



**MBBS Final Year
Obstetrics & Gynaecology
National University of Medical Sciences
Pakistan**

**Students Study Guide
CMH Institute of Medical Sciences (CIMS)
Bahawalpur**

CALENDAR OF 1ST YEAR MBBS CLASS
2020 / 2021

Description	Date & Day				Dept Responsibilities
College Re-Opening	7 June 2021 (Mon)				
Clinical Rotation /Trg Hrs 07 June To 05 Nov 2021 18x Weeks Trg Hrs		07 Jun to 16 July	26 July to 03 Sep	06 Sep to 15 Oct	<ul style="list-style-type: none"> • 06 Weeks each Deptt • Time: 0800hrs onwards • All left over practicals trg to be completed • OSCE trg / Short & Long Case • Annual Assessment for NUMS
	Medicine	Batch A	Batch B	Batch C	
	Surgery	Batch B	Batch C	Batch A	
	Paeds	07-25 June Batch C	26 July to 13 Aug Batch A	06 Sep to 24 Sep Batch B	
	Gynae	28 Jun to 16 July Batch C	16 Aug to 03 Sep Batch A	27 Sep to 15 Oct Batch B	
3x Weeks Revision classes		18-22 Oct	25-29 Oct	01-05 Nov	
	Medicine	Batch A	Batch B	Batch C	
	Surgery	Batch B	Batch C	Batch A	
	Paeds	18-19 Oct Batch C	25-26 Oct Batch A	01-02 Nov Batch B	
	Gynae	20-22 Oct Batch C	27-29 Oct Batch A	03-05 Nov Batch B	
Eid ul Azha Leave	17-25 July 2021				
Pre Send up Prep Leave	06-14 Nov 2021 (09 Days)				
Send up Exam (Theory)	15 Nov 2021 (Mon) - 0900 hrs		Medicine I		Exam Cell
	19 Nov 2021 (Fri) - 0900 hrs		Medicine II		
	22 Nov 2021 (Mon) - 0900 hrs		Surgery I		
	26 Nov 2021 (Fri) - 0900 hrs		Surgery II		
	30 Nov 2021 (Tue) - 0900 hrs		Gynae		
	04 Dec 2021 (Sat) - 0900 hrs		Paeds		
Viva/OSCE/Short & Long Case	06-10 Dec 2021				Respective Departments
Prep Leave Annual Exam	11 Dec to 13 Jan 2022 (34 Days)				
NUMS Prof Exams	14 Jan 2022				

WEEKLY TIME TABLE
FINAL YEAR MBBS CLASS (2020 / 2021)

	MONDAY Time in hrs							TUESDAY Time in hrs							WEDNESDAY Time in hrs							THURSDAY Time in hrs							FRIDAY Time in hrs								
Batch A Medicine	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	J U M M A B R E A K	7
Batch B Surgery	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7		7
Batch C Gynae & Obs	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7		7
Batch D Pediatrics	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7		7

KEY

 Behavioral Sciences
 Theory Lectures

 Clinics
 Self-Directed learning

TEACHING HOURS

SUBJECTS	FINAL YEAR	TOTAL
Medicine	500	*900 (at the end of final year)
General Medicine		500
Psychiatry		50
Emergency Medicine		50
Dermatology		50
Cardiology		50
Neurology		50
Pulmonology		50
Nephrology		50
Gastroenterology		50
Surgery	500	*900 (at the end of final year)
General Surgery		*600
Anesthesiology and Critical Care		*50
Orthopedics and Traumatology		*100
Radiology		*50
Surgical Specialties: - Urology (Compulsory) - Neurosurgery/ Spine Surgery/ Pediatric Surgery/ Thoracic Surgery/ Plastic Surgery/ Burn/ Vascular Surgery		50 50
Gynecology and obstetrics	230	*300 (at the end of final year)
Pediatrics	230	*300 (at the end of final year)
Pediatrics		250
Neonatology		50
Behavioral Sciences & Professionalism		
Communication Skills		
Professionalism	25	*150 (at the end of final year)
Leadership and Management		
Medical and Islamic ethics		
Infection control		*25
Patient safety	10	*25 (at the end of final year)
Self-Directed Learning	100	*500 (at the end of final year)
Co-curricular activities	40	*200 (at the end of final year)

I. Context/Preamble:

Obstetrics and Gynaecology is an integral part of the undergraduate curriculum. Basis of Obstetrics and Gynaecology is established in the initial years through contribution from basic sciences. It is being taught as a major subject in the last two years of undergraduate program. A minimum of 300 hours have been allocated for Obstetrics and Gynaecology as per latest PMDC rules and regulations.

II. Mission

Our academic mission is to train and develop medical students to practice as a safe obstetrician and gynaecologist and to advance in the field of Obstetrics and Gynaecology

III. Competencies

- Communication skills
- Critical thinking
- Problem solving
- Clinical decision making
- Examination skills
- Procedural skills

IV. Expectations from students

- Be professional in behavior and dress code when communicating with patient and her family
- Respect patient and their family's wishes along with social and cultural norms
- Examine patients with their permission in the presence of chaperon
- Inculcate behavior of regular self-learning for academic sessions & clinical problem encounters
- Keep yourself abreast with current relevant information about your patients
- Document and update patient's progress in her file regularly

V. Course Outcomes

To equip them with essential knowledge, skill and attitude in order to enable them to:

- Diagnose common Obstetric and Gynecological problems, suggest and interpret appropriate investigation, rationalize treatment plan and if appropriate, refer patient for specialist opinion/ management.
- Suggest preventive measure for the common public health problem in the community
- Perform relevant procedures
- Convey relevant information and explanations accurately to patients, families, colleagues and other professionals
- Participate effectively and appropriately in an inter professional health care team

- Understand medical ethics and its application pertaining to Obstetrics and Gynaecology and maintain the confidentiality of the patient.
- Adapt research findings appropriately to the individual patient situation or relevant patient population

VI. Learning Strategies & Situations

A variety of pedagogies are used in this course, including didactic teaching, team-based and evidence-based learning in class rooms and patient side environment. Students are encouraged to adopt and inculcate self-learning strategies during the course

VII. Learning Opportunities

- Teaching Ward Rounds
- Case presentations
- Case based Discussion
- Short cases in OPD
- Bedside Discussion
- Small Group Discussion
- Self-learning Activities
- Skill Lab Activity
- Observation of operations in OT

VIII. Venues for learning opportunities

- Outpatient clinic
- Emergency room
- Labour room
- Operation room
- Inpatient ward
- Tutorial room
- Libraries including audio-visuals

IX. Specific Learning Outcomes

Learning outcomes specific to the Obstetrics and Gynaecology course have been tabulated below in the table of specification and matched with educational strategies.

