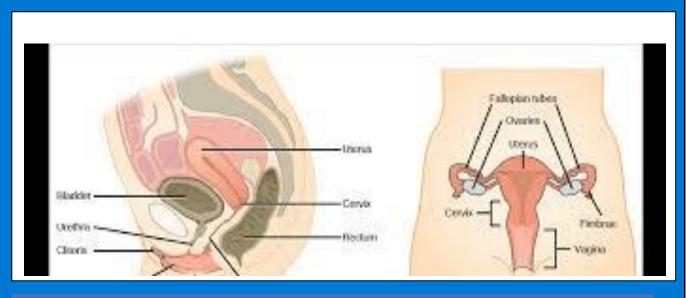
# SWAT MEDICAL COLLEGE SWAT

### **DEPARTMENT OF MEDICAL EDUCATION**



## **REPRODUCTION-I**



## 2<sup>ND</sup> YEAR MBBS

**BLOCK F** 

**CLASS OF: 2028** 

**DURATION: 03**WEEKS

FROM: 10 SEP-1 OCT

STUDENT NAME

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## 1 Acaedemic Calendar

				Calendar MBBS – 2023-24 ical College, Swat					
Activity/ Events	Week	Date	1st Year	2 <sup>nd</sup> Year	3 <sup>ra</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year		
Orientation Week	1	12th to 16th Feb				Neurosciences – II	D : 50 M		
Regular Classes	2	19th to 23rd Feb	Foundation I	Neurosciences-IA	Foundation II (5 weeks)	Mouroscioneos - II	Previous 5 <sup>m</sup> Year Preparatory leaves and		
Regular Classes	3	26th Feb to 1st March	(6 weeks)	(6 Weeks)	22 <sup>nd</sup> March, Module	(δ weeks)	annual exam		
Regular Classes	4	4th to 8th March	22 <sup>nd</sup> March, Module	22 <sup>nd</sup> March, Module	Exam	25th and 26th March			
Regular Classes	5	11th to 15th March	Exam	Exam		Block J Exam	Foundation-III (2 weeks)		
Regular Classes	6	18th to 22nd March					22 <sup>rd</sup> March Module Exan		
Regular Classes	7	25th to 29th March			Infection &		Blood & Immunology-II		
Regular Classes	8	1 <sup>st</sup> to 5 <sup>th</sup> April	Blood & Immunology		Inflammation		(2 weeks) 5th April Module Exam		
Spring Break/Eid ul Fitr	9	8th to 12th April	(5 Weeks)	Neurosciences-IB	(6 weeks) 6th May to 7th May Block		MSK-III		
Sports Week	10	15th to 19th April	6th & 7th May Block A	13th & 14th May Block D	GIT and Hepatobiliary	(2 weeks)			
Regular Classes	11	22 <sup>nd</sup> to 26 <sup>th</sup> April	exam		-iI	06th & 07th May Block N			
Regular Classes	12	29th to 3rd May			(9 weeks)	exam			
Regular Classes	13	6th to 10th May			MW	10th and 11th June Block K Exam	Cardiorespiratory-III		
Regular Classes	14	13th to 17th May			Multisystem (5 weeks)	K Exam	(5 weeks)		
Regular Classes	15	20th to 24th May			Module Exam 31st May		3 <sup>rd</sup> & 4 <sup>th</sup> June Block O		
Regular Classes	16	27th May to 31st May	MSK-I	GIT, Hepatobiliary &	mootio Entant or may		Exam		
Regular Classes	17	3 <sup>rd</sup> to 7 <sup>th</sup> June	(δ weeks) 1st & 2nd July Block-B	Metabolism-			Renal- III Module		
Regular Classes	18	10th to 14th June	Exam	(8 weeks)	Blood & immunology (3 weeks)	Renal – II Module	(2 weeks) 14th June Module Exam		
Eid-ul-Adha Holidays	19	17th to 21th June		1# & 2rd July	1st & 2nd July module	(4 weeks)	Endocrine &		
Regular Classes	20	24th to 28th June			exam	1st and 2nd July Module Exam	Reproduction-III		
Summer Vacations	21-23	3rd to 21st July				EXAM	(3 weeks) 29th & 30th July Block P		
Regular Classes	24	22nd to 26th July		Renal			Exam		
Regular Classes	25	29th July to 2nd Aug	CVS.I (3 W99/ks) MSK-II (5 W99/ks) 12th to 13th August Block (5 W99/ks)		Neurosciences - III				
Regular Classes	26	5th to 9th Aug	(2 weeks) 23rd August Module	( o weeks)	(5 weeks) 2™ Sep 3™ Sep Block H exam	Endocrine and Reproduction – II (8 weeks) 16 <sup>th</sup> and 17 <sup>th</sup> September Block-L exam	(3 weeks) 16 <sup>th</sup> August Module		
Regular Classes	27	12th to 16th Aug	Exam				Exam		
Regular Classes	28	19th 23rd Aug		Endocrine-I (4 weeks)			GIT & Hepatobiliary		
Regular Classes	29	26th to 30th Aug	Respiratory-I	6 <sup>th</sup> Sep			(2 weeks)		
Regular Classes	30	2 <sup>nd</sup> to 6 <sup>th</sup> Sep	(4 Weeks)	. 55	CVS-II		6th Sep Module Exam		
Regular Classes	31	9th to 13th Sep	23 <sup>rd</sup> -24 <sup>th</sup> SEP	Reproduction-I	(3 weeks) 20th September Module		Multisystem-II		
Regular Classes	32	16th to 20th Sep	Block-C Exam	(4 weeks)	exam	EYE and ENT	(4 weeks)		
Regular Classes/ Preparatory Leaves	33	23rd to 27th Sep		30th Sep 1st Oct	RF S.JI (4 Weeks)	(4 weeks)	(4 weeks)	(6 weeks)   14" to 18" Oct Block N1	7th -8th Oct Block Q
Regular Classes/ Preparatory Leaves	34	30th Sep to 4th Oct		21st and 22rd October					
Regular Classes/ Preparatory Leaves	35	7th to 11th Oct	PREPARATORY						
Regular Classes/ Preparatory Leaves	36	14th to 18th Oct	LEAVES	DOCUMBATORY	Block L exam				
Regular Classes/ Preparatory Leaves	37	21st to 25th Oct		PREPARATORY LEAVES					
Regular Classes/ Preparatory Leaves	38	28th Oct to 1st Nov		LEAVES					
Regular Classes/ Preparatory Leaves	39	4th to 8th Nov							
Regular Classes/ Preparatory Leaves	40	11th to 15th Nov			PREPARATORY	DDEDARLES			
Regular Classes/ Preparatory Leaves	41	18 <sup>th</sup> to 22 <sup>nd</sup> Nov			LEAVES	PREPARATORY	PREPARATORY		
Regular Classes/ Preparatory Leaves	42	25th to 29th Nov	Annual Exam as per	Annual Exam as per		LEAVES	LEAVES		
Regular Classes/ Preparatory Leaves	42	2 <sup>nd</sup> to 6 <sup>th</sup> Dec	KMU schedule.						
Regular Classes/ Preparatory Leaves	43	9th to 13th Dec		KMU					
Regular Classes/ Preparatory Leaves	44	16th to 20th Dec							
Regular Classes/ Preparatory Leaves	45	23 <sup>rd</sup> to 27 <sup>th</sup> Dec			Annual Exam as per				
Regular Classes/ Preparatory Leaves	46-49	November 2024			KMU schedule.				
Regular Classes/ Preparatory Leaves	50-53	December 2024	Winter vacation	Winter vacation					
Regular Classes/ Preparatory Leaves	54-57	January 2025			Winter vacation	Annual Exam as per KMU schedule.			
Start of new acad	amic cacei	on 2025-26	February 2025	February 2025	February 2025	February 2025	March 2025		

