



Jinnah Medical & Dental College

REPRODUCTIVE SYSTEM MODULE 1 & 2

MBBS 2023-24

Health is not valued till sickness comes

Thomas Fuller

VISION

To set local and global standards for quality patient outcomes – creating a culture of excellence to promote a transformative experience for the 21st century clinicians, educators and researchers to benefit all humanity.

MISSION

To develop well-rounded academicians, thinkers, clinicians and researchers by strengthening a global view, broadening intellectual foundations and teach effective communication. It is our aspiration to cultivate creative and critical thinking skills for problem solving, sensitive to cultural and ethical values and responsibilities. Our graduates will be role models and society leaders.

Team Members of Reproductive System Module I &II 2022-23

Name	Committee	Department
Professor Dr. Muhammad Baqir Soomro	Member	Anatomy
Professor Dr. Shahid Ahsan	Member	Biochemistry
Professor Dr. Sadaf Fatima	Member	Physiology
Professor Dr. Sanowar Ali	Member	Community Medicine
Vice Principal Ms. Debra Lobo	Member	Behavioral Sciences /Psychiatry
Professor Dr. Mahdev Harani	Member	Pathology & Microbiology
Professor Dr. Asha Mahesh	Member	Gynecology & Obstetrics
Professor Dr. Samia Perwaiz Khan	Member	Pharmacology
Professor Dr. Farooq Umer	Member	Urology
Dr. Zeelaf Shahid Associate Director	Member	Medical Education

Introduction

Greetings and a very warm welcome to medical students in the Reproductive modules. This module has been developed to impart integrated teaching as a part of modular curriculum in Jinnah Medical & Dental College, Karachi. Reproductive module I (2nd year) is covered in 5 weeks and Reproductive module II (4th year) covered in 6 weeks.

An estimated 30,000 women die each year from pregnancy related causes and most recent estimates indicate that the MMR is 276 per 100,000 births annually in Pakistan. Undernutrition of girls, early marriages and high fertility rates with needs of contraception are important determinant of maternal ill health in Pakistan. By understanding the basic concepts in reproductive health, study of the regulation and functions of hormones and the drugs given for treatment of these issues are important determinants of reproductive modules. Reproductive health had been one of the leading challenges for health care administration and providers in underdeveloped countries like Pakistan. This module will focus on the normal structure and function of the Reproductive system and will help students apply this information to solve clinically relevant problems suitable for this level of students.

Rationale

It is designed to provide students with not only knowledge about basics of Reproductive system but also develop their ability to apply information to solve problems.



JMDC CURRICULUM SEQUENCE: MBBS 1-5 YEARS

Year	Module 1	EOM	Module 2	EOM	Module 3	EOM	Module 4	EOM	Module 5	EOM* Exam of Module								
1	Foundation-1 8 weeks		Blood-1 4 weeks		Locomotor-1 8 weeks		Respiratory-1 4 weeks		CVS-1 4 weeks									
	Islamiat & Ethics																	
2	Module 6	EOM	Module 7	EOM	Module 8	EOM	Module 9	EOM	Module 10	EOM	Module 11	EO M	Module 12	EOM				
	GIT-1 4 weeks		Head & Neck-1 5 weeks		Neurosciences-1 7 weeks		Special Senses 3 weeks		Endocrine-1 4 weeks		Reproductive-1 4 weeks		Urinary-1 5 weeks					
Communication Skills Patient Safety & Infection Control Pakistan Studies Professionalism & Ethics																		
3	Module 13	EOM	Module 14	EOM	Module 15	EOM	Module 16	EOM	Module 17	EOM	Module 18	EO M	EOM					
	Foundation 2 10 weeks		Blood-2 5 weeks		Locomotor-2 4 weeks		Respiratory-2 4 weeks		CVS-2 5 weeks		GIT-2 7 weeks							
Clinical Rotations (Each Batch) WT* = Ward test																		
Communication Skills Patient Safety & Infection Control Professionalism & Ethics																		
R1	Medicine 2 weeks		Psychiatry 2 weeks	WT	Surgery 2 weeks	WT	Orthopedics 2 weeks	WT	OBS/ GYN 2 weeks	WT	Pediatrics 2 weeks	WT	Eye 2 weeks	WT	Ent 3 weeks	WT		
R2	Medicine 2 weeks		Psychiatry 2 weeks		Surgery 2 weeks		Orthopedics 2 weeks		OBS/ GYN 2 weeks		Pediatrics 2 weeks		Eye 2 weeks		Ent 3 weeks			
4	Module 19	EOM	Module 20	EOM	Module 21	EOM	Module 22	EOM	Module 23	EOM	Module 24	EOM	Module 25	EOM	Module 26	EOM	Module 27	EOM
	Nervous Sys & Psychiatry 2 8 weeks		H & N & SP Senses 1 (Eye) 4 weeks		H & N & SP Senses 3 (ENT) 4 weeks		Endocrinology 2 4 weeks		Repro 2 6 weeks		Urinary 2 4 weeks		Derma 2 weeks		Orthopedics 2 weeks		Rehab 2 weeks	
Lectures Eye/ENT																		
Clinical Rotations (Each Batch)																		
Communication Skills Patient Safety & Infection Control Professionalism & Ethics																		
R1	Medicine 3 weeks	WT	Psychiatry 3 weeks	WT	Surgery 3 weeks	WT	Orthopedics 3 weeks	WT	OBS/ GYN 3 weeks	WT	Pediatrics 3 weeks	WT	Eye 3 weeks	WT	Ent 3 weeks	WT		
R2	Medicine 3 weeks	WT			Surgery 3 weeks	WT			Eye 3 weeks	WT			Ent 3 weeks	WT		WT		
LECTURES R***= Rotation																		
5	Medicine				Surgery				OBS/Gynae				Pediatrics					
	Clinical Rotations																	
Communication Skills Patient Safety & Infection Control																		
R1	Medicine 4 weeks				Surgery 4 weeks				OBS/ GYN 4 weeks				Pediatrics 4 weeks					
R2	Medicine 5 weeks				Surgery 5 weeks				OBS/ GYN 5 weeks				Pediatrics 5 weeks					

Final Exam

Students Assessment

There will be an end of module/rotation test after completion of module/clinical posting which will comprise the following components: -

i. Written Assessment

The theory paper will have components of one – best type multiple – choice questions (MCQs).

ii. Practical / lab examination:

This will comprise Objective Structured Clinical Examination (OSCE) The OSCE will have both observed and non-observed stations. The end of clinical posting will be of 2 hours duration. This will comprise the following components:

The OSPE/ OSCE will be conducted in batches. The students will be having different patterns of OSPE/OSCE in the subject of both Basic & Clinical Sciences.

Summary of marks of each module exam

Theory (BCQs) = 100 marks

OSPE (10 stations) = 100 marks

Total = 200 marks

Internal Assessment:

- Continuous monitoring of attendance and practical assessment in short groups By Mini CEX, DOPS and logbooks.
- It may be in the form of MCQs (BCQs), Ward tests, and OSCE.
- Internal assessment carries 20% weightage

Course Evaluation:

Course evaluation will be obtained through a feedback form which will be posted on the JMC website

Mandatory Policy:**Eligibility for sitting in Professional Examinations is as follows:**

- 75% overall Class Attendance
- 75% Attendance all Clinical Wards with passing marks in all Clinical Ward Tests.
- Minimum 40% aggregate marks on all Internal Examinations (Module Tests, Midterm, Pre-Professional Examinations)
- MBBS 1stYear: Complete all Professional Communication assignments with passing marks
- MBBS 1st& 2ndYear: Obtain passing marks in Behavioral Sciences & Research Module assessments
- MBBS 2ndYear: Presentation in Journal club at least twice in a year
- MBBS 4th& Final Year: CPC Presentation at least once in a year
- Skills Labs: Must be completed with passing marks
- Research Paper must be completed before MBBS 4 Professional Examination

Failure to Meet the Eligibility Requirements:

- A Student failing to meet the above listed eligibility for sitting in the professional examination will not be allowed to sit in 1st attempt of the Professional Examination.
The college has the right to withhold all students who however, not met the eligibility requirements from sitting in the 1st attempt.
- Such students who have been withheld from sitting in the 1st attempt of the Professional exam because of failure to meet the eligibility requirements will be allowed only to sit in the retake of that examination.

It is expected that deficiency in requirements of Professional communication assignments, Behavioral Sciences & Research Module assessments, journal Club presentations, CPC, Skills Labs must be made up and fulfilled before a student will allowed to sit in the retake exam.