X. Implementation of curriculum

*The university will give details of all content including learning outcomes and table of specifications, distribution of which across the three years and rotations is upon the discretion of the medical college/institute. Rotation plan is devised by the institute itself.

All institute to follow PM&DC minimum requirements i.e 300 contact hours with 50% weighting to theory content and 50% to practical/skills

XI. Attendance & Discipline:

- A record of attendance of medical students, class/ test results, end of module/rotation test result, workshop marks should be updated regularly.
- Each Head of unit would keep a log of all clinical activities
- Attendance of each student would be endorsed in his logbook as well.
- Overall 75% attendance is mandatory to appear in final professional exam

XII. Assessment/ Feedback of clinical placement

Assessment is an important aspect of any training program which not only includes assessment of students but also of the training program itself. The performance of each student would be marked and counted towards final internal assessment. The following tools/ methods would be used for this purpose:

XIII. Theory

- **Periodical class tests**
- **End Modular/End of Rotation Exams:** At the end of each clinical rotation, a theory exam would be held concurrently for the entire class from the syllabus covered during this period.

XIV. Practical

- **Log Book:** Each student would complete his log book and get it countersigned from HOD at the end of each rotation. Log book is maintained during the rotation
- **CBL performance:** Performance of each student would be marked and sent to Head of Clinical Training
- **End of Rotation Exams:** At the end of each clinical rotation, the whole group would have a clinical exam.

XV. Evaluation of the Course

- Student portfolio should be maintained in the department in which students should give their feedback either by name or anonymously
- Faculty suggestions if any, for improvement of training may be incorporated in the next rotation

Recommended Readings

- Obstetrics by Ten Teachers
- Gynaecology by Ten Teachers

Reference books

- Evidence based text for MRCOG by David M. Luesley
- Dewhurst's Text book of Obs and Gynae by Keith Edmonds
- Royal College of Obs & Gynae and American College of Obs & Gynae guidelines
- PM&DC approved journals

Table of Specification (Themes/Topics/Learning outcomes/Educational Strategies/Weightings)

SPECIFIC LEARNING OBJECTIVES IN OBSTETRICS

The table below gives details of all content, distribution of which across the three years and rotations is upon the discretion of the medical College/Institute

Clinical Problem/ Theme	Goals / Competencies	Learning Objectives		Instructional Strategy	Assess ment Tool
		At the end of teaching session, the student should be able to:			
		Knowledge	Skills/Attitude		
I. PREGNANCY AND LABOUR					
Maternal Anatomy/Physiology in Pregnancy and Labor	<ul style="list-style-type: none"> Anatomy of the pelvis Physiological changes in maternal systems during pregnancy 	<ul style="list-style-type: none"> Demonstrate an understanding of anatomy of the pelvis Compare normal physiological changes of body systems in pregnant and non pregnant patient. Compare the important effects in a pregnant woman of estrogen and progesterone and correlate their function. Appraise the factors that are implicated in the onset of labour 	<ul style="list-style-type: none"> Take and present an obstetric history Perform clinical examination of heart, lungs, thyroid and breast of healthy pregnant women. Counsel a normal pregnant woman the reasons why it can be normal to experience breathlessness, urinary frequency, constipation and heat intolerance. 	SGD, Self Directed Learning Case presentation/ OPD	OSCE SAQs/ MCQs

Pre-Pregnancy Care	<ul style="list-style-type: none"> Principles of pre-pregnancy care Genetic mode of inheritance and common structural abnormalities of fetuses resulting from abnormal development 	<ul style="list-style-type: none"> Demonstrate an understanding of genetic mode of inheritance and common structural abnormalities of fetuses Identify the maternal conditions that require pre-pregnancy care and discuss the principles of management. Appraise the screening tests that may be performed in pre-pregnancy counseling of apparently healthy women. 	<ul style="list-style-type: none"> Summarize ethical issues relevant to pre-pregnancy screening of genetic disorders. Counsel apparently healthy women regarding benefits of pre-pregnancy care. 	SGD, Self-Directed Learning, OPD	OSCE SAQs/ MCQs
Antenatal Care	<ul style="list-style-type: none"> Principles of antenatal care Concept of preconception care Minor pregnancy complications 	<ul style="list-style-type: none"> Plan hematological investigations performed at the booking visit. Select the infections screened for at the booking visit, and summarize the possible adverse sequelae associated with these infections. Plan a schedule of antenatal visits for a normal pregnant woman. 	<ul style="list-style-type: none"> Demonstrate history taking of a pregnant woman at booking. Perform clinical examination of a pregnant patient. Prepare a patient for regular antenatal checkups even though she is completely healthy 	Self-Directed Learning/ Case presentation/ OPD	OSCE SAQs/ MCQs

		<ul style="list-style-type: none"> • Diagnose and manage minor pregnancy complications in antenatal clinic. 			
Prenatal Diagnosis	Prenatal diagnosis and methods available for prenatal diagnosis.	<ul style="list-style-type: none"> • Appraise the anomaly scan in detail with its purpose and systems examined. • Identify pregnant women who need prenatal diagnosis. • Plan the tests that are necessary for prenatal diagnosis. 	<p>Interpret the following investigations:</p> <ul style="list-style-type: none"> • The result of Down's syndromes screening tests • The reports from an anomaly scan. Counsel a patient with fetal anomaly. 	SGD, Self-Directed Learning Case presentation/ OPD	OSCE, SAQ, MCQ.
Labour and Delivery	<p>Normal labour and its management:</p> <ul style="list-style-type: none"> • Analgesia in labour • Fetal surveillance during labour • Abnormal labour and its management • Intrapartum haemorrhage • Spontaneous vaginal delivery • Operative vaginal delivery • VBAC and TOLAC 	<ul style="list-style-type: none"> • Manage 1st and 2nd stages of labour • Manage abnormal labour • Appraise operative vaginal delivery • Identify patient suitable for VBAC and TOLAC 	<ul style="list-style-type: none"> • Prepare and interpret partogram of normal laboring women. • Predict fetal distress on CTG. • Participate in management of labour. • Conduct normal vaginal delivery. • Observe/ assist operative vaginal delivery. • Communicate clearly and effectively to a laboring woman and her partner. 	Self-Directed Learning Case presentation, labour room, ward rounds	OSCE/ SAQ/ MCQ