Note: The given dates are tentative and may be subject to change as needed/demanded. The KMU will share the annual exam schedule at the end of the current session.

#### Dear Student

The Department of Medical Education (DME) has successfully conducted faculty training for the curation of study guides. In accordance with the guidelines set by Khyber Medical University, Peshawar, this study guide has been meticulously developed by the respective block coordinator. For any queries or concerns, kindly refer to the "Query and Troubleshooting" section for contact information.

Please be advised that the timetables provided in the study guides are tentative, and the final versions will always be accessible on the official website, notice boards, and social media platforms.

It is crucial to acknowledge that this guide is subject to continuous improvement, aligning with updates to module learning objectives and blueprints by KMU Peshawar. It is noteworthy that the learning objectives and blueprints outlined in this guide represent an enhanced and revised version of those originally provided by KMU.

For more information on modules and examination blueprints, please visit <a href="https://kmu.edu.pk/examination/guidelines">https://kmu.edu.pk/examination/guidelines</a>.

Your login link of official website: <a href="https://mis.swatmedicalcollege.edu.pk/login/student\_login">https://mis.swatmedicalcollege.edu.pk/login/student\_login</a>

## 2 List Of Abbrevation

Anat-SGD	Small Group Discussion in Anatomy	G. Med-L	General Medicine Lecture			
Bio-L	Biochemistry Lecture	OSPE	Objectively Structured Practical Examination			
Bio-P	Biochemistry Practical	Paeds-L	Pediatrics Lecture			
Bio-SGD	Small Group Discussion in Biochemistry	Patho-L	Pathology Lecture			
C.Med-L	Community Medicine Lecture	Phar-L	Pharmacology Lecture			
DSL	Directed Self Learning	Phy-L	Physiology Lecture			
FDT	Film/Demonstration/Tutorial	Phy-P	Physiology Practical			
F.Med-L	Forensic Medicine Lecture	Phy-SGD	Small Group Discussion in Physiology			
G.Anat-L	Gross Anatomy Lecture	PBL	Problem Based Learning			
Histo-P	Histology Practical	SDL	Self-Directed Learning			
IT	Information Technology	SL	Skill Lab			
LGIS	Large Group Interactive Session	SAQs	Short Answer Questions			
MCQs	Multiple Choice Questions	SEQs	Short Essay Questions			
Med.Edu-L	Medical Education Lecture	SGDs	Small Group Discussions			
PRIME	PRIME Professionalism and Communication Skills, Research, Identity Formation, Management and Leadership, Ethics					

## 3 Module Committee:

s.no	Name	Depa	rtment	Role			
1.	Prof. Dr. Aziz Ahmad				Princip	pal/Dean	
2.	Dr. M Junaid Khan	DME		Director			
			Mo	dule Team			
Team I							
S.No	Name		Depart	ment	Block	Designation	
1.	Prof. Dr Rashid A	hmad	Physio	logy	MPC-I	Professor	
2.	Dr. Obaid Ur Rehman		Bio-ch	emistry	A	Associate Professor	
3.	Prof. Dr Muhamr Khan	nad	Anator	my	В	Professor	
4.	DrFizaIqbal		Physio	logy	С	Professor	
5.	DrAmanullah		Physiol	ogy	D	Assistant Professor	
6.	DrHumaira Ali		Anaton	ıy	E	Associate Professor	
7.	Dr Sara Maryium		Bio-ch	emistry	F	Co-ordinator	



## 4 Recommended List Of Icons



**Introduction To Case** 



For Objectives



**Critical Questions** 



Assessment



**Resource Material** 

## 5 Mission/ Vision of the College

#### **5.1** Mission Statement of the Institution:

To train medical students as per international standards, thereby producing doctors who exhibit excellence as professionals, academicians, researchers and adeptly fulfil healthcare needs through the application of ethical and evidence-based practices.