Details of Attendance policy

The CR is responsible to bring attendance sheets from Student Affairs Office to each class. At the end of class, the attendance sheet must be signed and returned by the faculty member to the Student Affairs Office. No attendance sheets from students will be accepted.

These attendances will be compiled together as follows:

LECTURE ATTENDANCE = # Lectures Attended / Total # of Lectures

PRACTICAL ATTENDANCE = # Practical's Attended / Total # of Practical's

TUTORIAL ATTENDANCE = # Tutorials Attended / Total # of Tutorials

NOTE: All tutorials will be conducted by a Senior Faculty Member (AP or above), assisted by a Junior Faculty Member (Lecturer)

FINAL CLASS ATTENDANCE =

%Lecture Attendance + %Tutorial Attendance + %Practical Attendance

Teaching / Learning Methods

The teaching learning sessions of this module will be of diverse types:

- a. Large group interactive sessions (LGIS)
- b. Small group teaching will include tutorials and, case – based learning session.
- c. Problem – based learning sessions.
- d. Practical session will comprise sessions on early exposure to clinical methods and practical laboratory demonstrations.
- e. Seminars: On different topics, in which students will make oral presentations on different aspects of the allocated topic.
- f. Self-directed learning sessions: This is the time during which students are expected to revise what they have learnt in the class, clear their concepts by consulting different textbooks, reference material and prepare their assignments and projects.

Main Content Areas

Anatomy

- Pelvis and its types
- Sacrum + Joints of Pelvis
- Pelvic Boundaries and Pelvimetry
- Pelvic Malformations
- Pelvic peritoneal reflections in male & female
- Perineum: division, spaces and urogenital region
- Perineum: Anal triangle, Anal canal and Ischioanal Fossa
- Blood supply, venous and lymphatic drainage of pelvis & perineum
- Nerves of pelvis, perineum and sacral plexus
- Gross anatomy and histology of Testis, Epididymis and Scrotum
- Gross anatomy and histology of Prostate, Seminal vesicles & Bulbourethral glands
- Gross anatomy and histology of female genital tract, Ovary & Fallopian tube
- Gross anatomy and histology of Uterus, Cervix & Vagina
- Development of male reproductive system and Spermatogenesis
- Development of female reproductive system

Biochemistry

- Male Sex Hormones
- Female sex hormones
- Biochemical changes during menopause
- Pituitary Hormone and Menstrual Cycle
- Biochemical role of Placenta

Physiology

- Spermatogenesis, Semen & Capacitation of Sperms
- Male Sex Hormone: Testosterone & its functions
- Abnormalities of Male sexual function
- Functions of Ovary
- Puberty, Menstrual Cycle, Menarche & Menopause
- Pregnancy, Functions of Placenta, Maternal Changes During Pregnancy & Parturition
- Mammary Gland & Lactation

Community medicine

- Introduction to reproductive health
- Maternal care
- Infant Care
- Integrated Management of Neonatal & Childhood Illness (IMNCI)
- Family Planning

- Reproductive Tract Infections
- Fertility determinants

Behavioral Sciences / Psychiatry

- Management of male & female sexual and reproductive dysfunction
- Sexual and domestic violence

Pathology

- Congenital anomalies of female and male genital tract; Epididymo-orchitis
- Infectious agents causing genital ulcer disease
- Infectious agents causing vaginitis
- Pelvic Inflammatory Disease (PID)
- Sexually Transmitted Infections (STI)
- Non-neoplastic and neoplastic conditions of vulva and vagina
- Non-neoplastic and neoplastic conditions of cervix
- Endometrial Hyperplasia & Functional Endometrial Disorders
- Tumours of Uterine corpus (Benign and Malignant endometrial tumours)
- Non-neoplastic cysts and functional cyst of ovary and Poly Cystic Ovaries
- Ovarian Tumours - I (Tumours of ovary & fallopian tube)
- Ovarian Tumours – II
- Testicular Tumours
- Early and late disorders of Pregnancy/ Placenta; pre- eclampsia & eclampsia
- Gestational Trophoblastic Diseases
- Non-proliferative & proliferative breast diseases
- Tumours of breast

Gynecology & Obstetrics

- **Terminologies & definitions related to menstrual disorders**
- (Amenorrhea, Oligomenorrhea, Menorrhagia, dysmenorrhea, dyspareunia)
- Bleeding PV and early pregnancy complications {Miscarriages, Ectopic pregnancy, and Gestational Trophoblastic diseases/ neoplasia (molar) GTD/GTN}
- Postpartum Care and puerperal disorders
- Lactation management and breast care
- Poly-Cystic Ovary Syndrome (PCOS)
- Vulvo-vaginal infections (vaginal discharge)
- Pelvic Inflammatory Disease (PID, STIs)
- Sexually transmitted diseases
- UTI in Gynecology (Cystitis, Lower Urinary Tract Symptoms)
- Infertility
- Benign tumors of the genital tract I (Ovarian cysts, Polyps, Fibroid)

- Gynecological Investigations
- Public health issues related to reproductive health
- Family planning (contraceptive) methods

OBSTETRICS

- Antenatal care & Assessment
- Antenatal investigation
- Normal Labor
- Anemia in pregnancy
- Preterm Labor
- Abnormal Labor-I (Fetal mal-presentation and malposition)
- Abnormal Labor-II (Obstructed Labor)
- Induction of Labor
- Analgesia & Anesthesia in Obstetrics
- Role of ultrasound in Obstetrics

Pharmacology

- Androgens & Anti-androgens
- Progestins & Anti-progestins
- Drug used in pregnancy & lactation
- Contraceptive Drugs
- Acid Peptic Disorder including H. Pylori-I & II

Urology

- STIs in male genital tract; including epididymitis, orchitis, prostatitis
- Male sexual dysfunction
- Male Infertilit

GENERAL LEARNING OBJECTIVES:

By the end of this module, the students will be able to:

Anatomy

- Describe Pelvis and its types
- Discuss features of Sacrum & Joints of Pelvis
- Describe Pelvic Boundaries and Pelvimetry
- Explain Pelvic Malformations
- Describe Pelvic peritoneal reflections in male & female
- Explain Perineum: division, spaces and urogenital region
- Explain Perineum: Anal triangle, Anal canal and Ischioanal Fossa
- Describe Blood supply, venous and lymphatic drainage of pelvis & perineum
- Describe Nerves of pelvis, perineum and sacral plexus
- Explain Gross anatomy of Testis, Epididymis and Scrotum
- Describe histological features of Testis, Epididymis and Scrotum
- Explain Gross anatomy of Prostate, Seminal vesicles & Bulbourethral glands
- Describe histological features of Prostate, Seminal vesicles & Bulbourethral glands
- Explain Gross anatomy of female genital tract, Ovary & Fallopian tube
- Describe histological features of female genital tract, Ovary & Fallopian tube
- Explain Gross anatomy of Uterus, Cervix & Vagina
- Describe histological features of Uterus, Cervix & Vagina
- Describe Development of male reproductive system and Spermatogenesis
- Describe Development of female reproductive system

Biochemistry

- Discuss Male Sex Hormones
- Discuss Female sex hormones
- Explain Biochemical changes during menopause
- Describe Pituitary Hormone and Menstrual Cycle
- Describe Biochemical role of Placenta

Physiology

- Discuss Spermatogenesis, Semen & Capacitation of Sperms
- Describe Male Sex Hormone: Testosterone & its functions
- Explain Abnormalities of Male sexual function
- Discuss Functions of Ovary
- Describe Puberty, Menstrual Cycle, Menarche & Menopause
- Explain Pregnancy, Functions of Placenta, Maternal Changes During Pregnancy & Parturition
- Discuss Mammary Gland & Lactation

Community medicine

- Explain Introduction to reproductive health
- Discuss Maternal care
- Explain Infant Care
- Describe Integrated Management of Neonatal & Childhood Illness (IMNCI)
- Family Planning
- Explain Reproductive Tract Infections
- Describe Fertility determinants

Behavioral Sciences / Psychiatry

- Explain Management of male & female sexual and reproductive dysfunction
- Describe Sexual and domestic violence

Pathology

- Discuss Congenital anomalies of female and male genital tract; Epididymo-orchitis
- Discuss Infectious agents causing genital ulcer disease
- Explain Infectious agents causing vaginitis
- Discuss Pelvic Inflammatory Disease (PID)
- Describe Sexually Transmitted Infections (STI)
- Explain Non-neoplastic and neoplastic conditions of vulva and vagina
- Explain Non-neoplastic and neoplastic conditions of cervix
- Endometrial Hyperplasia & Functional Endometrial Disorders
- Explain Tumours of Uterine corpus (Benign and Malignant endometrial tumours)
- Describe Non-neoplastic cysts and functional cyst of ovary and Poly Cystic Ovaries
- Discuss Ovarian Tumours - I (Tumours of ovary & fallopian tube)
- Explain Ovarian Tumours – II
- Describe Testicular Tumours
- Explain Early and late disorders of Pregnancy/ Placenta; pre- eclampsia & eclampsia
- Discuss Gestational Trophoblastic Diseases
- Explain Non-proliferative & proliferative breast diseases
- Describe Tumours of breast