			<ul style="list-style-type: none"> • Counsel a patient regarding operative vaginal delivery and LSCS. 		
Third Stage of Labour	<ul style="list-style-type: none"> • Management of third stage of labor • Complications of third stage of labour including perineal tear, postpartum haemorrhage 	<ul style="list-style-type: none"> • Compare active and physiological management of third stage of labor. • Summarize the causes and management of primary & secondary PPH. • Appraise postnatal complications that cause maternal deaths. 	<ul style="list-style-type: none"> • Demonstrate delivery of placenta by controlled cord traction on a mannequin. • Conduct / assist third stage of labor. • Estimate blood loss at delivery/C section 	Self-Directed Learning Case presentation, labour room, Workshop	OSCE/ SAQ's/ MCQ's
Puerperium	<ul style="list-style-type: none"> • Normal puerperium • Complications of puerperium • postpartum amenorrhoea, lactational problems, medical and psychiatric disorders, puerperal pyrexia, postpartum pyrexia 	<p>Compare the benefits of breast feeding and bottle feeding</p> <p>Manage postpartum amenorrhoea, lactational problems, medical and psychiatric disorders, puerperal pyrexia, postpartum pyrexia on the basis of its etiology</p>	<ul style="list-style-type: none"> • Counsel a woman on exclusive breast feeding. • Counsel a woman regarding postpartum contraception 	Self-Directed Learning Case presentation	OSCE/ SAQs/ MCQs
II. MEDICAL DISORDERS IN PREGNANCY(Acute/chronic):					
Anaemia/ Pallor In Pregnancy	<ul style="list-style-type: none"> • Effects of following diseases on maternal and fetal outcome • Effects of pregnancy on following diseases 	Manage anemic women on the basis of relevant investigations	<ul style="list-style-type: none"> • Perform examination of a patient with anemia • Interpret the patterns of abnormality found on full blood count that are 	SGD, Self Directed Learning Case presentation/ OPD	C S C E /

	Anaemia in pregnancy		<p>indicative of iron deficiency anemia, Beta thalassemia minor, B12 and folic acid deficiency anemia.</p> <ul style="list-style-type: none"> • Counsel a patient with Beta thalassemia trait. 		S A C S / M C C S
Hypertension and Proteinuria/ Eclampsia:		<ul style="list-style-type: none"> • Categorize a hypertensive patient in pregnancy according to standard classification • Compare the principles of management of pre eclampsia with chronic essential hypertension. • Critically appraise the drugs used in the management of pre eclampsia • Identify the maternal and fetal complications of pre eclampsia and eclampsia 	<ul style="list-style-type: none"> ○ Perform following tests; <ul style="list-style-type: none"> • Measure B.P using mercury sphygmomanometer • Dipstick urine analysis • Elicit ankle jerk and clonus ○ Interpret following investigations <ul style="list-style-type: none"> • Renal function tests • Liver function tests • Coagulation tests <ul style="list-style-type: none"> • Urine microscopy, culture and sensitivity • Analyze the ethical issues relevant to delivery of a baby for maternal versus fetal safety • Counsel a patient concerning the 	SGD, Self Directed Learning Case presentation/ OPD	C S C E / S A C S / M C C S

			maternal and fetal complications associated with pre eclampsia and eclampsia		
Diabetes Mellitus	Hypertension and proteinuria in pregnancy	<ul style="list-style-type: none"> Evaluate the screening tests for diabetes in pregnancy Summarize the principles of management of Diabetes in pregnancy Compare and contrast effects on fetus and mother of Gestational Diabetes 	<ul style="list-style-type: none"> Interpret lab tests used to screen Diabetes mellitus in pregnancy Check random blood sugar by glucometer Construct diet chart for a pregnant patient Counsel a pregnant patient the reason for screening for Diabetes in pregnancy and effects of poorly controlled Diabetes. 	SGD, Self-Directed Learning Case presentation/ OPD	C S C E / S E C S / M C C S
Cardiac, Respiratory, Renal and Liver Disease		Compare and contrast effects of pregnancy in general on women with Cardiac, Respiratory, Renal and Liver disease	<ul style="list-style-type: none"> Examine cardiovascular system of a pregnant patient Interpret RFT's and LFT's Counsel a pregnant woman about a medical disorder in pregnancy 	SGD, Self-Directed Learning Case presentation/ OPD/ Clinical Methods	C S C E / S A C S / M

	<ul style="list-style-type: none"> Diabetes mellitus in pregnancy 				C C S
Obesity in pregnancy	<ul style="list-style-type: none"> Cardiac, Respiratory, Renal and Liver disease 	Compare and contrast effects of obesity on mother and fetus in pregnancy	Counsel a pregnant woman about complications of obesity in pregnancy and weight reduction by changing life style and diet	SGD, Self-Directed Learning Case presentation/ OPD/ Clinical Methods	C S C E S A C S / M C C S
Thyroid.	<ul style="list-style-type: none"> Obesity Thyroid disease in pregnancy: <ul style="list-style-type: none"> Hypothyroidism Hyperthyroidism Autoimmune conditions and dermatological conditions 	<ul style="list-style-type: none"> Compare and contrast effects of hypothyroidism and hyperthyroidism on mother and fetus in pregnancy Interpret TFT's. 	<ul style="list-style-type: none"> Examine thyroid gland Counsel a pregnant patient with goiter 	SGD, Self-Directed Learning Case presentation/ OPD/ Clinical Methods	C S C E / S A C S / M C C S