#### **5.2** Vision Statement of the Institution:

To be a center of excellence in medical education, patient care and research globally.

#### 6 Overview of the Module/ Preface

Congratulations and welcome to the Block F of 2<sup>nd</sup> year MBBS, comprising of reproduction module, where the overarching goal is to provide high-quality educational program for acquisition of knowledge, skills, and behaviors necessary for the future doctor. Throughout the program, emphasis is placed on integrating theoretical knowledge with practical applications, ensuring a comprehensive didactic experience. The core theme of module is meticulously designed to foster an in-depth and thorough understanding of the reproductive system. Students will gain hands-on experience through dissections, small group interactive sessions, case based discussions and practicals in diverse settings such as museum, dissection hall and skill labs providing a well-rounded education.

The study guide acts as an indispensable tool for the students, offering clarity on module contents, instructional methodologies, faculty guidance, and assessment criteria. It serves as a crucial reference for assessment and evaluation by clearly outlining the theory and practical components that will be assessed, along with the corresponding assessment tools, which may include MCQS, SEQS and OSPE. This transparency enables students to align their efforts with the evaluation criteria, promoting a sense of accountability and preparation for success in their academic pursuits. As future medical professionals, graduates can look forward to diverse career pathways, from clinical practice to research, with opportunities in various disciplines worldwide. In essence, by actively engaging with the information provided, students can navigate their academic journey with confidence and purpose, maximizing their learning experience in the relevant subject, ethical values and professionalism.

Being the block coordinator, I wish you all the best.



#### 7 Introduction/ Organization of Module

#### 7.1 **Introduction**:

The duration of Reproduction Module-11 is 3-weeks, comprising of gross and microscopic features as well as development of different reproductive organs. It includes Physiological effects, mechanism of action of male and female sex hormones and abnormalities related to genital organs and their hormones.

Abortion, medico legal aspects of pregnancy, safe motherhood and its components, the steps of antenatal and postnatal care, family planning and emergency obstetric care are also included.

The contents of the module will be taught in LGF-Lectures, DSL and SGF-Practicals, SGD, SDL.

#### 7.2 Rationale:

A Student stepping into a medical school requires orientation, introduction to medical sciences with respect to health & disease. A student also needs certain guidelines to achieve goals to become a successful but ethical doctor in future. More than half of the population of Pakistan are females. Diseases related to female and male reproductive systems constitute a large segment of medical practice in all countries. These diseases together with pregnancy and its related disorders are the core teaching in this module. The importance of gynecology and obstetrics is well reflected in the curriculum. The basic knowledge of Anatomy, Physiology, Biochemistry, Pharmacology etc related to reproductive system will also be imparted

## 7.3 Organization of the Study guide:

## **Reproduction Module 11 consists of the following themes (03weeks):**

## **List of Themes**

S. No	Themes	Weeks
1	Pregnancy and child birth	02
2	Infertility	01

#### 7.4 Teaching Strategies:

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

#### A. Large Group Formats:

- a. 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.
- b. Directed Self Learning:Directed self-learning is an active learning approach where the learners are provided with predefined learning objectives and some facilitation through the learning process in the form of guidance and supervision. It helps establish a strong foundation for autonomous and deep learning.
- c. Self Directed Learning: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.

#### B. Small Group Formats:

- a. Small Group Disscussions: This format helps students to clarify concepts acquire skills or 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.
- b. Practical Demonstration:Basic science practicals related to anatomy, biochemistry and physiology are scheduled for student learning.

#### 7.5 Assessment strategies

Assessments within the MBBS program at STMC consist of both formative and summative evaluations. These assessments are integral to monitoring student progress and academic performance.

#### A. Formative Assessment:

Formative assessments, accounting for 10% of the total marks assigned to each block, serve as ongoing evaluations designed to provide feedback and facilitate learning. The allocation of this 10% can be determined in accordance with the blueprint of KMU and further distributed as per the academic council's recommendations at STMC. Formative assessments are conducted after the completion of each module, ensuring that students receive timely feedback to enhance their understanding and performance.

#### B. Summative Assessment:

Summative assessments, which comprise the majority of the assessment weighting (90% of all marks), are conducted and overseen by KMU, as part of the annual examination process. The summative annual examination is organized and conducted by KMU, which carries out the evaluation and grading. This summative assessment evaluates students' comprehensive understanding of the curriculum and accounts for a significant portion of their final scores.

#### C. Assessment Tools:

Various assessment tools are employed to gauge students' knowledge and competencies. These tools include:

- Written Examinations: These encompass Multiple Choice Questions (MCQ) and Short Essay Questions (SEQ) that evaluate students' theoretical knowledge.
- Performance Assessments: Objective Structured Practical Examinations (OSPE) and Objective Structured Clinical Examinations (OSCE) are used to assess practical skills and clinical competence.
- In-Training Assessments: Clinical logbooks provide a comprehensive record of students' practical experiences and serve as a valuable tool for tracking their progress.
- Assignments: Presentations, projects, and self-reflection assignments are included in the assessment process to enhance students' critical thinking and research skills

#### 7.6 Feedback mechanism and summary

At the end of each module a "Module Evaluation Form" will be provided to the students whether in hard copies or online and the students will give their opinion regarding the "Course Contents", "Learning Resources", "Teaching Methods", "Engegement& Motivation" and "Assessment Methods".