Gynecology & Obstetrics

- Describe Terminologies & definitions related to menstrual disorders (Amenorrhea, Oligomenorrhea, Menorrhagia, dysmenorrhea, dyspareunia)
- Describe Explain Bleeding PV and early pregnancy complications {Miscarriages, Ectopic pregnancy, and Gestational Trophoblastic diseases/ neoplasia (molar) GTD/GTN}
- Explain Postpartum Care and puerperal disorders
- Describe Lactation management and breast care
- Explain Poly-Cystic Ovary Syndrome (PCOS)
- Describe Vulvo-vaginal infections (vaginal discharge)

- Explain Pelvic Inflammatory Disease (PID, STIs)
- Discuss Sexually transmitted diseases
- Explain UTI in Gynecology (Cystitis, Lower Urinary Tract Symptoms)
- Infertility
- Explain Benign tumors of the genital tract I (Ovarian cysts, Polyps, Fibroid)
- Gynecological Investigations
- Explain Public health issues related to reproductive health
- Explain Family planning (contraceptive) methods

OBSTETRICS

- Discuss Antenatal care & Assessment
- Explain Antenatal investigation
- Explain Normal Labor
- Describe Anemia in pregnancy
- Explain Preterm Labor
- Discuss Abnormal Labor-I (Fetal mal-presentation and malposition)
- Explain Abnormal Labor-II (Obstructed Labor)
- Describe Induction of Labor
- Discuss Analgesia & Anesthesia in Obstetrics
- Explain Role of ultrasound in Obstetrics

Pharmacology

- Describe Androgens & Anti-androgens
- Explain Progestins & Anti-progestins
- Drug used in pregnancy & lactation
- Explain Contraceptive Drugs

Urology

- Discuss STIs in male genital tract; including epididymitis, orchitis, prostatitis
- Describe Male sexual dysfunction
- Discuss Male Infertility

Recommended Reading Material

Anatomy

A. GROSSANATOMY

1. K.L. Moore, Clinically Oriented Anatomy
2. Richard L. Drake, Gray's anatomy for students

B. HISTOLOGY

1. B. Young J. W. Health Wheather's Functional Histology
2. di Fiore's Atlas of histology and functional correlations

C. EMBRYOLOGY

1. Keith L. Moore. The Developing Human
2. Langman's Medical Embryology

Biochemistry

TEXT BOOKS

1. Harper's Illustrated Biochemistry
2. Lippincott's Illustrated reviews of Biochemistry
3. Lehninger's Principles of Biochemistry
4. Biochemistry by Devlin

Physiology

A. TEXTBOOKS

1. Textbook of Medical Physiology by Guyton And Hall
2. Human Physiology by Lauralee Sherwood
3. Berne & Levy Physiology
4. Best & Taylor Physiological Basis of Medical Practice

B. REFERENCEBOOKS

1. Ganong's Review of Medical Physiology

Community Medicine

- Public Health and Community Medicine by Shah Ilyas Ansari, 8th Edition
- Park's Textbook of Preventive and Social Medicine by K Park 24th Edition Epidemiology and Biostatistics:
- Epidemiology by Leon Gordis, Fifth Edition
- Basic Statistics for the Health Sciences by Jan W. Kuzma, Fifth Edition.

Forensic Medicine

- Gautam Biswas Book of Forensic Medicine
- Parikh's Book of Forensic Medicine

Pathology

- Basis of Pathology by Robbins & Cotran
- Review of Microbiology by Livingston

Pharmacology

- Katzung. Basic & Clinical Pharmacology. 14th Edition.
- Katzung & Trevor's. Pharmacology. 12th Edition.
- Rang & Dales. Pharmacology.

Gynecology & Obstetric

- Obstetrics by Ten Teachers, Louise C. Kenny, Jenny E. Myers
- Gynecology by Ten Teachers, Louise Kenny, Helen Bickerstaff
- Hacker & Moore's Essentials of Obstetrics and Gynecology
- Textbook of Gynecology, Rashid Latif Khan
- Fundamentals of Gynecology, Dr Arshad Chohan

Urology

- Clinical Examination of Surgery by Norman Browse
- Short Practice of Surgery by Baily's and Love
- Washington manual of Surgery
- Surgery on call

Behavioral Sciences /Psychiatry

- Behavioral Science in Medicine by Frederick R Hine et al
- Behavioral Science in Medicine by Barbara Fadem

Reproductive Module 1

Organization

Time requirements:

- | | |
|----------------|----------|
| • Anatomy | 41 Hours |
| • Physiology | 25 Hours |
| • Biochemistry | 34 Hours |

100 Hours

Reproductive Module II

Organization

Time requirements:

- | | |
|----------------------------|------------|
| • Anatomy | 01 Hour |
| • Community Medicine | 06 Hours |
| • Pathology & Microbiology | 20.5 Hours |
| • Pharmacology | 10.5 Hours |
| • OBS & Gynecology | 22 Hours |
| • Urology | 04 Hours |
| • Behavioral sciences | 02 Hours |

66 Hours

Total = 166 Hours

Reproductive System -1

Module

ANATOMY

LECTURES

S.NO.	LEARNING OBJECTIVES By the end of the modules, the students should be able to	Content	TEACHING Activity Duration	ASSESSMENT
1.	<ul style="list-style-type: none"> • Discuss the features of bony pelvis • Describe the boundaries of pelvic inlet & outlet • Differentiate between male and female Pelvis 	Pelvis and its types	LGIS 50 Mins + Demonstrations 90 mins	MCQs OSPE
2.	<ul style="list-style-type: none"> • Discuss the osteology of sacrum & pelvic bone • List the muscles and ligaments attached to Sacrum • Explain the types, articulations, ligaments, relations and movements of joints of pelvis • List the factors providing stability to the joints of pelvis 	Sacrum + Pelvic bone and Joints of Pelvis	SGD 90 mins + Demonstrations 90 mins	MCQs
3.	<ul style="list-style-type: none"> • Describe the anatomy of the pelvic walls • Name the muscles of pelvic floor/pelvic diaphragm • Discuss the attachment & actions of muscles of pelvic floor/pelvic diaphragm • Describe the attachment & significance of pelvic fascia • Discuss the clinical conditions associated with the pelvic floor & fascia • Discuss the role of pelvic floor in urinary and fecal continence • Discuss the important points of Pelvimetry 	Pelvic Boundaries & Pelvimetry	LGIS 50 Mins + Demonstrations 90 mins	MCQs OSPE
4.	<ul style="list-style-type: none"> • Describe the gross anatomical features of perineum • Describe the division of perineum into anal and urogenital triangles • List the boundaries of perineum • Describe male urogenital triangle and its contents • Describe female urogenital triangle and its contents <p>(K)</p>	Pelvic Malformations and Pelvic peritoneal reflections in male & female	LGIS 50 Mins + Demonstrations 90 mins	MCQs OSPE
5.	<ul style="list-style-type: none"> • Describe the gross anatomical features of perineum • Describe the division of perineum into anal and urogenital triangles • List the boundaries of perineum • Describe male urogenital triangle and its contents • Describe female urogenital triangle and its contents <p>(K)</p>	Perineum: division, spaces and urogenital region	LGIS 50 Mins + Demonstrations 90 mins	MCQs OSPE
6.	<ul style="list-style-type: none"> • Discuss the boundaries and features of anal triangle • Discuss the importance of pectinate line with respect to the vasculature and lymphatic drainage of the rectum and anal canal <p>(K)</p>	Perineum: Anal triangle, Anal canal and Ischioanal Fossa	LGIS 50 Mins + Demonstrations 90 mins	MCQs OSPE
7.	<ul style="list-style-type: none"> • Describe the blood supply, nerve supply & lymphatic drainage of pelvis & perineum <p>(K)</p>	Blood supply, venous and lymphatic drainage of pelvis & perineum	LGIS 50 Mins + Demonstrations 90 mins	MCQs OSPE