Autoimmune Conditions and Dermatological Conditions		Appraise general effects of Autoimmune conditions and dermatological conditions on mother and fetus		SGD, Self-Directed Learning	C S C E / S A C S / M C C S
Neurological Conditions	Epilepsy	Appraise general effects of epilepsy on pregnancy and effects of anti-epileptic medicines on the fetus	Counsel a pregnant patient with epilepsy	SGD, Self-Directed Learning Case presentation/ OPD/ Clinical Methods	C S C E / S A C S / M C C S

Drug and Alcohol Misuse/Smoking	Drug and alcohol misuse, Smoking	Appraise general effects of Drug and alcohol misuse, smoking on pregnancy and effects of drugs/alcohol on the fetus	Counsel a pregnant patient about effects of drug abuse/smoking on fetus	SGD, Self-Directed Learning Case presentation/ OPD/ Clinical Methods	C S C E / S A C s / M C C s
III. HIGH RISK INTRA PATUM EVENTS					
Ante Partum Hemorrhage	<ul style="list-style-type: none"> • Differentiation of different causes of Ante partum hemorrhage • Principles of management of: <ul style="list-style-type: none"> ○ Placenta praevia ○ Abruptio placentae ○ Incidental bleeding 	<ul style="list-style-type: none"> • Draw a diagram showing position of placenta in major and minor placenta previa • Compare and contrast symptoms and signs found in women with vaginal bleeding secondary to placental abruption and placenta previa • Draw a flow chart of investigations for a patient with ante-partum hemorrhage 	<ul style="list-style-type: none"> • Insert large bore I/V cannula • Interpret a hard copy of ultrasound image of pregnant uterus at greater than 24 weeks and identify site of placenta • Counsel a woman whose baby has died following placental abruption 	SGD, Self-Directed Learning Case presentation, Clinical Methods, ER	OSCE/ SAQs/ MCQs

		<ul style="list-style-type: none"> Evaluate the investigations and management of patients with ante-partum hemorrhage 			
Pre-maturity and Post Maturity	<p>Diagnosis and management of prematurity Principles of management of:</p> <ul style="list-style-type: none"> Preterm pre-labour rupture of membranes Preterm labour IUD Postdates and post term pregnancy 	<ul style="list-style-type: none"> Differentiate between Threatened preterm labour, Preterm pre-labor rupture of membranes and preterm labor Appraise the principles of diagnosis and management of Threatened preterm labor, Preterm pre-labor rupture of membranes and Preterm labor. Identify the causes of IUD Outline the management plan of IUD Differentiate between postdates and Post term pregnancy and appraise the policy of Induction of labor in each instance 	<ul style="list-style-type: none"> Interpret a contractions trace from a CTG Interpret the following investigations: <ul style="list-style-type: none"> C Reactive proteins White Blood Cell count Fibronectin vaginal swab Anicardiolipin antibodies Urine culture sensitivities and microscopy Counsel a woman whose baby has died in the womb Explain to a patient reason for administering antenatal steroids Explain to a patient the reason for Induction of 	SGD, Self-Directed Learning Case presentation, Clinical Methods, ER	OSCE/SAQs/MCQs

			labor for Post Term pregnancy		
IV. MALPRESENTATIONS					
Malpresentations <ul style="list-style-type: none"> • Breech Presentation • Transverse Lie • Brow, Face and Shoulder Presentation • Cord Presentation and Prolapse • Compound Presentation • Malpositions 	Diagnosis and principles of management of: <ul style="list-style-type: none"> • Breech presentation • Transverse lie • Brow, face and shoulder presentation • Cord presentation and prolapse • Compound presentation • Malpositions <ul style="list-style-type: none"> • Persistent occipitoposterior position • Deep transverse arres 	<ul style="list-style-type: none"> • Appraise breech presentation, its incidence, predisposing factors, diagnosis and principles of management in the antenatal period and in labor • Compare maternal and fetal outcomes in vaginal breech delivery with delivery by Elective Lower Segment Caesarean section • Summarize the principles of diagnosis and management of Brow, Face and Shoulder presentation • Summarize the principles of management of Malpositions 	<ul style="list-style-type: none"> • Demonstrate types of breech presentation on a mannequin • Identify the fontanelles and diameters on a fetal skull. Assemble the Ventouse apparatus and explain the principles of its application • Counsel a patient with breech presentation about external cephalic version • Counsel a patient with breech presentation requesting vaginal delivery the pros and cons of vaginal breech delivery 	SGD, Self-Directed Learning Case presentation/ OPD	OSCE/ SAQ/ MCQ
V. MULTIPLE PREGNANCY					
Multiple Pregnancy	Diagnosis and principles of management in multiple pregnancy and labor	<ul style="list-style-type: none"> • Differentiate between monozygotic and dizygotic twins in terms of mechanism, diagnosis 	<ul style="list-style-type: none"> • Interpret a hard copy of ultrasound picture of twin pregnancy at 12 weeks gestation 	SGD, Self-Directed Learning	SAQ/ MCQ/ OSCE

		<p>and complications in antenatal period and labor</p> <ul style="list-style-type: none"> • Appraise the role of clinical examination and ultrasound examination in the diagnosis of multiple pregnancy • Summarize the maternal and fetal complications in pregnancy and labor • Appraise the principles of management in pregnancy and labor and how he/ she will determine zygosity at birth 	<ul style="list-style-type: none"> • Counsel a patient with twin pregnancy regarding her nutrition 	Case presentation/ OPD	
VI. FETAL GROWTH DISORDERS					
<p>Intra Uterine Growth Restriction and Small for Gestational Age (IUGR/ SGA). Macrosomia</p>	<p>Differentiate between Intra Uterine Growth Restriction and Small for Gestational Age (IUGR/ SGA). Diagnosis and management of fetal Macrosomia</p>	<ul style="list-style-type: none"> • Differentiate between the terms Small for Gestational Age and Intrauterine Growth restriction • Diagnose Intrauterine Growth Restriction through relevant history, clinical examination and ultrasound examination • Distinguish between symmetrical and asymmetrical IUGR 	<ul style="list-style-type: none"> • Interpret plots on a fetal growth curve • Counsel a patient of symmetrical IUGR regarding prenatal diagnosis and prognosis 	SGD, Self Directed Learning Case presentation/ OPD	OSCE/ SAQ/ MCG