## 8 Table Of Specification

	No. of Hours Allocated in Time table					H Di:	Assessment	
Subject	Large Group Format		Small Group Format		Total	Percent Distributio n	MCQs	OSPE
	Lectures	DSLs	Practicals SGDs			tio	$\mathcal{S}$	Ę.
Gross Anatomy	12	02	03	04	45	31.9%	12	06
Histology	12	02	03	04	45	31.970	06	00
Embryology	12						07	
Physiology	20	03	06	00	29	20.6%	14	02
Biochemistry	02	01	06	00	09	6.38%	06	01
PRIME	00	00	00	00	00	0%	00	00
Pharmacology	02	00	00	00	02	1.42%	00	00
Gynecology	02	00	00	00	02	1.42%	00	00
Community Medicine	08	00	00	00	08	5.67%	02	00
Forensic Medicine	04	00	00	00	04	2.84%	01	00
General surgery	02	00	00	00	02	1.42%	00	00
General Medicine	02	00	00	00	02	1.42%	00	00
Pediatrics	02	00	00	00	02	1.42%	00	00
SDL	00	00	00	00	36	25.5%	00	00
Total	80	06	15	04	141	100%	48	09



#### 9 Learning Objectives

#### 9.1 General Learning Outcomes

By the end of this module the students would be able to;

#### Knowledge

- 1. Describe the development, structure and functions of bony pelvis, uterus, ovaries and perineum.
- 2. Describe the development, structure and functions of mammary glands.
- 3. Explain the contents and mechanism of formation of milk.
- 4. Describe the development, structure and functions of male genital organs.
- 5. Explain the synthesis, mechanism of action, physiological effects and regulation of sex hormones in males and females and hormones released from placenta.
- 6. Describe the physiology of gestation and parturition.
- 7. Describe basic statistical tests and their significance.
- 8. Describe the concept of empathy as part of professionalism.
- 9. Explain the steps of research evaluation, its validity and reliability,

#### **Skills**

Perform pregnancy test

#### 9.2 Specific Learning Outcomes

## Theme-1 Pregnancy and child birth

#### **Introduction:**

This is two-weeks theme consists of gross, microscopic features and development of pelvis, ovary, uterus and mammary gland. Overview of reproductive system, with functions of sex hormones are included. Cyclical changes as well as physiological changes in pregnancy, milk formation and mechanism of labor also part of this theme.

The contents of the module will be taught in LGF-Lectures, DSL and SGF-Practicals, SGD, SDL

SNO	Topics	<b>Learning Outcomes</b>	hours	MIT		
Gross Anatomy						

1.	Bony pelvis &Uterus 1	Describe the general features of bony pelvis Differentiate between male and female pelvis Classify the differences between true and false pelvis Describe the gross structure, location and relations of uterus Describe the blood supply of uterus	2	LGF/ SGD
	Uterus 2	describe the boundaries of pouch of Douglas/recto-uterine pouch and its clinical significance Describe the gross structure, location and relations of Fallopian tubes Describe the blood supply of Fallopian tubes Enlist various support mechanisms of uterus Describe the formation and components of broad ligament Discuss the clinical correlates of uterus and fallopian tubes		
2	Ovary	Describe the gross structure, location and relations of ovaries.  Describe the blood supply of ovaries  Name ligaments supporting the ovaries	2	LGF/ SGD
3.	Pelvic floor	Describe the general features of sacrum Describe the special features of sacrum Name the muscles making the pelvic floor Describe their origin, insertion, nerve supply and actions of muscles of pelvic floor Describe the boundaries and contents of superficial perineal pouch Describe deep perineal pouch List the boundaries and contents of ischio-rectal (anal) fossa Give the clinical significance of ischiO-rectal fossa	2	LGF/ SGD
		Embryology		

1	Uterus	Describe the development of uterus Enlist the various developmental Anomalies of uterus Describe the remnants of mesonephric and Paramesonephric ducts in females	2	LGF/ SGD
2	Ovary	Describe the development of ovaries	2	LGF/ SGD
3	Mammary gland	Describe the development of mammary gland Enlist various developmental anomalies of mammary gland along with embryological reasons	2	LGF/ SGD
	1	Histology		1
1	Uterus	Describe the microscopic structure of uterus Discuss the microscopic features of endometrium in different phases of menstrual cycle	2	LGF/ SGD
2	Ovary	Describe the microscopic structure of ovary Elaborate the different stages of ovarian follicle	2	LGF/ SGD
3	Mammary gland	Describe the microscopic features of inactive mammary gland Describe the microscopic features of mammary gland during pregnancy and lactation	2	LGF/ SGD
	•	Physiology		1
1	Male Reproductive System	Describe the spermatogenesis  Explain the function of prostate gland  Describe the composition of semen	2	LGF/ SGD
2	Male sex hormones	Relate the functions of testosterone with its secretion and metabolism  Describe the intracellular mechanism of action of testosterone  Relate the control of secretion of testosterone with its congenital and acquired abnormalities	2	LGF/ SGD
3	Female sex hormones	Describe the functions of Estrogens Describe the functions of Progesterone	2	LGF/ SGD
4	Female Reproductive System	Describe the monthly ovarian cycle Describe the effects of gonadotropic hormones on the ovaries.	2	LGF/ SGD