8.	<ul style="list-style-type: none"> Describe the gross anatomical features of perineum List the boundaries of perineum Discuss the blood supply, nerve supply and lymphatic drainage of the perineum Describe male urogenital triangle and its contents Describe the gross anatomy, blood supply, nerve supply and lymphatic drainage of male urethra Discuss the clinical conditions associated with penis & male urethra Describe female urogenital triangle and its contents <p>(K)</p>	Perineum: division, spaces and uro genital region	LGIS 50 Mins + Demonstrations 90 mins	MCQs OSPE
9.	<ul style="list-style-type: none"> Describe the division of perineum into anal and urogenital triangles Discuss the boundaries and features of anal triangle Discuss the importance of pectinate line with respect to the vasculature and lymphatic drainage of the rectum and anal canal <p>(K)</p>	Perineum: Anal triangle, Anal canal and Ischiorectal Fossa	LGIS 50 Mins + Demonstrations 90 mins	MCQs
	<ul style="list-style-type: none"> Describe the blood supply, nerve supply & lymphatic drainage of pelvis & perineum <p>(K)</p>	Blood supply, venous and lymphatic drainage of pelvis & perineum	LGIS 50 Mins + Demonstrations 90 mins	
10.	<ul style="list-style-type: none"> Name the nerves innervating pelvis & perineum Describe Sacral plexus and its formation Describe the branches and divisions of sacral plexus Describe coccygeal plexus, hypogastric plexus, its location, formation and branches Discuss the injuries associated with the nerves of pelvis, perineum and sacral plexus <p>(K)</p>	Nerves of pelvis, perineum and sacral plexus	LGIS 50 Mins + Demonstrations 90 mins	MCQs
11.	<ul style="list-style-type: none"> List the male reproductive organs Describe the anatomy of the testis Describe the anatomy of Ductus Deferens, Epididymis & Ejaculatory duct Describe the gross anatomy of penis Discuss their location, relations, blood supply, nerve supply & lymphatic drainage <p>(K)</p>	Gross anatomy of Testis, Epididymis Scrotum and Penis	LGIS 50 Mins	MCQs
12.	<ul style="list-style-type: none"> Describe the histological features of testes and male genital duct system Describe the histology of seminiferous tubules, sertoli cells, spermatozoa, leydig cells, rete testis and epididymis <p>(K)</p>	Histology of Testis, Epididymis and Scrotum	LGIS 50 Mins	MCQs
13.	<ul style="list-style-type: none"> Describe the gross features of following male internal organs: <ul style="list-style-type: none"> i. Prostate gland ii. Seminal Vesicles iii. Ductus deference iv. Bulbourethral glands Discuss their location, relations, blood supply, nerve supply & lymphatic drainage. 	Gross anatomy of Prostate, Seminal vesicles & Bulbourethral glands	LGIS 50 Mins	MCQs

	<ul style="list-style-type: none"> Discuss the clinical conditions associated with prostate gland, seminal vesicles & bulbourethral glands <p>(K)</p>			
14.	<ul style="list-style-type: none"> describe the histological features of the following: <ul style="list-style-type: none"> i. Prostate gland ii. Seminal Vesicle iii. Bulbourethral glands <p>(K)</p>	Histology of Prostate, Seminal vesicles & Bulbourethral glands	LGIS 50 Mins	MCQs
15.	<ul style="list-style-type: none"> State the location of ovary & fallopian tube Describe the parts & functions of fallopian tube Explain the ligaments of ovary & fallopian tube Describe the blood supply, nerve supply & lymphatic drainage of ovary & fallopian tube Discuss the clinical correlates of ovary & fallopian tube <p>(K)</p>	Gross anatomy Ovary & Fallopian tube	LGIS 50 Mins	MCQs
	<ul style="list-style-type: none"> Describe the histological features of ovary & fallopian tube <p>(K)</p>	Histology of Ovary & Fallopian tube	LGIS 50 Mins	MCQs
	<ul style="list-style-type: none"> List the parts of uterus, cervix & vagina Describe the location & relations of uterus, cervix and vagina with surrounding structures Describe the ligaments of uterus Discuss the blood supply, nerve supply & lymphatic drainage of uterus, cervix & vagina Discuss the clinical conditions associated with uterus, cervix and vagina <p>(K)</p>	Gross anatomy of Uterus, Cervix & Vagina	LGIS 50 Mins	MCQs
	<ul style="list-style-type: none"> Describe the histological features of the uterus, cervix and vagina <p>(K)</p>	Histology of Uterus, Cervix & Vagina	LGIS 50 Mins	MCQs
	<ul style="list-style-type: none"> Describe the process of spermatogenesis List the timeline of development of male reproductive system Describe the process of development of parts of male reproductive system Discuss the development of male external genitalia Discuss the congenital anomalies of male genital system <ul style="list-style-type: none"> i. Cryptorchidism (un-descended testes) ii. Hypospadias is and other malformation of urethra <p>(K)</p>	Development of male reproductive system and Spermatogenesis	LGIS 50 Mins	MCQs
	<ul style="list-style-type: none"> Discuss the primordial germ cells, their precursors and migration Describe the location and division of genital ridges Describe the development of female genital ducts Discuss the development and differentiation of Paramesonephric ducts, and the development of uterus and vagina Discuss the congenital anomalies associated with the female reproductive system <p>(K)</p>	Development of female reproductive system	LGIS 50 Mins	MCQs

ANATOMY

PRACTICALS

S.NO.	LEARNING OBJECTIVES	Content	TEACHING Activities (Duration)	ASSESSMENT
1.	<ul style="list-style-type: none"> List the male reproductive organs Describe the histological features of testes and male genital duct system Describe the histology of seminiferous tubules, sertoli cells, spermatozoa, leydig cells, rete testis and epididymis Identify the histological features of testis and duct system under light microscope <p>(S)</p>	Histology of testes and duct system	Demonstrations 90 mins	OSPE
2.	<ul style="list-style-type: none"> Identify the histological features of the following, under light microscope: <ol style="list-style-type: none"> Prostate gland Seminal Vesicle Bulbourethral glands <p>(S)</p>	Histology of Prostate, Seminal vesicles & Bulbourethral glands	Demonstrations 90 mins	OSPE
	<ul style="list-style-type: none"> Identify the histological features of ovary (follicles in different stages) Identify layers of different parts of fallopian tubes under light microscope Explain the microscopic features of Ovary and Fallopian tube <p>(S)</p>	Histology of ovary & fallopian tube	Demonstrations 90 mins	OSPE
	<ul style="list-style-type: none"> Identify the histological features of: <ol style="list-style-type: none"> Walls of the uterus; perimetrium, myometrium, endometrium Lining epithelium of uterus Identify the histological features and parts of cervix & vagina under light microscope Explain the microscopic features of Uterus, Cervix & vagina <p>(S)</p>	Histology of Uterus, Cervix & vagina	Demonstrations 90 mins	OSPE

BIOCHEMISTRY

LECTURES

S.NO.	LEARNING OBJECTIVES	Content	TEACHING Activities (Duration)	ASSESSMENT
	By the end of module, the students should be able to			
1.	<ul style="list-style-type: none"> List the male sex hormones Discuss the production of male sex hormones Explain the synthesis, chemical structure, mechanism of action and metabolic functions of male sex hormones Discuss the hypothalamic pituitary axis of male sex hormones 	Male Sex Hormones	LGIS 50 Mins	MCQ's

	<ul style="list-style-type: none"> • Discuss the regulation and feedback mechanism of male sex hormones • Describe the clinical diseases and complication associated with male sex hormones <p>(K)</p>			
2.	<ul style="list-style-type: none"> • List the female sex hormones • Discuss the production of female sex hormones • Explain the synthesis, chemical structure, mechanism of action and metabolic functions of female sex hormones • Discuss the hypothalamic pituitary axis of female sex hormones • Discuss the regulation of female sex hormones and feedback mechanism • Describe the clinical diseases and complication associated with female sex hormones <p>(K)</p>	Female sex hormones	LGIS 50 Mins	MCQ's
3.	<ul style="list-style-type: none"> • Explain the biochemical functions of female reproductive system • Discuss hormonal regulation (the hypothalamic-pituitary-ovarian axis) during prepuberty, puberty and menopause • Describe the menstrual cycle (Ovarian and uterine cycles) • Discuss the three phases of the ovarian cycle (Follicular, Ovulation and Luteal) • Discuss the three phases of the uterine cycle (Menstrual, Proliferative and Secretory) • Explain the hormonal changes at menarche and menopause • Discuss the clinical abnormalities of the menstrual cycle and its biochemical investigations <p>(K)</p>	Pituitary Hormone and Menstrual Cycle	LGIS 50 Mins	MCQ's
4	<ul style="list-style-type: none"> • Define menopause • Discuss the hormonal and biochemical changes during menopause • Discuss the clinical conditions associated with menopause • Describe the types of amenorrhea <p>(K)</p>	Biochemical changes during menopause	LGIS 50 Mins	MCQ's
5	<ul style="list-style-type: none"> • List the placental hormones • Discuss the cells type and production of placental Hormones • Explain the synthesis, chemical structure, mechanism of action and metabolic functions of placental hormones • Discuss the hypothalamic pituitary axis of placental Hormones • Discuss the regulation of placental hormones and feedback mechanism • Describe the clinical conditions associated with placental hormones and their lab Investigations <p>(K)</p>	Biochemical role of Placenta	LGIS 50 Mins	MCQ's