		<ul style="list-style-type: none"> • Compare and contrast etiological factors, pathogenesis, principles of management and prognosis of symmetrical and asymmetrical IUGR • Appraise how he/ she will reach a diagnosis of fetal Macrosomia • Summarize the maternal and fetal complications associated with this condition and how best to avoid them 			
VII. LIQUOR VOLUME ABNORMALITIES					
Oligohydramnios and Polyhydramnios	Causes of oligohydramnios and polyhydramnios Diagnosis and management of liquor volume abnormalities	<ul style="list-style-type: none"> • Appraise the diagnosis and the maternal and fetal conditions which can cause polyhydramnios and associated complications • Categorize the causes of oligohydramnios • Appraise the diagnostic modalities and how the etiological factors would modify your management 	<p>Interpret the largest single vertical pool of liquor on a hard copy of an ultrasound scan</p> <p>Counsel a patient of polyhydramnios regarding her discomfort with empathy</p>	SDL, SGD Case presentation/ OPD	SAQ/ MCQ/ OSCE
VIII. BAD OBSTETRIC HISTORY					

Poor pregnancy outcome	Previous history of foetal loss and problems in early pregnancy	<ul style="list-style-type: none"> Identify the possible causes of recurrent foetal loss Critically appraise the factors leading to recurrent foetal loss and means to reduce it Outline the management plan 	Counsel a woman who has had a recurrent fetal loss	CBL/OPD	SAQ/ MCQ/ OSCE
Foetal infections	Foetal infections	Recognize possible causes of foetal infections		Lecture	SAQ/ MCQ/ OSCE
Hydrops Fetalis:	Principles of prevention and management of Rhesus incompatibility	<ul style="list-style-type: none"> Distinguish between immune and non-immune causes of hydrops fetalis Draw a diagram showing the mechanism of Rhesus immunization Appraise how Rhesus immunization can be prevented 	<ul style="list-style-type: none"> Calculate the right dose of anti D injection according gestational age and clinical conditions which dictates its use Counsel a rhesus negative woman who has delivered a rhesus positive baby the reasons why she needs anti-D injection with -in 72 hours of delivery 	SDL, SGD	SAQ/ MCQ/ OSCE
IX. OBSTETRICAL EMERGENCIES					
Obstetrical and resuscitation Collapse Maternal	Causes of obstetrical collapse Principles of diagnosis and management of obstetrical collapse	<ul style="list-style-type: none"> Categorize the obstetric and non-obstetric causes of maternal collapse and explain the general principles of 	<ul style="list-style-type: none"> Insert an airway Insert a large bore cannula Insert a Foleys catheter 	SDL, Case presentation/ ER	SAQ/ MCQ/ OSCE

	<ul style="list-style-type: none"> • General • specific 	<ul style="list-style-type: none"> • management of obstetric shock • Apprise the principles of specific management of the following obstetric emergencies: <ul style="list-style-type: none"> ○ Obstetric haemorrhage ○ Eclampsia ○ Cord Prolapse ○ Obstructed labor 	<ul style="list-style-type: none"> • Interpret an input and output record • Interpret FBC, Electrolytes, coagulation screen and Blood gases • Monitor pulse, B.P, oxygen saturation, urinary output and conscious state • Counsel a patient's relatives regarding the patient, the proposed management and prognosis 	Clinical Methods, Labour room Role plays		
SPECIFIC LEARNING OBJECTIVES IN GYNAECOLOGY						
S.No	Core Clinical Concepts/ Themes	Contents	Learning Objectives		Instructional Strategy	Assessment Tool
			At the end of teaching session, the student should be able to			
			Knowledge	Skills/Attitude		
I. PUBERTY & ADOLESCENCE						
1.	Puberty & Adolescence	<ul style="list-style-type: none"> • Concept of precocious and delayed puberty • Adolescent Menorrhagia 	<ul style="list-style-type: none"> • Apprise the changes and their sequence of appearance at puberty and describe disorders of puberty like premature and delayed puberty • Apprise the malformations of uterus and vagina their 	<ul style="list-style-type: none"> • Identify the uterus in a hard copy of pelvic USG • Counsel a young women with delayed puberty 	Lecture/CBL/S DL/ bedside training	SAQ/ MCQ/ OSCE

			<p>examination and treatment.</p> <ul style="list-style-type: none"> Describe the relationship of genital tract abnormalities with urinary tract abnormalities. 			
II. SUBFERTILITY & CONTRACEPTION						
2.	Primary and secondary subfertility	<p>Primary and secondary subfertility:</p> <ul style="list-style-type: none"> Male factors Female factors ART <p>Surgical intervention for subfertility</p>	<ul style="list-style-type: none"> Differentiate between primary and secondary subfertility and devise a classification for the causes of subfertility Draw a graph of the changes in serum levels of estrogen, progesterone, LH and FSH during the menstrual cycle Identify women at risk of tubal damage Appraise the general principles of treatment of infertile couple 	<ul style="list-style-type: none"> Take a history from a couple presenting with subfertility Interpret the following: <ul style="list-style-type: none"> Female follicular phase hormonal profile Female luteal phase progesterone changes Male semen analysis Explain the principles of dealing with sensitivity and sympathetically with subfertile couple 	Lecture/CBL/SDL/ bedside training	SAQ/MCQ/OSCE
3.	Contraception	<ul style="list-style-type: none"> Mechanism of action/efficacy of contraceptives Physiological methods Reversible methods: <ul style="list-style-type: none"> Hormonal Intrauterine devices Barrier methods Permanent methods 	<ul style="list-style-type: none"> Categorize methods of contraception Discuss pros and cons of each with their failure rates and complications Distinguish between different modes / mechanism of action of different methods 	<ul style="list-style-type: none"> Explain insertion of IUCD Counsel and explain the methods of use of oral Contraceptive pills Explain family planning in terms of social, cultural, economic and regional context 	Lecture/CBL/SDL/ bedside training	SAQ/MCQ/OSCE