		General Surgery		
3	Maternal Child Health-III	Explain the importance of breast feeding	2	LGF/ SGD
2	Maternal Child Health-II	Describe the causes, impact and prevention of maternal mortality in Pakistan	2	LGF/ SGD
1	Maternal Child Health -I	Describe the steps of antenatal and postnatal care, family planning and emergency obstetric care	2	LGF/ SGD
		Community medicine	1	שטט
2	Pregnancy	Describe the steps of diagnosis of pregnancy Explain the medico legal aspects of pregnancy	2	LGF/ SGD
1	Abortion	Describe the type of abortion Discuss criminal abortion and its complications Explain the findings of abortion in victims Describe the indications of therapeutic abortion		SGD
		Define abortion	2	LGF/
		Forensic medicine		
1	Prematurity	Uterine Life Discuss Special Functional Problems in the Neonates Discuss Special Problems of Prematurity		
		Describe Growth and Functional Development of the Fetus Describe adjustments of the newborn to Extra	2	LGF/ SGD
		Paediatrics	1	
8	Milk production	Explain the functions of prolactin Describe the ejection or "let down" of milk. Explain the composition of milk	2	LGF/ SGD
7	Parturition	Explain the process of parturition and involution of the uterus after parturition	2	LGF/ SGD
6	Pregnancy -II	Describe the maternal changes in pregnancy Describe the changes in maternal circulatory system during pregnancy. Describe the development of breast during pregnancy	2	LGF/ SGD
5	Pregnancy -I	fallopian in the uterus.  Explain the effects of HCG in causing persistence in pregnancy  Describe the secretion of estrogen and progesterone by placenta  Describe the functions of HCS		SGD
		Define puberty, menarche and menopause.  Enumerate the changes produced in puberty  Describe the transport of fertilization ovum in the	2	LGF/
		Explain monthly endometrial cycle  Describe the role of hypothalamic and Pituitary ovarian system in controlling the female hormones		

1	Lymn in hugget	Describe the etiology, pathological types and	2	LGF/
1	Lump in breast	clinical presentation of carcinoma of breast		SGD

#### **Theme-2: Infertility**

#### **Introduction:**

This 1- week theme consists of gross, microscopic features and development of testes, fallopian tubes, genital ducts and genitalia. Structure, mechanism of action and regulation of sex hormones are included. Oral contraceptive medicines, sexually transmitted diseases as well as causes, and investigations of infertility are also discussed.

The contents of the module will be taught in LGF-Lectures, DSL and SGF-Practicals, SGD, SDL.

TABLE OF SPECIFICATION							
The	eme-2: Infertility	y					
S. No	Topics	Learning Outcomes	Hours	MIT			
		Anatomy					
1	Male genitalia1	Describe the anatomy of scrotum Discuss the gross anatomy of testes Describe the coverings and contents of spermatic cord	2	LGF/ SGD			
2	Male genitalia2	Describe epididymis, ductus deferens and seminal vesicles Describe the clinical correlates of male genital system	2	LGF/ SGD			
3	Female external genitalia and vaginal canal	Give the gross Anatomy of female external genitalia and vagina	2	LGF/ SGD			
		Embryology					
1	External Genitalia	Describe the development of external genitalia in males Describe the development of external genitalia in females Discuss the developmental anomalies of male and female genitalia	2	LGF/ SGD			
2	Male Gonads and genital ducts	Describe the development of testis Name the factors responsible for decent of testis Discuss the decent of testis Describe the developmental anomalies of testes Discuss the development of epididymis, vas deferens and seminal vesical	2	LGF/ SGD			
3	Vagina	Describe the development of vagina describe the remnants of mesonephric and paramesonephric ducts in males	2	LGF/ SGD			
		Histology					

1	Testes	Discuss general microscopic structure of testes Discuss seminiferous tubules Discuss different cells of seminiferous epithelium	2	LGF/ SGD	
2	Male genital ducts	Define blood testes barrier  Describe the microscopic structure of epididymis, ductus deferens and seminal vesicle	2	LGF/ SGD	
3	Fallopian tube	Describe the microscopic structure of fallopian tube	2	LGF/ SGD	
		Physiology		SOD	
1	Sex Hormones –I	Describe the structure, secretion, mechanism of action, physiological actions and regulation of Testosterone Describe the hormonal changes occurring in puberty in males and females	2	LGF/ SGD	
2	Sex Hormones –II	Describe the structure, secretion, mechanism of action, physiological actions and regulation of			
		Biochemistry			
1	Sex Hormones	Discuss the chemistry of these hormones Describe the synthesis of these hormones Discuss the enzyme deficiencies and their manifestations Describe the diagnostic role of 17-ketosteroids' excretion in urine Describe the mechanism of action of these hormones and their receptors Describe the classical and non-classical target organs of these hormones Describe the metabolic functions of these hormones Describe the regulation of these hormones especially by FSH & LH Discuss the manifestations of deficiency and excess of these hormones Discuss the and ropause and menopause Discuss the role of LHRH Agonists and antagonists as well as anti-androgens Discuss the role of 5a-Reductase Inhibitors	2	LGF/ SGD	
		Pharmacology			
1	Oral contraceptives	Describe the types, mechanism of action and physiological effects of Estrogens and Progesterone containing oral contraceptives	2	LGF/ SGD	
		Community medicine			

1	Sexually transmitted diseases (STDs)  Describe the types of STDs  Describe the guidelines for the prevention and management of STDs		2	LGF/ SGD			
	Gynecology						
1	Infertility	Describe the causes, and investigations of female infertility	2	LGF/ SGD			
	General Medicine						
1	Infertility	Describe the etiology and investigations of male infertility Describe normal semen analysis Define oligo/azoospermia	2	LGF/ SGD			