BIOCHEMISTRY

PRACTICALS

S.NO.	LEARNING OBJECTIVES	Content	TEACHING Activities (Duration)	ASSESSMENT
1.	<ul style="list-style-type: none"> Outline the methods for performance of pregnancy test Explain the principle of HCG one step pregnancy test Perform urine pregnancy test by using dip stick (β-HCG levels) Interpret relevant clinical conditions correlated with their laboratory investigations 	Pregnancy test	Demonstration 90 mins	OSPE
2	<ul style="list-style-type: none"> Explain the principle and procedure of PCR Describe the applications of PCR Interpret relevant clinical conditions correlated with their laboratory investigations 	Polymerase Chain Reaction (PCR)	Demonstration 90 mins	OSPE

PHYSIOLOGY

LECTURES

S.NO	LEARNING OBJECTIVES	Content	TEACHING Activities (Duration)	ASSESSMENT
1.	<ul style="list-style-type: none"> Explain the stages of spermatogenesis Describe the hormonal control of spermatogenesis <p>(K)</p>	Spermatogenesis, Semen & Capacitation of Sperms	LGIS 50 Mins	MCQ's
2.	<ul style="list-style-type: none"> Describe the synthesis, function and regulation of male sex hormones <p>(K)</p>	Male Sex Hormone: Testosterone & its functions	LGIS 50 Mins	MCQ's
3.	<ul style="list-style-type: none"> Discuss the abnormalities of male sexual function (hypo and hypogonadism) <p>(K)</p>	Abnormalities of Male sexual function	LGIS 50 Mins	MCQ's
4.	<ul style="list-style-type: none"> Discuss oogenesis, stages of follicle development through ovulation, and formation of corpus luteum <p>(K)</p>	Functions of Ovary	LGIS 50 Mins	MCQ's

<p>5.</p>	<ul style="list-style-type: none"> • Describe the synthesis, function and regulation of hormones of female reproductive system • Describe the hormonal changes and control mechanism of the changes that occur during puberty • Explain the secondary sexual characteristics that develop during puberty in males and females • Explain the control of secretion of FSH and LH through negative and positive feedback during menstrual cycle • Describe the cyclical changes that occur in endometrium and hormonal mechanisms that control these changes <p>(K)</p>	<p>Puberty, Menstrual Cycle, Menarche & Menopause</p>	<p>LGIS 50 Mins</p>	<p>MCQ's</p>
<p>6.</p>	<ul style="list-style-type: none"> • List hormones secreted by placenta and their actions • Interpret endocrine assays during the course of pregnancy • Describe the physiological changes during pregnancy with respect to all organs and systems • Briefly describe parturition especially its stages, mechanism & hormones <p>(K)</p>	<p>Pregnancy, Functions of Placenta, Maternal Changes During Pregnancy & Parturition</p>	<p>LGIS 50 Mins</p>	<p>MCQ's</p>
<p>7.</p>	<ul style="list-style-type: none"> • Describe the hormonal requirements for development of mammary gland during pregnancy and milk ejection reflexes <p>(K)</p>	<p>Mammary Gland & Lactation</p>	<p>LGIS 50 Mins</p>	<p>MCQ's</p>

Week 4

End of Module

Reproductive System Module 1 Test Theory

Reproductive System Module 1 Test OSCE

Reproductive System -2

Module

COMMUNITY MEDICINE

LECTURES

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<input type="checkbox"/> Describe the components of reproductive health <input type="checkbox"/> Explain the approaches of health education related to reproductive health (K)	Introduction to reproductive health	LGIS 50mins	MCQs
2.	<input type="checkbox"/> Explain the determinants of maternal care <input type="checkbox"/> Discuss high-risk pregnancies <input type="checkbox"/> Describe Preventive measures of maternal mortality (K)	Maternal care	LGIS 50mins	MCQs
3.	<input type="checkbox"/> Explain the determinants of maternal care <input type="checkbox"/> Discuss high-risk pregnancies <input type="checkbox"/> Describe Preventive measures of maternal mortality (K)	Infant Care	LGIS 50mins	MCQs
4.	<input type="checkbox"/> Describe the components of IMNCI <input type="checkbox"/> Discuss the role of community and family practice in IMNCI <input type="checkbox"/> Explain the process of assessment of danger signs in IMNCI (K)	Integrated Management of Neonatal & Childhood Illness (IMNCI)	LGIS 50mins	MCQs
5.	<input type="checkbox"/> Describe family planning <input type="checkbox"/> Explain methods used in family planning <input type="checkbox"/> List the common reasons for unmet need of Family Planning (UMNFP) (K)	Family Planning	LGIS 50mins	MCQs
6.	<input type="checkbox"/> Classify reproductive tract infections <input type="checkbox"/> Discuss epidemiology of Reproductive Tract Infections <input type="checkbox"/> Discuss the syndromic management of reproductive tract infections <input type="checkbox"/> Describe the preventive measures of HIV/AIDs <input type="checkbox"/> Describe HIV/AIDS control Programme in Pakistan (K)	Reproductive Tract Infections	LGIS 50mins	MCQs
7.	<input type="checkbox"/> Differentiate between fertility and fecundability <input type="checkbox"/> Describe determinants of fertility <input type="checkbox"/> Calculate the measures of fertility (K)	Fertility determinants	LGIS 50mins	MCQs

PATHOLOGY

LECTURES

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<ul style="list-style-type: none"> <input type="checkbox"/> Describe the various congenital anomalies of female genital tract with their important salient features <input type="checkbox"/> Discuss developmental abnormalities and related features of the hypospadias, Epispadias, phimosis & Cryptorchidism. <input type="checkbox"/> Discuss the microorganism, pathogenesis and morphology of specific and nonspecific types epididymo-orchitis <p>(K)</p>	Congenital anomalies of female and male genital tract; Epididymo-orchitis	LGIS 50mins	MCQs
2.	<ul style="list-style-type: none"> <input type="checkbox"/> List the important microorganism causing genital ulcer disease <input type="checkbox"/> Discuss in detail the pathophysiology, clinical manifestation, laboratory diagnosis, treatment and prevention of: <ol style="list-style-type: none"> i. HSV 2 infection ii. HPV infection <p>(K)</p>	Infectious agents causing genital ulcer disease	LGIS 50min	MCQs
3.	<ul style="list-style-type: none"> <input type="checkbox"/> List the important microorganisms causing vaginitis <input type="checkbox"/> Briefly discuss candida infections <input type="checkbox"/> Discuss in detail the important properties, pathophysiology, clinical manifestation, diagnosis, treatment and prevention of: <ol style="list-style-type: none"> i. Trichomonas vaginalis infection ii. Gardnerella vaginalis infection <p>(K)</p>	Infectious agents causing vaginitis	LGIS 50min	MCQs
4.	<ul style="list-style-type: none"> <input type="checkbox"/> Define Pelvic Inflammatory Disease <input type="checkbox"/> List the important microorganisms causing cervicitis and PID <input type="checkbox"/> Discuss the risk factors, pathophysiology, morphology and clinical presentation and complications of PID <input type="checkbox"/> Discuss the role of Staphylococcus in causing toxic shock syndrome <input type="checkbox"/> Discuss in detail the important properties, pathophysiology, clinical manifestation, laboratory diagnosis, treatment and prevention of Neisseria gonorrhoea infection <p>(K)</p>	Pelvic Inflammatory Disease (PID)	LGIS 50min	MCQs
5.	<ul style="list-style-type: none"> <input type="checkbox"/> Define STI <input type="checkbox"/> List the important microorganisms causing STI <input type="checkbox"/> Discuss the risk factors, pathophysiology, morphology and clinical presentation of STI's <input type="checkbox"/> Discuss in detail the pathophysiology, clinical manifestation, laboratory diagnosis, and treatment of: <ol style="list-style-type: none"> i. CMV 	Sexually Transmitted Infections (STI)	LGIS 50min	MCQs