		<ul style="list-style-type: none"> ▪ Emergency Contraceptio ▪ WHO medical eligibility criteria 	<ul style="list-style-type: none"> • Compare and contrast male and female sterilization 			
III. MENSTRUAL DISORDERS						
4.	Heavy Menstrual Bleeding	<p>Concept of hypothalamo-pituitary-ovarian-endometrial axis</p> <p>Principles of diagnosis and management of:</p> <ul style="list-style-type: none"> • Heavy menstrual bleeding • Metorrhagia • Abnormal uterine bleeding • Post menopausal bleeding • primary and secondary amenorrhea • Dysmenorrhoea • Post coital bleeding 	<ul style="list-style-type: none"> • Revise the hormonal changes in a menstrual cycle • Formulate a flow diagram for the treatment of heavy menstrual bleeding. • Differentiate between heavy menstrual bleeding and abnormal uterine bleeding/Metorrhagia • List the causes of heavy and irregular menstruation • Outline the management plan 	<ul style="list-style-type: none"> • Take a detailed menstrual history • Assist/ perform: <ul style="list-style-type: none"> ○ Pap smear ○ Pipelle endometrial biopsy • Communicate with the patient with explanation of the condition, treatment options and complications. 	Lecture/CBL/S DL/ bedside training	SEQ/ MCQ/ OSCE
5.	Amenorrhea		<ul style="list-style-type: none"> • Distinguish primary from secondary amenorrhea • Describe a scheme for classifying the causes of amenorrhea, based on the primary site of problem • Devise a scheme of relevant and appropriate 	<ul style="list-style-type: none"> • Calculate Body mass Index • Should have observed and be able to describe: <ul style="list-style-type: none"> ○ Transvaginal USG ○ Pipelle endometrial biopsy ○ Hysteroscopy ○ Laparoscopy 	Lecture/CBL/S DL/ bedside training	SEQ/ MCQ/ OSCE

			<p>investigations to reach a diagnosis</p> <ul style="list-style-type: none"> Appraise the principles of management available for: <ul style="list-style-type: none"> Hypothalamic dysfunction Pituitary dysfunction Ovarian dysfunction <p>Outflow tract abnormalities</p>	<ul style="list-style-type: none"> Counsel a woman with amenorrhea. Describe the ethical issues relevant to the methods available to achieve pregnancy in women with amenorrhea e.g. oocyte donation. 		
6.	Post Menopausal Bleeding and Post coital bleeding		Formulate a flow diagram of management of a woman with post menopausal bleeding/ Post coital bleeding	<p>Should have observed and be able to describe:</p> <ul style="list-style-type: none"> Transvaginal USG Pipelle endometrial biopsy Hysteroscopy <p>Counsel a woman with post menopausal bleeding/ Post coital bleeding about the condition, management and prognosis</p>	Lecture/CBL/S DL/ bedside training	SAQ/ MCQ/ OSCE
7.	PCOs	Diagnosis and management of Polycystic ovarian syndrome	Appraise the principles of management available for PCOs	Counsel a woman with PCOs about the condition, management and prognosis	Lecture/CBL/S DL/ bedside training	SAQ/ MCQ/ OSCE
IV. MISCARRIAGES:						
8.	Miscarriages	<ul style="list-style-type: none"> Principles of diagnosis and management Spontaneous miscarriage 	<ul style="list-style-type: none"> Devise a classification of miscarriages 	<ul style="list-style-type: none"> Take a relevant gynecological history in a woman complaining of 	Lecture/CBL/S DL/ bedside training	SEQ/ MCQ/ OSCE

		<ul style="list-style-type: none"> • Recurrent miscarriage • Gestational trophoblastic disease 	<ul style="list-style-type: none"> • Differentiate between different types of spontaneous and induced abortions • Critically appraise the treatment available for different types of abortions • Formulate a list of investigations for recurrent pregnancy loss • Appraise the principles of management of benign and malignant Trophoblastic disease 	vaginal bleeding and/ or abdominal pain in early pregnancy <ul style="list-style-type: none"> • Identify a hard copy of USG for complete hydatiform Mole • Counsel a patient following a spontaneous abortion • Counsel a patient regarding follow up for benign Trophoblastic disease 		
V. MENOPAUSE AND OSTEOPOROSIS:						
7.	Menopause and Osteoporosis:	Diagnosis and management of menopause and osteoporosis.	<ul style="list-style-type: none"> • Appraise menopause and its causes • Appraise the hormonal and physical changes that occur during climacteric • Classify the symptoms of climacteric in to short term and medium term • Critically appraise the different regimens of hormonal therapy and explain the reasons of why progesterones are used in post menopausal women who have a uterus 	<ul style="list-style-type: none"> • Take a detailed history of climacteric problems and identify the risk factors for osteoporosis and cardiovascular disease • Counsel a patient regarding menopausal issues and hormonal therapy 	Lecture/CBL/S DL/ bedside training	SEQ/ MCQ/ OSCE

			<ul style="list-style-type: none"> • Compare the risks and benefits of hormonal replacement therapy • Evaluate the important risk factors for osteoporosis and cardiovascular disease 			
VI. URINARY PROBLEMS:						
9.	Urinary incontinence	<ul style="list-style-type: none"> • Urinary incontinence • Detrusor Instability • Urodynamic Stress • Incontinence overflow incontinence • True Incontinence 	<ul style="list-style-type: none"> • Classify urinary incontinence and differentiate between detrusor instability and urodynamic stress incontinence • Categorize the symptoms that are associated with: <ul style="list-style-type: none"> • Urodynamic stress incontinence • Detrusor instability • Voiding difficulty • True incontinence • Critically appraise the role of urodynamic investigations for the diagnosis of cause of urinary incontinence • Appraise the principles of management of: <ul style="list-style-type: none"> • Urodynamic stress incontinence • Detrusor instability • Voiding difficulty 	<ul style="list-style-type: none"> • Identify a urodynamic trace • Explain the taboos related to urinary incontinence. 	Lecture/CBL/S DL/ bedside training	SAQ/ MCQ/ OSCE