			Practical work
Subject Topic			Learning objectives
Physiology	Pregnancy test	120 Perform pregnancy test	
<b>Histology</b> Ovaries 121		121	Describe the microscopic structure of ovaries under microscope
	Fallopian tubes 122		Describe the microscopic structure of fallopian tubes under microscope
	Uterus	123	Describe the microscopic structure of uterus under microscope
	Mammary glands		Describe the microscopic structure of mammary glands under microscope
Testes and Epididymis 125		125	Describe the microscopic structure of Testes and Epididymis under microscope



### 10 Learning Opportunities and Resources

#### a. Instruction (if any)

- Try to be regular in class as teacher is the best guide & facilitator.
- Make your studies a primary goal.
- Study your textbooks covering the learning objectives relevant to the topic of study, read reference books when needed and do use other learning resources such as videos, text relevant to the topic on website and research articles.

#### b. Books:

S.No	Subject	Learning Resources/ Recommended Books
1.	Anatomy	Clinical Anatomy by Regions by Richard S. Snell (Latest Edition)
1.		Gray's Anatomy for Students (Latest Edition)
		K.L. Moore, Clinically Oriented Anatomy (Latest Edition)
		Netter's "Atlas of Human Anatomy (Latest Edition)
		Last's Anatomy (Latest Edition)
2.	Histology	Textbook of Histology by Junqueira (Latest Edition)
		diFiore's ATLAS of Histology with Functional Correlations (Latest
		Edition)
		Atlas of Human Histology by Wheaters. (Latest Edition)
		Textbook of Histology by Laiq Hussain (Latest Edition)
3.	Embryology	Langman's Medical Embryology (Latest Edition)
		The Developing Human "by Keith L Moore" (Latest Edition)
4.	Physiology	Textbook of Medical Physiology by Guyton and Hall (Latest Edition)
		Ganong's "Review of Medical Physiology" (Latest Edition)
5.	Biochemistry	Harper's Illustrated Biochemistry (Latest Edition)
		Lippincott's Illustrated Review: Biochemistry (Latest Edition)
6.	Pharmacology	Katzung`s Basic and Clinical Pharmacology (Latest Edition)
7.	Pathology	Robbin's Basic Pathology (Latest Edition)
8.	Community	Essential Community Medicine (Latest Edition)
	Medicine	K Park Textbook of Preventive and Social Medicine (Latest Edition)
9.	Forensic	Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and
	Medicine	Toxicology (Latest Edition)
10.	General	Davidson's Principles and Practice of Medicine (Latest Edition)
	SUMMATIVE cine	

#### 11 Examination and Methods of Assessment:

#### a. Instruction:

• Students must arrive the examination venue at least 15 minutes before the scheduled start time. Latecomers 15 minutes after the start of exam, will not be allowed to enter the examination hall after the start time, and if permitted, they will not receive extra time.

- Students without College ID Card and white Lab Coat will not be allowed to sit in exam.
- In case of an emergency such as a medical emergency, students should inform the examination supervisor.
- Students are required to submit prohibited items such ass mobile phones, smartwatches, electronic devices, books, notes, or any unauthorized materials before entering the examination hall.
- Students must maintain complete silence within the examination hall. They should refrain from communicating with fellow students and strictly follow invigilator instructions.
- Students must mark their attendance properly.
- No student will be allowed to leave the examination hall before half the time is over and paper should be properly handed to the examiner.
- Violation of these guidelines may lead to disqualification from the examination.

#### b. The Distribution of Internal Assessment Score (10% Marks):

The distribution of Internal Assessment Score for 2<sup>nd</sup> Year MBBS will be as follows:

- Total Marks for 2ndYear MBBS= 700 & Internal Assessment Marks=70 (10%)
- 50 % of the Internal Assessment Marks may be given to Block Exams
- 50 % of the Internal Assessment marks may be given to Class Test/ End of Module Exam, Assignments and Presentations.
- Biochemistry department is responsible to maintain the attendance record for BLOCK –
   D in coordination with all the concerned departments.
- Anatomy department is responsible to maintain the attendance record for BLOCK E in coordination with all the concerned departments.
- Physiology department is responsible to maintain the attendance record for BLOCK F in coordination with all the concerned departments.

#### A. Distribution of ..... Marks for Block Papers for 2<sup>nd</sup> Year MBBS will be as under:

Block	Block D	Block E	Block F	Total
Marks				

#### B. Distribution of .... Marks for Block OSPE will be as under:

Block	Block D	Block E	Block F	Total
Marks				

## C. Distribution of .... marks for Class Test/ End of Module Exam & Assignments for 2<sup>nd</sup>Year MBBS will be as under:

Subject (Theory)	Block D	Block E	Block F	Total
Class Test/ End of				
Module Exam				
Assignments				
Total				

## D. Distribution of .... marks for Presentations, Attitude/ Behavior for 2<sup>nd</sup> Year MBBS will be as under:

Subject (OSPE)	Block D	Block E	Block F	Total
Presentations				
Attitude/ Behavior				
Total				

#### c. UNIVERSITY EXAM: Exam has 90% Marks

- To appear in any university examination, more than 75% attendance in all disciplines is mandatory for the students.
- The Paper ..... will be comprised of 120 MCQs. The distribution of 90% Marks for Paper .... Written Exam will be as under:

Blue Print for Block F Assessment							
Subject	Endocrinology	Reproduction	Total MCQs				
Gross Anatomy	1	12	13				
Histology	5	6	11				
Embryology	2	7	9				
Physiology	34	14	48				
Biochemistry	20	6	26				
PRIME	3		3				
Pathology							
Pharmacology	2		2				
Forensic Medicine		1	1				
Community Medicine	1	2	3				
General Medicine	4		4				
EYE							
ENT							
Surgery							
Total	72	48	120				

## Block F OSPE Blueprint

Subject	Endocrine module	Viva stations	Reproduction module	Viva stations	Total OSPE stations	
<b>Gross Anatomy</b>	0		2			
Histology	3	1	3	1	10	
Embryology	0		0			

Physiology	0	1	1	1	3
Biochemistry	3	1	0	1	5
Total	6	3	6	3	12 + 6 (viva) =18

## 12 Tentative Timetables

### TIME TABLE FOR REPRODUCTION MODULE(2nd Year MBBS) SESSION 2024-25(WEEK 1)

Days	8:00 to 9:00 am	09:00 to 10:00 am	10:00 am to 11:00 am	11:00am to 1:00 pm			1:30 to2:30 pm
Monday	G. Anat-L1 Pelvis Dr. Junaid	Phy-L1 Overview of the reproductive system Dr.Alam Zeb Khan	Histo-L1 Female Genital System Prof. Dr. Muhammad Khan	PRACTICALS/Skill Lab Batch A: Phy <b>Dr.Uzair</b> Batch B: Histo <b>PDr.Sabiha Junaid</b> Batch C: Bio <b>Dr. Shahab Alam</b>			Skill Lab Batch A: Anat Dr. Sobia Muhammad
Tuesday	G. Anat-L2 Uterus, Ovary & fallopian tubes Dr.Erum Zeb	Phy-L2 Functions of Testosterone Prof Dr. Rashid Ahmad	G. Anat-L3 General features of Pelvic floor Dr. Sobia Muhammad	PRACTICALS/Skill Lab Batch A: Bio Dr. Shahab Alam Batch B: Phy Dr.Uzair Batch C: HistoPDr.Sabiha Junaid		P R A	Skill Lab Batch B: Anat Dr. Sobia Muhammad
Wednesday	Phy-L3 Hormonal cyclical changes of female reproductive system Dr. Amanullah	G. Anat-L4 Contents of Superficial & Deep perineal pouch Dr. Salman Younas	Phy-L4 Physiological changes in pregnancy Dr.Alam Zeb Khan	PRACTICALS/Skill Lab Batch A: HistoPDr. Sabiha Junaid Batch B: Bio Dr. Shahab Alam Batch C: Phy Dr. Uzair		Y E R S	Skill Lab Batch C: Anat Dr. Sobia Muhammad
Thursday	Phy-L5 (Gynae-L1) Parturition Dr. Maryum	Histo-L2 Male Genital System-I Prof. Dr. Muhammad Khan	Emb-L1 Development of Uterus, Ovary & Mammary Glands Dr. Humaira Ali	Phy-L6 Milk Production Dr. Amanullah	Histo-L3 Male Genital System-II Prof. Dr. Muhammad Khan	R E A K	C. Med-L1 Breast feeding / Growth Chart Dr.Ubaidullah / Jawaria Sajjad
Friday	C. Med-L2 Safe Motherhood Maternal Mortality Dr. Rafiullah	Phy-L7 /(Paeds-L1) Problems of prematurity Dr. Ibrahim	Emb-L2 Development of male & female external genitalia Dr. Humaira Ali	F. Med-L1 Abortion Medicolegal aspects of pregnancy Dr. Azmat Ullah	G. Anat-L5 Boundaries of Ischiorectal fossa Dr. Salman Younas		SDL (SLRC/Library)

#### TIME TABLE FOR REPRODUCTION MODULE(2nd Year MBBS) SESSION 2024-25(WEEK 2)

Days	8:00 to 9:00 am	09:00 to 10:00 am	10:00 am to 11:00 am	11:00am to 1:00 pm	n		1:30 to 2:30 pm
Monday	G. Anat-L6 Ligaments of the Uterus Dr.Erum Zeb	Phy- DSL Male Sex Hormones Dr. Sapna Ahmad	Bio-L1 Sex Hormones-I Mr. Khalilullah	PRACTICALS/Skill Lab Batch A: PhyDr.Furqan UlHaq Batch B: HistoPDr. Sabiha Junaid Batch C: Bio Dr. Salman Ibrahim		P R	Skill Lab Batch A: Anat Dr. Sobia Mohammad
Tuesday	Surgery-L1 Carcinoma of Breast Prof Dr. Manzoor Ali	G. Anat-L7 Gross Anatomy of male genital system Dr. Salman Younas	Bio-L2 Sex Hormones-II Dr. Sara Maryam	PRACTICALS/Skill Lab Batch A: Bio Dr. Salman Ibrahim Batch B: Phy Dr. Furqan UlHaq Batch C: HistoPDr. Sabiha Junaid		A Y Skill Lab Batch B: Anat Dr. Sobia Mohammad	
Wednesday	Phy-L9 Female Sex Hormones - Prof Dr. Rashid Ahmad	G. Anat-L8 Gross Anatomy of female genital system Dr. Junaid Rahman	Emb-L3 Development of testes & descent of testes Dr. Humaira Ali	PRACTICALS/Skill Lab Batch A: HistoPDr. Sabiha Junaid Batch B: Bio Dr. Salman Ibrahim Batch C: Phy Dr. Furqan UlHaq		B R E	Skill Lab Batch C: Anat Dr. Sobia Mohammad
Thursday	Emb-L4 Development of Epididymis, vas deference, seminal vesicles Dr. Humaira Ali	C. Med-L3 Sexually Transmitted Diseases Dr. Rafiullah	Histo-L4 Revision Prof Dr. Mohammad Khan	G. Med-L1 Male infertility Dr. Sardar Ali Khan	Gynae-L2 Female infertility Dr. Maryum	A K	Pharma-L1 Oral Contraceptives Dr. Zeeshan
Friday			SELF-STUDY SDL (SLRC/Library)				

