained out of 36: _____

Facilitators' signature: _____, _____, _____

APPENDIX B:

SR.#	Roll. #	Name of Students	
Group-A			Sub Group
1	MC/2020/001	Aatqua Nadeem	A1
2	MC/2020/002	Aisha Bibi	
3	MC/2020/003	Akash Kumar	
4	MC/2020/004	Akasha Haroon	
5	MC/2020/005	Aliha	
6	MC/2020/006	Alizay Rehman	
7	MC/2020/007	Anees Mazhar	
8	MC/2020/008	Anusha Kafeel	
9	MC/2020/009	Aqsa	A2
10	MC/2020/010	Arifa Bashir	
11	MC/2020/011	Arshia Siddiqua	
12	MC/2020/012	Asad Mehdi	
13	MC/2020/013	Ayesha	
14	MC/2020/014	Ayesha Khan	
15	MC/2020/015	Bakhtawar Mubeen	
16	MC/2020/016	Bilal Yousuf	
17	MC/2020/017	Deepak Kumar	A3
18	MC/2020/018	Dhanwanti Devi	
19	MC/2020/019	Eraj Javed	
20	MC/2020/020	Faiza Faisal	
21	MC/2020/021	Faiza Raheem	
22	MC/2020/022	Fariha Ejaz	
23	MC/2020/023	Fatima Suleman	
24	MC/2020/024	Fizzah Qamar	
25	MC/2020/025	Ganpat Kumar	

Group-B			
1	MC/2020/026	Gul Muhammad	B1
2	MC/2020/027	Hadiqa Sana	
3	MC/2020/028	Hafiz Ali Shabbir Rajput	
4	MC/2020/029	Hanesh Tanwani	
5	MC/2020/030	Haresh Kumar	
6	MC/2020/031	Hiba Rasheed	
7	MC/2020/032	Hina Javeria	
8	MC/2020/033	Hira Rafaqat	
9	MC/2020/034	Hunaiza Muhammad Siraj	B2
10	MC/2020/035	Iftikhar Ahmed	
11	MC/2020/037	Imran Khan	
12	MC/2020/038	Jai Parkash	
13	MC/2020/039	Jai Shankar	
14	MC/2020/040	Kainat Fatima	
15	MC/2020/041	Kanchan Kumari	
16	MC/2020/042	Kashmalla	
17	MC/2020/043	Khushbakht Rashid	B3
18	MC/2020/044	Kiran Zahid	
19	MC/2020/045	Laiba Amini	
20	MC/2020/046	Maham Atta	
21	MC/2020/047	Maira Hassan	
22	MC/2020/049	Mehran Khan	
23	MC/2020/050	Mehroze Fatima	
24	MC/2020/051	Mirza Usman Baig	

SR.#	Roll. #	Name of Students	Sub Group
Group-C			
1	MC/2020/052	Mohammed Akram	C1
2	MC/2020/053	Muhammad Kamran	
3	MC/2020/054	Muhammad Mairaj Khan	
4	MC/2020/055	Muhammad Shah Zaib Khan	
5	MC/2020/056	Naushad Nizam	
6	MC/2020/057	Nida Nisar	
7	MC/2020/058	Nimra Naeem	
8	MC/2020/059	Nisar Ahmed	C2
9	MC/2020/060	Noor-e-Saba	
10	MC/2020/061	Qurat ul Ain	
11	MC/2020/062	Ramish Rizwan	
12	MC/2020/063	Ramla Ali	
13	MC/2020/064	Ramsha Abbas	
14	MC/2020/065	Rohit Kumar	
15	MC/2020/066	Rumael Jawed Baig	C3
16	MC/2020/067	Saba Abrar	
17	MC/2020/068	Sabahat Ghafoor	
18	MC/2020/069	Saima Rajab	
19	MC/2020/070	Salma Khatoon	
20	MC/2020/071	Salma Zahir Imam	
21	MC/2020/072	Samahir Imtiaz	
22	MC/2020/073	Samiullah	
23	MC/2020/074	Sana Khan	
24	MC/2020/075	Sandeep Kumar	

Group-D			
1	MC/2020/076	Sanna	D1
2	MC/2020/077	Saud Nadeem	
3	MC/2020/078	Shahid Javeed	
4	MC/2020/079	Shahtaj Khan	
5	MC/2020/080	Shahzad Ahmad	
6	MC/2020/081	Shifa Khan	
7	MC/2020/082	Shrooq Anees	
8	MC/2020/084	Syeda Fizza Abbas	
9	MC/2020/085	Syeda Rabea Sarwar	D2
10	MC/2020/086	Syeda Suneela Zaheer	
11	MC/2020/088	Toseef Ahmad	
12	MC/2020/089	Uzma	
13	MC/2020/090	Vijay Kumar	
14	MC/2020/091	Vijay Kumar Vinesh	
15	MC/2020/092	Vinesh Kumar	
16	MC/2020/093	Wajeeha Shah	
17	MC/2020/094	Zainab	D3
18	MC/2020/095	Zainab Hasan	
19	MC/2020/096	Zainab Nadeem	
20	MC/2020/097	Zarmeen Khan	
21	MC/2020/098	Zoha Kashif	
22	MC/2020/099	Zubair Ahmed	
23	MC/2020/100	Sunny Kumar	
24	MC/2020/101	Usama Sadiq	