	<ul style="list-style-type: none"> ii. Chlamydial infection iii. Syphilis (<i>Treponema pallidum</i>) <input type="checkbox"/> Briefly discuss the role of HIV as sexually transmitted infection (K)			
6.	<input type="checkbox"/> 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 <input type="checkbox"/> Discuss the pathogenesis and morphology of Vaginal Intraepithelial Neoplasia and squamous cell carcinoma, Embryonal rhabdomyosarcoma (K)	Non-neoplastic and neoplastic conditions of vulva and vagina	LGIS 50min	MCQs
7.	<input type="checkbox"/> Discuss the infections of cervix including acute & chronic cervicitis, and Endocervical Polyps <input type="checkbox"/> Discuss the risk factors, pathogenesis and morphology of cervical intraepithelial lesions and cervical carcinoma <input type="checkbox"/> Elaborate the role of HPV in cervical cancer, <input type="checkbox"/> Discuss cervical screening methods and pap smear (K)	Non-neoplastic and neoplastic conditions of cervix	LGIS 50min	MCQs
8.	<input type="checkbox"/> Define dysfunctional uterine bleeding (DUB) <input type="checkbox"/> Classify abnormal uterine bleeding according to age group and aetiology <input type="checkbox"/> Discuss the aetiology, pathogenesis, morphology and clinical features of Abnormal uterine bleeding and Anovulatory Cycle <input type="checkbox"/> Discuss the aetiology, pathogenesis, morphology and clinical features of acute and chronic Endometritis, Endometriosis and Adenomyosis and Endometrial Polyps <input type="checkbox"/> Classify Endometrial hyperplasia <input type="checkbox"/> Discuss the aetiology, pathogenesis, morphology and clinical features of Endometrial hyperplasia (K)	Endometrial Hyperplasia & Functional Endometrial Disorders	LGIS 50min	MCQs
9.	<input type="checkbox"/> Classify tumours of uterus/endometrium <input type="checkbox"/> Discuss the aetiology, pathogenesis, morphology and clinical features of Carcinoma of the Endometrium, Tumours of Endometrial Stroma & mixed Mullerian tumours. (K)	Tumours of Uterine corpus (Benign and Malignant endometrial tumours)	LGIS 50min	MCQs
10.	<input type="checkbox"/> Discuss the follicular and luteal cysts, and their morphology <input type="checkbox"/> Define Polycystic Ovaries (PCOs) <input type="checkbox"/> Discuss its aetiology, pathogenesis, morphology and complications (K)	Non-neoplastic cysts and functional cyst of ovary and Poly Cystic Ovaries	LGIS 50min	MCQs

11.	<input type="checkbox"/> Classify Ovarian tumours <input type="checkbox"/> Discuss the aetiology, pathogenesis, morphology and clinical features of Serous tumours, Mucinous tumours, Endometrioid tumours, Clear cell tumours, Transitional cell tumours, Adenosarcoma and Malignant mixed Müllerian tumour, and tumours of fallopian tube (K)	Ovarian Tumours - I (Tumours of ovary & fallopian tube)	LGIS 50min	MCQs
12.	<input type="checkbox"/> Discuss the aetiology, pathogenesis, morphology and clinical features of Sex Cord-Stromal Tumours, Teratoma, Dysgerminoma, Yolk sac tumour, Mixed Germ cell tumours and Metastatic Cancer (K)	Ovarian Tumours - II	LGIS 50min	MCQs
13.	<input type="checkbox"/> Classify testicular tumours <input type="checkbox"/> Discuss the aetiology, pathogenesis, morphology and clinical features of various types of testicular cancer (K)	Testicular Tumours	LGIS 50min	MCQs
14.	<input type="checkbox"/> Discuss the aetiology, 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 (K)	Early and late disorders of Pregnancy/ Placenta; pre- eclampsia & eclampsia	LGIS 50min	MCQs
15.	<input type="checkbox"/> Discuss the aetiology, pathogenesis and morphology of hydatiform mole including complete, partial and invasive mole <input type="checkbox"/> Explain the pathogenesis and morphology of choriocarcinoma and placental site trophoblastic tumour (K)	Gestational Trophoblastic Diseases	LGIS 50min	MCQs
16.	<input type="checkbox"/> Name non proliferative and proliferative breast lesions <input type="checkbox"/> Discuss the aetiology, 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 (K)	Non-proliferative & proliferative breast diseases	LGIS 50min	MCQs
17.	<input type="checkbox"/> Classify Breast tumours <input type="checkbox"/> Discuss the aetiology, risk factors, pathogenesis, morphology, molecular profile and clinical features of various types of breast cancer <input type="checkbox"/> Discuss risk factors, pathogenesis, morphology and clinical features of stromal tumours of breast (Fibroadenoma, Phylloides) (K)	Tumours of breast	LGIS 50min	MCQs

PATHOLOGY

TUTORIALS

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<input type="checkbox"/> Discuss the aetiology and morphological features of ovarian tumours (K)	Ovarian tumours	SGDs 1hour	MCQs
2.	<input type="checkbox"/> Discuss the aetiology and morphological features of testicular tumours (K)	Testicular tumours	SGDs 1hour	MCQs
3.	<input type="checkbox"/> Discuss the aetiology and morphological features of breast tumours (K)	Breast tumours	SGDs 1hour	MCQs

PHARMACOLOGY

LECTURES

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<input type="checkbox"/> Discuss classification of Androgens & Anti-androgens with their basic & clinical pharmacology of these agents (K)	Androgens & Anti-androgens	LGIS 50min	MCQs
2.	<input type="checkbox"/> Discuss classification of Progestins, Anti-progestins <input type="checkbox"/> Explain the basic & clinical pharmacology of these agents (K)	Estrogens & Anti-estrogens	LGIS 50min	MCQs
3.	<input type="checkbox"/> Discuss the contraindicated and safer drugs in pregnancy & lactation (K)	Progestins & Anti-progestins	LGIS 50min	MCQs
4.	<input type="checkbox"/> Discuss the contraindicated and safer drugs in pregnancy & lactation (K)	Drug used in pregnancy & lactation	LGIS 50min	MCQs
5.	<input type="checkbox"/> Discuss the classification, kinetics and dynamics of different hormonal contraceptive drugs (K)	Contraceptive Drugs	LGIS 50min	MCQs

PHARMACOLOGY

TUTORIALS

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<input type="checkbox"/> Observe the effects of the drug Oxytocin on rat uterus by using power lab (K)	Effects of different drugs on the rat uterus	SGDs 1hour	MCQs
2.	<input type="checkbox"/> Explain the clinical importance of Androgen and Anti-androgens with their basic and clinical Pharmacology (K)	Androgens & Anti-androgens	SGDs 1hour	MCQs
3.	<input type="checkbox"/> Explain the clinical importance of Estrogens & Anti-estrogens with their basic and clinical pharmacology (K)	Estrogens & Anti-estrogens	SGDs 1hour	MCQs
4.	<input type="checkbox"/> Explain the clinical importance of Progestins & Anti-progestins with their basic and clinical Pharmacology (K)	Progestins & Anti-progestins	SGDs 1hour	MCQs
5.	<input type="checkbox"/> Explain contraindicated and safer drugs in pregnancy & lactation (K)	Drug used in pregnancy & Lactation	SGDs 1hour	MCQs
6.	<input type="checkbox"/> Explain the clinical importance of Contraceptive Preparations (K)	Contraceptive Preparations	SGDs 1hour	MCQs

BEHAVIORAL SCIENCES/ PSYCHIATRY

LECTURES

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<input type="checkbox"/> Describe the psychosocial issues associated with infertility <input type="checkbox"/> Describe ethical issues confronted by patients with infertility (K)	Management of male & female sexual and reproductive dysfunction	LGIS 50min	MCQs

2.	<input type="checkbox"/> List characteristics of people at increased risk for sexual assault <input type="checkbox"/> Describe the medical and psychosocial management of a victim of sexual assault (K)	Sexual and domestic violence	LGIS 50min	MCQs
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UROLOGY

LECTURES

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<input type="checkbox"/> Describe the aetiology, 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) (K)	STIs in male genital tract; including epididymitis, orchitis, prostatitis	SGDs 1hour	MCQs
2.	<input type="checkbox"/> Explain the anatomy and physiology of penile erection <input type="checkbox"/> Classify the causes of erectile dysfunction <input type="checkbox"/> Discuss the various investigations for diagnosis of erectile dysfunction <input type="checkbox"/> Discuss the treatment options for Erectile dysfunction including penile implant (K)	Male sexual dysfunction	SGDs 1hour	MCQs
	<input type="checkbox"/> Define infertility <input type="checkbox"/> Describe the stages of spermatogenesis and fertilization <input type="checkbox"/> List the causes of male infertility <input type="checkbox"/> Discuss steps of evaluation of male infertility including history, examination and investigations <input type="checkbox"/> Describe the treatment options for the common conditions causing male infertility (K)	Male Infertility	SGDs 1hour	MCQs