# SWAT MEDICAL COLLEGE DEPARTMENT OF MEDICAL EDUCATION TIME TABLE FOR REPRODUCTION MODULE(2nd Year MBBS) SESSION 2024-25 WEEK-3

Days	8:00am to 10:00 am		10:00 am to 11:00 am	11:00am to 12:00 am	12:00am to 1:00 pm		1:30pm to 2:30 pm	
Monday	PRACTICALS: Batch A: PhyDr. Batch B: HistoDr. Batch C: Bio Dr.		G. Anat-L3 Dr.	Physio-L9 I Dr.	Physio-L10 Dr.		Anat-DSL Dr.	
Tuesday	PRACTICALS: Batch A: Bio Dr. Batch B: PhyDr. Batch C: HistoDr.  PRACTICALS: Batch A: HistoDr. Batch B: Bio Dr. Batch C: PhyDr		Histo-L1 Dr.	Physio-L11 Dr.	Physio-L13  Dr.  Physio-L14  R S		Physio-DSL Dr.	
Wednesday			Emb-L1 Dr.	Physio-L13 Dr.			Bio-DSL Dr.	
Thursday	8:00am to 9:00 am Physio-L15 Introduction to Immunity Dr.	9:00am to 10:00 am Physio-L16 Prof. Dr.	Bio-L11 Dr.	Physio-L17 Dr.	Physio-L18 Dr.	B R E A	PRIME-L5 Dr.	
Friday	Islamiyat-L3 Ethics Definition & IT Skills-L3 Engr.  Mr.		Physio-L19 Dr.	Physio-L20 Dr.	C. Med-L2 Dr.		SDL (SLRC/Library)	

# SWAT MEDICAL COLLEGE DEPARTMENT OF MEDICAL EDUCATION TIME TABLE FOR REPRODUCTION MODULE (2nd Year MBBS) SESSION 2024-25 WEEK-4

Days	8:00am to 10:00 am	10:00 am to 11:00 pm	11:00am to 12:00 pm	12:00am to 1:00 pm	1:30pm to 2:30 pm			
Monday			SELF STUDYSDL (SLRC/Library)					
Tuesday	Block F Written Test							
Wednesday	HOLIDAY							
Thursday	Block F OSPE (Batch A & C)							
Friday			Block F OSPE (Batch B	& D)				

## 13 For inquiry and troubleshooting



Please contact: Dr Sara Mariyum Associate Prof. Biochemistry( contact no: 0334-5475729) Email address:drsaraamjad45@gmail.com

#### 14 Module Evaluation Form

This is an example of feedback form and real-time feedback will be obtained through an electronic link and/or your LMS.

		ana/or your Li	MS.					
MBBS Year:		Block:		Module:				
`	e: Unsatisfactory) 2 (Fair) egory: Course Contents	3 (Satisfactory)4 (	Good)	5	(Excellen	t)		
No.	Question		1	2	3	4	5	
1	To what extent did the course con stated learning objectives of the n	· ·						
2	How clear and comprehensive we provided in this module?	re the course materials						
3	Were the core topics adequately c	overed, ensuring a well-						

#### rounded understanding of the subject? How current and up-to-date were the course contents in reflecting recent advancements? 5 Did the module incorporate real-world applications and case studies effectively? Category: Learning Resources Were the learning resources (e.g., textbooks, online 6 materials, laboratory facilities) readily available and easily accessible? How helpful were additional learning resources such as supplementary readings or multimedia content? 8 Did the module offer adequate support for research and independent study? Were digital resources and online platforms effectively utilized to enhance the learning experience? Were there sufficient opportunities for hands-on practice 10 and practical application of knowledge? **Category: Teaching Methods** How well did instructors engage with students and create a supportive learning environment? 12 Were diverse teaching methods (e.g., lectures, group discussions, simulations) effectively employed? 13 How responsive were instructors to questions, concerns, and feedback from students? 14 To what extent did instructors provide timely and constructive feedback on assignments and assessments? Were opportunities for collaborative learning and peer-topeer interactions encouraged and facilitated? **Category: Engagement and Motivation** No. To what extent did the module use real-world examples 16 and practical applications to engage students? How well were active learning techniques (e.g., problem-17 solving, case studies) integrated into the curriculum?

No. 23	Question  How would you rate the overall quality of this module?	(Very Poor)	2 (Poor)	(Fair)	(Good)	5 (E	Exce	llent
Nia	Category: Overall	1	2 (Daars)	1 2	1	-		
22	How effectively were accommodations provided for stude prior knowledge?	nts with va	arying levels	of				
21	Were efforts made to include diverse perspectives, cultures, and backgrounds in the curriculum?							
20	How well did the module accommodate different learning students?	styles and	preferences	among				
Cate	gory: Inclusivity and Diversity							
19	Were assessments designed to challenge and motivate students to excel in their studies?							
18	Did the module provide opportunities for students to pursue their individual interests within the subject matter?							

## 15 Students Diary/Notes

S.NO	DATE	TASK	PENDING/COMPLETED	COMMENTS

PROGRESS:	 ACHIEVEMENT:	