10.	Urinary tract infections	Diagnosis and management of UTIs	Outline the management plan on the basis of its etiology	<ul style="list-style-type: none"> Take relevant history Perform clinical examination 	Lecture/CBL/S DL/ bedside training	SEQ/ MCQ/ OSCE
VII. UTEROVAGINAL PROLAPSE:						
11.	Uterovaginal Prolapse:	Principles of diagnosis and management of uterovaginal prolapsed. Concept of POP-Q classification	<ul style="list-style-type: none"> Differentiate between: <ul style="list-style-type: none"> Cystocele and urethrocele Rectocele and enterocele Vaginal vault prolapse and uterine prolapse. Classify the uterine prolapse according to severity Appraise the methods of treatment of uterovaginal prolapse and select factors that are important in the choice of best treatment 	<ul style="list-style-type: none"> Place a woman in Sim's position Should have observed the examination of prolapse Able to describe the uses of Sim's speculum Counsel a patient with uterovaginal prolapse 	Lecture/CB L/SDL/ bedside training	SEQ/ MCQ/ OSCE
VIII. ABDOMINOPELVIC PAIN:						
12.	Acute abdomino pelvic pain	Diagnosis and management of acute abdominal pain due to: <ul style="list-style-type: none"> Ectopic pregnancy Ovarian cyst accident first trimester d miscarriage 	<ul style="list-style-type: none"> Categorize the causes of acute onset of pelvic pain Compare and contrast the signs and symptoms of ectopic pregnancy, ovarian cyst accident 	<ul style="list-style-type: none"> Take history and emanation of patient with acute abdomen The student should have observed and able to describe transvaginal pelvic ultrasound 	Lecture/CBL/SDL/ bedside training	SEQ/ MCQ/ OSCE

		Principles of diagnosis and management of chronic pelvic pain	and first trimester d miscarriage <ul style="list-style-type: none"> • Appraise the medical and surgical methods of treatment of ectopic pregnancy • Construct a flow diagram of management of ovarian cyst presenting with acute pelvic pain 			
	Chronic abdomino pelvic pain	Chronic pelvic pain <ul style="list-style-type: none"> • Dysmenorrhea • Endometriosis Principles of diagnosis and management of endometriosis causing: <ul style="list-style-type: none"> • Pelvic pain Infertility 	<ul style="list-style-type: none"> • Categorize the gynaecological and non gynaecological causes of chronic pelvic pain • Differentiate between primary and secondary dysmenorrhea and describe the differences in symptomatology of each • Appraise the treatment available for primary dysmenorrhea • Point out the investigations that may be undertaken for chronic pelvic pain and explain the reasons for each. 	The students should have observed and be able to describe the following procedures: <ul style="list-style-type: none"> • Laparoscopy • TVS P3 Counsel and explain a patient the reasons for laparoscopy in the management of her pelvic pain. A3	Lecture/CBL/SDL/ bedside training	SEQ/ MCQ/ OSCE

			<ul style="list-style-type: none"> • Explain what is meant by endometriosis along with theories of its etiology and possible associated signs and symptoms. • Appraise the medical and surgical treatment available for endometriosis. • Evaluate the policy of laparoscopy for all women with chronic pelvic pain. 			
IX. GENITAL TRACT INFECTIONS:						
13.	Vaginal Discharge/ Lower genital tract infections	Concept of etiological factors, clinical diagnosis and management of: <ul style="list-style-type: none"> • Vaginal Discharge • Lower genital tract infections 	<ul style="list-style-type: none"> • Classify the causes of vaginal discharge • Describe the physiology, pathology and clinical picture of various types of vaginal discharge • Summarize methods of diagnosis of various types of vaginal discharge 	<ul style="list-style-type: none"> • Elicit a sexual history from a patient giving consideration to the ethical and communication skills aspect. • Take HVS • Outline the issues of confidentiality 	Lecture/CBL/SDL/ bedside training	SEQ/ MCQ/ OSCE
14.	Upper genital tract infections	Concept of etiological factors, clinical diagnosis and management of: Upper genital tract infections	Appraise the symptoms of presentation, criteria of diagnosis, relevant investigations and	<ul style="list-style-type: none"> • Interpret lab report of: <ul style="list-style-type: none"> ○ Urine examination ○ HVS 	Lecture/CBL/SDL/ bedside training	SEQ/ MCQ/ OSCE

			principles of treatment as well as prevention of PID			
X. GYNAECOLOGICAL TUMORS/SEXUAL DISORDERS:						
15.	Benign	Benign: <ul style="list-style-type: none"> • Fibroid uterus • Benign tumors of Ovary 	<ul style="list-style-type: none"> • Appraise the epidemiology, etiology, clinical presentation and principles of management of fibroid uterus. • Classify common benign tumors of ovary along with their clinical presentation and principles of management. 	Identify fibroids on a hard copy of USG. <ul style="list-style-type: none"> • Explain the association of fibroid with infertility to a patient 	Lecture/CBL/SDL/ bedside training	SAQ/ MCQ/ OSCE
	Malignant	Malignant: <ul style="list-style-type: none"> • Cervical cancer • Endometrial cancer • Ovarian cancer • Screening of gynecological cancer • Prevention • Radiotherapy and chemotherapy for uterine and ovarian cancers 	<ul style="list-style-type: none"> • Appraise the management of important gynaecological cancers namely: Cervical squamous carcinoma, Endometrial adenocarcinoma, Surface epithelial tumors of ovary, Vulval & vaginal cancers along with their basic clinical pathology including principles of tumors staging. 	<ul style="list-style-type: none"> • Perform a cervical smear. • Explain the significance of pap smear result and appropriate management. 	Lecture/CBL/SDL/ bedside training	SAQ/ MCQ/ OSCE

	Sexual disorders	<ul style="list-style-type: none"> Sexually transmitted infections(HIV) Sexual dysfunction disorders 	<ul style="list-style-type: none"> Interpret the investigations of patient with sexually transmitted disease Appraise the management of sexually transmitted infections(HIV) and sexual dysfunction disorders 	<ul style="list-style-type: none"> Counsel a woman with sexually transmitted disease and sexual dysfunction disorders 		
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Procedural skills to be acquired in clinical training:

Year III & IV

Level of Competency	Procedure
Observe or ideally assist	Female Urinary catheterization
Observe or ideally assist	Passage of Nasogastric Tube
Observe or ideally assist	Surgical Dressing
Observe or ideally assist	Preparation of iron sucrose solution
Observe or ideally assist	Removal of sutures
Performs under direct supervision	Intra Muscular Injection
Performs under direct supervision	Subcutaneous Injection
Performs under direct supervision	Obstetrical examination
Performs under direct supervision	Intravenous Line