GYNAECOLOGY

LECTURERS

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<input type="checkbox"/> Define primary & secondary amenorrhoea, oligomenorrhoea, menorrhagia, dysmenorrhoea, dyspareunia, post-menopausal bleeding, post-coital bleeding, pre-menstrual syndrome <input type="checkbox"/> Explain the etiology, and symptoms and signs, of primary and secondary amenorrhoea, and oligomenorrhoea <input type="checkbox"/> Differentiate among the three types of amenorrhoea	Terminologies & definitions related to menstrual disorders (Amenorrhoea, Oligomenorrhoea, Menorrhagia, dysmenorrhoea, dyspareunia)	LGIS 50mins	MCQs

	<input type="checkbox"/> Define primary & secondary dysmenorrhea <input type="checkbox"/> Interpret the investigation findings of clinical abnormalities of the menstrual cycle (K)			
2.	<input type="checkbox"/> List the most common pregnancy complications <input type="checkbox"/> Define ectopic pregnancy <input type="checkbox"/> Discuss differential diagnosis of acute abdomen in women <input type="checkbox"/> Diagnose ectopic pregnancy, based on provided data (history, examination findings, investigation reports) <input type="checkbox"/> Define abortion according to WHO criteria <input type="checkbox"/> Differentiate among the various types of abortions based on data provided (history, examination findings, investigation reports) <input type="checkbox"/> Describe the treatment options for each type of abortion <input type="checkbox"/> Discuss the definition, aetiology, risk factors and the classification of GTN (K)	Bleeding PV and early pregnancy complications {Miscarriages, Ectopic pregnancy, and Gestational Trophoblastic diseases/ neoplasia (molar) GTD/GTN}	LGIS 50mins	MCQs
3.	<input type="checkbox"/> Define puerperium <input type="checkbox"/> Describe signs and symptoms, and management of normal and abnormal puerperium, including puerperal pyrexia and puerperal sepsis <input type="checkbox"/> Recognize the risk factors for depression (postpartum blues) and the role of psychosocial support <input type="checkbox"/> Identify the capacity of mother to take care of her newborn (K)	Postpartum Care and puerperal disorders	LGIS 50mins	MCQs
4.	<input type="checkbox"/> Discuss the benefits & complications of breastfeeding for the baby, mother, family, and country <input type="checkbox"/> Discuss the role of counselling by health care provider about breast feeding at term <input type="checkbox"/> Explain the significance of self-breast examination and clinical examination (K)	Lactation management and breast care	LGIS 50mins	MCQs
5.	<input type="checkbox"/> Interpret the hormone profile report for PCOS <input type="checkbox"/> Discuss the aetiology, pathophysiology, diagnosis, and management options for PCOS (K)	Poly-Cystic Ovary Syndrome (PCOS)	LGIS 50mins	MCQs

6.	<input type="checkbox"/> List the causes of vaginal Discharge (candida, bacterial vaginosis, trichomoniasis) <input type="checkbox"/> Differentiate between a normal vaginal discharge (Leucorrhoea) and pathological vaginal discharge on the basis of clinical history <input type="checkbox"/> Describe symptoms, signs, investigations and treatment options for vaginal discharge due to Candidiasis, Bacterial vaginosis, Trichomoniasis, Gonorrhoea and Chlamydia trachomatis infection <input type="checkbox"/> Discuss steps of prevention and recurrence of vaginal discharge (K)	Vulvo-vaginal infections (vaginal discharge)	LGIS 50mins	MCQs
	<input type="checkbox"/> Define Pelvic Inflammatory disease (PID) <input type="checkbox"/> Diagnose PID based on symptoms, signs and investigation findings <input type="checkbox"/> Discuss the differential diagnosis of PID and its possible complications <input type="checkbox"/> Discuss the management options for acute and chronic PID (K)	Pelvic Inflammatory Disease (PID, STI's)	LGIS 50mins	MCQs
	<input type="checkbox"/> Explain the aetiology of Sexually Transmitted Infections (STI's), Post delivery PID, Post-abortion PID and post-surgical PID (K)	Sexually transmitted diseases	LGIS 50mins	MCQs
	<input type="checkbox"/> Based on data provided, diagnose UTI in pregnant women <input type="checkbox"/> Discuss the principles underlying their effective investigation and treatment (K)	UTI in Gynaecology (Cystitis, Lower Urinary Tract Symptoms)	LGIS 50mins	MCQs
	<input type="checkbox"/> Define infertility and sub-fertility <input type="checkbox"/> Discuss the causes and relevant investigations of an-ovulation in women <input type="checkbox"/> Interpret the reports of Semen analysis in male and fertility-related hormone profile in female (K)	Infertility	LGIS 50mins	MCQs
	<input type="checkbox"/> Describe the benign tumors of female genital tract <input type="checkbox"/> Differentiate among the various types of ovarian cysts, polyps & fibroids based on their etiology, symptoms, signs and pathophysiology <input type="checkbox"/> Justify the selection of investigations for ovarian cysts, polyps & fibroid uterus (K)	Benign tumours of the genital tract I (Ovarian cysts, Polyps, Fibroid)	LGIS 50mins	MCQs

	<ul style="list-style-type: none"> <input type="checkbox"/> Identify the hard and soft copy views of X rays and contrast X-rays <input type="checkbox"/> Identify the laparoscopic views of adnexal mass, ruptured and un-ruptured ectopic pregnancy, PID and TO mass, endometriosis, and pelvic adhesions <input type="checkbox"/> Identify the hysteroscopy views (endometrial polyp, normal uterine cavity, Sub mucus fibroid, septate uterus) including Colposcopy views of cervix <p style="text-align: center;">(K)</p>	Gynaecological Investigations	LGIS 50mins	MCQs
	<ul style="list-style-type: none"> <input type="checkbox"/> Discuss the maternal health situation in Pakistan <input type="checkbox"/> Discuss the important causes of maternal mortality and morbidity <input type="checkbox"/> Describe maternal health services <input type="checkbox"/> Describe the levels of obstetric care including obstetric first aid, basic Em NOC, comprehensive Em NOC <input type="checkbox"/> List the basic steps of counselling in reproductive health, with emphasis on family planning <input type="checkbox"/> Discuss the role of contraception in population dynamics <p style="text-align: center;">(K)</p>	Public health issues related to reproductive health	LGIS 50mins	MCQs
	<ul style="list-style-type: none"> <input type="checkbox"/> Describe the commonly used methods of family planning, and their indications <input type="checkbox"/> Explain their significance <p style="text-align: center;">(K)</p>	Family planning (contraceptive) methods	LGIS 50mins	MCQs

OBSTETRICS

LECTURES

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<ul style="list-style-type: none"> <input type="checkbox"/> Explain the importance of routine prenatal laboratory investigations, prenatal diagnostic options (IPS, Quad screen, amniocentesis, CVS) and fetal ultrasound assessment <input type="checkbox"/> Explain the process/schedule 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 <p style="text-align: center;">(K)</p>	Antenatal care & Assessment	LGIS 50mins	MCQs
2.	<ul style="list-style-type: none"> <input type="checkbox"/> Explain the importance and process antenatal care and investigations <input type="checkbox"/> Interpret Rh prophylaxis, GBS screening, term cervical assessment to ensure maternal health and normal fetal growth and well being <p style="text-align: center;">(K)</p>	Antenatal investigation	LGIS 50mins	MCQs

3.	<input type="checkbox"/> Define labour <input type="checkbox"/> Explain the stages of normal labour <input type="checkbox"/> Describe the basic mechanisms of labor evaluation <input type="checkbox"/> Describe the seven cardinal movements of labour <input type="checkbox"/> Explain the technique of delivery, traction, and handling of infant after delivery <input type="checkbox"/> Define Partogram and CTG <input type="checkbox"/> List the uses of partograph and CTG in the management of normal labour <input type="checkbox"/> Interpret result of partogram (K)	Normal Labour	LGIS 50mins	MCQs
4.	<input type="checkbox"/> Discuss the causes, sign and symptoms, and investigations of anaemia in pregnancy <input type="checkbox"/> Outline its management <input type="checkbox"/> Explain the complications of anaemia in pregnancy and its effects of anaemia on maternal and fetal outcome (K)	Anaemia in pregnancy	LGIS 50mins	MCQs
5.	<input type="checkbox"/> Differentiate between Threatened preterm labour, Preterm pre-labour rupture of membranes and preterm labour <input type="checkbox"/> Discuss the clinical features, diagnosis and management of preterm labour and preterm pre-labour rupture of membranes <input type="checkbox"/> Appraise the principles of diagnosis and management of Threatened preterm labour, Preterm pre-labour rupture of membranes and Preterm labour <input type="checkbox"/> List the causes of IUD (K)	Preterm Labour	LGIS 50mins	MCQs
6.	<input type="checkbox"/> Define mal-presentation & malposition <input type="checkbox"/> List the different types of mal-presentation & malposition <input type="checkbox"/> Describe the causes of Breech, Transverse lie and other mal-presentations and mal-positions <input type="checkbox"/> Describe the management options for mal-presentation and malposition (K)	Abnormal Labor-I (Fetal mal-presentation and malposition)	LGIS 50mins	MCQs
7.	<input type="checkbox"/> Define obstructed labour <input type="checkbox"/> List the main causes of obstructed labour <input type="checkbox"/> Describe how each cause contributes to the development of this complication <input type="checkbox"/> Describe the clinical signs of obstructed labour and the common maternal and fetal complications that result from uterine obstruction <input type="checkbox"/> Describe the management of obstructed Labour (K)	Abnormal Labour-II (Obstructed Labour)	LGIS 50mins	MCQs
8.	<input type="checkbox"/> Define induction and augmentation of labour <input type="checkbox"/> Explain indications, contraindications, advantages and disadvantages of induction and augmentation of labour <input type="checkbox"/> Discuss the monitoring and management of induced and augmented labour <input type="checkbox"/> Discuss the management of abnormal partograph and CTG	Induction of Labour	LGIS 50mins	MCQs

	(K)			
9.	<input type="checkbox"/> Describe analgesic techniques used in labour and caesarean delivery <input type="checkbox"/> Describe different anaesthetic options used in labour and caesarean delivery including the risks and benefits of general, spinal, & epidural anaesthesia, pudendal nerve block, and narcotics (K)	Analgesia & Anaesthesia in Obstetrics	LGIS 50mins	MCQs
10.	<input type="checkbox"/> Describe the role of Ultrasound, point of care ultrasound (POCUS), and Doppler ultrasound in OBS including antepartum fetal surveillance in the normal and high risk pregnancy & evaluation of fetal growth restriction (K)	Role of ultrasound in Obstetrics	LGIS 50mins	MCQs

ANATOMY

TUTORIALS

S.NO.	Learning Objectives By the end of the session, students will be able to:	Content Areas	Learning Activity (Duration)	Assessment
1.	<input type="checkbox"/> Describe the structure of male and female genital tract <input type="checkbox"/> Describe the gross anatomy of the female pelvic organs including: the ovaries uterine tubes, the uterus, the broad ligament and the vagina <input type="checkbox"/> Explain the role of clinical pelvimetry (K)	Pelvis and Pelvimetry	LGIS 50mins	MCQs

Week 5

End of Module

Reproductive System Module 2 Test Theory

Reproductive System Module 2 Test OSCE

MEDICAL EDUCATION

LECTURES/WORKSHOP

S.NO.	Learning Objectives (domain) At the end of session, student will be able to:	Content Areas	Teaching Activity (Duration)	Assessment
1.	Introduction to Medical Education <ul style="list-style-type: none"> Appreciate the journey of medical education from learning biomedical to clinical science. (K) 	<ul style="list-style-type: none"> Plan of medical education in college Organization of undergraduate medical curriculum Integrated Curriculum 	LGIS 50 mins	–
2.	Skills of Succeeding in a Medical College – 1 <ul style="list-style-type: none"> Describe the methods of learning knowledge in a medical college. (K) 	<ul style="list-style-type: none"> Difference in teaching and learning in school / college and a medical institution Learning knowledge Learning skills 	LGIS 50 mins	–
3.	Problem – based Learning <ul style="list-style-type: none"> Describe the basis of problem – based learning. (K) Follow the process / steps of problem – based learning session. (S) 	<ul style="list-style-type: none"> Basics of problem-based learning Process / steps of problem – based learning Practical demonstration of PBL session 	Workshop (2 hours)	–
4.	Medical Professionalism <ul style="list-style-type: none"> Describe the basics of medical professionalism and outline the behavioral descriptors of students. (K) 	<ul style="list-style-type: none"> History of medical professionalism Principals of medial professionalism Behaviors required from medical students 	LGIS 50 mins	–

Learning resource: How to succeed at medical school, Dason Evans & Jo Brown, 2009

TIME TABLES

Jinnah Medical & Dental College
MBBS 2 (Batch 24) - 2022
REPRODUCTIVE MODULE – WEEK 1

Venue: LH102

MON Aug 15	ENDOCRINE MODULE TEST					SELF STUDY / EXTRA CURRICULAR ACTIVITIES		
TUES Aug 16	8:30-10:00 ANATOMY DEMONSTRATION Bony Pelvis 1 ABC: Dissection Hall DEF: LH102		10:30-11:20 BIOCHEMISTRY Male Sex Hormones	11:25-12:15 PHYSIOLOGY Male Reproductive System I Dr. Hamza	12:20-12:45 MEDICAL EDUCATION Endocrine Module Test Review Dr. Sara		LUNCH	1:45-3:15 ANATOMY DEMONSTRATION Bony Pelvis 2 DEF: Dissection Hall PBL 1.1 A: SR104 B: SR105 C: SR106
WED Aug 17	8:30-9:20 ANATOMY Pelvic Boundaries	9:25-10:15 PHYSIOLOGY Male Reproductive System II Dr. Hamza		10:45-12:15 JOURNAL CLUB Dr. Muslim / Dr. Amber				1:45-3:15 ANATOMY DEMONSTRATION Bony Pelvis 2 ABC: Dissection Hall PBL 1.1 D: SR306 E: SR307 F: SR106
THUR Aug 18	8:30-9:20 ANATOMY Male Genital Organs	9:25-10:15 BIOCHEMISTRY Female Sex Hormones		10:45-12:15 ANATOMY DEMONSTRATION Pelvic Floor Muscles DEF: Dissection Hall PBL 1.2 A: SR104 B: SR105 C: SR106			LUNCH	1:45-3:15 ANATOMY DEMONSTRATION Pelvic Floor Muscles ABC: Dissection Hall PBL 1.2 D: SR306 E: SR307 F: SR106
FRI Aug 19	8:30-9:20 PHYSIOLOGY Female Reproductive System Dr. Sadaf	9:25-10:15 BIOCHEMISTRY Pituitary Hormones & Menstrual Cycle		10:45-12:15 ANATOMY DEMONSTRATION Perineum DEF: Dissection Hall ABC: LH102	12:20- 1:00 LH102 Post PBL Session		PRAYER	SELF STUDY

Jinnah Medical & Dental College
MBBS 4 (Batch 22)
EYE/ENT- REPRODUCTIVE MODULE - WEEK 1

Venue: Monday/Tuesday – JMDC LH103 Wed-Saturday – JMCH LH 1

	8:30–9:20	9:25-10:15		10:45-12:45		12:30-2:00
MON 11/04	NEUROPSYCHIATRY MODULE TEST					
TUES 12/04	NEUROPSYCHIATRY MODULE TEST					
	9:00-9:50	9:55-10:45	10:45-11:15	11:00-1:00		
WED 13/04	CLINICAL PATHOLOGICAL CONFERENCE	ENT Surgical Anatomy / Physiology Nasal Pathology Symptomatology	MEDICAL EDUCATION NeuroPsych Module Test Review Dr. Furqan Mirza	CLINICAL WORK Rotation 4.1		RESEARCH MODULE WORK SELF STUDY
THURS 14/04	COMMUNITY MEDICINE Introduction to Reproductive Health	OB/GYN Menstrual Disorders- Terminologies, Definitions & PCO's		CLINICAL WORK		RESEARCH MODULE WORK SELF STUDY
FRI 15/04	OB/GYN Benign Genital Tract Disorders	OB/GYN Gynecological Infections		CLINICAL WORK		RESEARCH MODULE WORK SELF STUDY
SAT 16/04	UROLOGY STI 1 (Epididymitis, Orchitis, Prostatitis)	EYE Lens and Associated Diseases		CLINICAL WORK		RESEARCH MODULE WORK SELF STUDY

BUSES PROVIDED BY JMDC WILL LEAVE MEDICARE CAMPUS AT 8:15 AM SHARP FOR KORANGI CAMPUS