Year V

Level of Competency	Procedure
Observe or ideally assist	Female Urinary catheterization
Observe or ideally assist	Passage of Nasogastric Tube
Observe or ideally assist	Surgical Dressing
Observe or ideally assist	Preparation of iron sucrose solution
Observe or ideally assist	Removal of sutures
Observe or ideally assist	MVA
Observe or ideally assist	Pip Pele
Observe or ideally assist	HSG
Observe or ideally assist	Conduct of delivery
Observe or ideally assist	Stitching of episiotomy

Observe or ideally assist	Scrubs and assists in C-section, hysterectomy and laparotomy
Observe or ideally assist	Wound closure(skin)
Observe or ideally assist	Performing CTG and its interpretation
Observe or ideally assist	Vaginal placement of prostaglandins
Observe or ideally assist	Cervical Foley
Observe or ideally assist	Trans abdominal and vaginal Ultrasound
Observe or ideally assist	Assisted Vaginal delivery
Observe or ideally assist	Cervical and vulval biopsy
Observe or ideally assist	Vaginal packing of UG prolapse
Observe or ideally assist	Bimanual uterine massage
Observe or ideally assist	Balloon tamponede
Observe or ideally assist	Colposcopy
Performs under direct supervision	Intra Muscular Injection
Performs under direct supervision	Subcutaneous Injection
Performs under direct supervision	Obstetrical examination
Performs under direct supervision	Intravenous Line
Performs under direct supervision	HVS
Performs under direct supervision	Pap smear
Counsel and demonstrate	Position for breast feeding

FINAL PROFESSIONAL MBBS EXAMINATION (GYNAE PAPER – I) (2020)

OBSTETRICS & GYNAECOLOGY

Time Allowed	=03 hrs. (Including MCQs)	
Marks of theory paper	=90	
Internal assessment	=10	
Total marks	=100	
Pass Marks	=50	
45 x MCQs	(45 Marks)	Time =50 min
Q. No. 1,2,3,4,5,6,7,8,9		
9x SAQs/SEQs (Application)	= 05 marks each	
Total Marks	= 45 Marks	Time = 2 hours & 10 min

Topic	NUMBER OF MCQs (45) Applications (45) (01 marks each)	NUMBER OF SAQs/SEQs (09) Applications (05 marks each)
Physiological changes in pregnancy	02	0
Preconception care	01	01
Antenatal care	03	0
Normal Labor	02	0
Abnormal Labor	02	0
Medical Disorder	06	02
Pre term labor+ PROM	02	
APH	01	01
Maternal Collapse	01	
Malpresentations	02	0
Multiple Pregnancy	02	0
Liquor Abnormaliliteis	02	0
Fetal Growth Restriction	03	01
BOH/Recurrent Fetal Loss	03	01
Assessment of fetal well being	02	0
Role of imaging	01	0
Prenatal diagnosis	01	0
Infections in pregnancy	02	01
Puerperal disorders	02	01
Obstetric emergencies	04	01
Mental Health in pregnancy	01	0
Total	45 (45)	09 (45)

FINAL PROFESSIONAL MBBS EXAMINATION (GYNAE PAPER – II) (2020)

OBSTETRICS & GYNAECOLOGY

Final Professional Examination

TABLE OF SPECIFICATION (THEORY):-

Time Allowed	=	03 hrs (including MCQs)
Total Marks	=	90
Internal Assessment	=	10
Maximum Marks	=	100
Pass Marks	=	50

- Note:** a. All Questions are compulsory
b. Attempt MCQs on separate sheet provided

Part A

Q.No.1 45 x MCQs (on separate sheet) (Time = 50 minutes)

Part B

09 x SAQ/SEQ (Time = 2 hours 10 minutes)

Topic	MCQs (45) (Applications) <u>Part A</u> (01 marks each)	SAQ/SEQ (09) (Applications) <u>Part B</u> (05 marks each)
Anatomy and Embryology	01	0
Puberty & Adolescence	04	0
Menstrual Disorders	04	01
Subfertility & Reproductive Endocrinology	04	01
Bleeding in early Pregnancy (Abortion Ectopic/Molar Pregnancy)	05	01
Menopause, Osteoporosis & MHT	04	01
Uterovaginal Prolapse	02	0
Urogynaecology	02	01
Pelvic Pain	02	01
Genital Tract Infections	04	0
Benign Diseases of Genital Tract	04	01
Malignant Diseases of Genital Tract	04	01
Contraception	04	01
Endometriosis	01	0
Total	45 (45 Marks)	09 (45 Marks)

Proposed Table of Specification for 2020
Clinical Examination Gynae/Obstetrics - OSCE
Practical

Max Marks = 180
 Internal Assessment = 20
 Grand Total = 200
 Pass Marks = 90

Clinical Examination Gynae/Obstetrics - OSCE																								
Gynae												Obstetrics												Total Marks
Long Case (4 x Linked Station)				Interactive Stations		Non-Interactive Stations						Long Case (4 x Linked Station)				Interactive Stations		Non-Interactive Stations						Total Marks
Observed		Non-Observed		Observed		Non-Observed						Observed		Non-Observed		Observed		Non-Observed						Total Marks
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	Total Marks
Focused History	Examination Skills	D/D, Investigation	Management plan	Skill Demonstration	Counselling/ Comm Skills	Picture	X-Ray/ Ultrasound	Instrument	Device	Drugs	Data Interpretation	Focused History	Examination Skills	D/D, Investigation	Management plan	Skill Demonstration	Counselling/ Comm Skills	Pictures	X-Ray/ Ultrasound	Instrument	Partogram/ CTG	Device/ Drug	Data Interpretation	Total Marks
10	10	10	10	10	10	05	05	05	05	05	05	10	10	10	10	10	10	05	05	05	05	05	05	Total Marks
90 Marks												90 Marks												180
<u>15 Stations for Gynae</u> 5 minutes for each station 15 x 5 = 75 Minutes												<u>15 Stations for Obstetrics</u> 5 minutes for each station 15 x 5 = 75 Minutes												

INTERNAL ASSESSMENT CALCULATION FOR THEORY PAPER

Internal Assessment	
Periodical class tests / End of module /rotation exam	20 Marks

INTERNAL ASSESSMENT CALCULATION FOR PRACTICAL

Internal Assessment	
Log book/CBL performance/ End of module /rotation practical Exam/OSCE/ Workshop	20 Marks