

AITo – Diabetes Mellitus

ANATOMY AITo - DIABETES MELLITUS							
Number	Competency The student should be able to	SLO	Domain K/S/A/C	Level K/KH/S/SH/P	CORE (Y/N)	Teaching - Learning methods	Assessment methods
AN47.5	1. Describe and demonstrate Pancreas under following headings - Anatomical position , External and Internal features , Important peritoneal and other relations , Blood supply , Nerve supply , Lymphatic drainage and applied aspects	1. Identify and demonstrate the anatomical position of the Pancreas 2. Describe in detail the external features and histology of the Pancreas 3. Describe the visceral and peritoneal relations of the Pancreas 4. Explain in detail the blood supply , nerve supply and lymphatic drainage of Pancreas	K/S	KH/SH	Y	1. Lecture 2. Small group discussion 3. DOAP	1. Written exam 2. Practical EXAm and Viva

PHYSIOLOGY AITo - DIABETES MELLITUS						
	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
Diabetes mellitus Describe biosynthesis, mechanism of action and regulation of pancreatic hormones	1.Structure and biosynthesis of insulin	K	KH	Y	Lecture	Written
	2.Structure and synthesis of glucagon	K	KH	Y	Lecture	Written
	3.Mechanism of action of glucagon	K	KH	Y	Lecture	Written

BIOCHEMISTRY AITo - DIABETES MELLITUS							
NUMBER	COMPETENCY <i>The student should be able to</i>	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
1.	Describe and discuss the role of Insulin in Diabetes Mellitus	<i>At the end of session, the phase I MBBS student must be able to</i> Explain the role of Insulin in Diabetes Mellitus.	K	KH	Y	Lecture, Small Group Discussion	Written/ Viva voce
2	Interpret the results of blood glucose levels and other laboratory investigations related to Diabetes Mellitus.	<i>At the end of session, the phase I MBBS student must be able to</i> List the investigations done in Diabetes Mellitus. Explain their role in diagnosis and prognosis of Diabetes Mellitus.	K	KH	Y	Lecture, Small Group Discussion	Written/ Viva voce

PATHOLOGY AITo - DIABETES MELLITUS						
	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
Diabetes	Classification, etiology, pathogenesis & pathology of diabetes mellitus	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	1.At the end of the session, students must be able to know the classification of Diabetes accurately	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	2.At the end of the session, students must be able to understand the etiopathogenesis of Diabetes & its complications correctly	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	3. At the end of the session, students must be able to know the gross and microscopic features of affected organs in diabetes & its complications	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce

MICROBIOLOGY AITo - DIABETES MELLITUS						
	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
DIABETES	The second phase students should be able to List out various microbial infections in diabetes.	K	KH	Y	Small group Teaching	Written / Viva - Voce

FORENSIC MEDICINE AITo - DIABETES MELLITUS						
	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
diabetes	1.At the end of the session, students must be able to know the medicolegal aspects of sudden deaths in Diabetes.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce

PHARMACOLOGY AITo - DIABETES MELLITUS						
Number	OBJECTIVES FOR THE RESPECTIVE COMPETENCY (At the end of the session the student should be able to)	Domain K/S/A/C	Level K/KH/SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
	1.Classify anti diabetic drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	2.Explain the mechanism of action of each class of anti diabetic drugs.	k	KH	Y	LECTURE	VIVA/WRITTEN
	3.know the indications of each class of anti diabetic drugs.	K	KH	Y	LECTURE	VIVA/WRITTEN
	4.Enumerate the adverse effects of each class of anti diabetic drugs.	K	KH	Y	LECTURE	VIVA/WRITTEN
	5.List out the drug interactions of each class of anti diabetic drugs.	K	KH	Y	LECTURE	VIVA/WRITTEN

COMMUNITY MEDICINE AITo - DIABETES MELLITUS

Number	Competency	SLO	Domain	Level of Competency K/KH/SH/P	Core	T/L Method	Assessment Method	Duration
CM8.2	Describe and discuss the epidemiological and control measures including the use of essential laboratory tests at the primary care level for Non Communicable diseases (diabetes.)	<p>The 3rd Prof. Part I student should be able to</p> <p>1.describe different types of DM and differentiate between type 1 and 2 DM</p> <p>2.discuss all epidemiological factors responsible for causing the disease.</p> <p>3. Understand the criteria for diagnosis of DM and interpret lab report for DM.</p> <p>4. List out different laboratory investigations available for it.</p> <p>5.Identify the control measures and discuss it's prevention at 3 levels</p>	K	KH	Y	Small group discussion, Lecture	Written / Viva voce	<p>30 min</p> <p>40 min</p> <p>30 min</p> <p>30 min</p> <p>40 min</p>

CM8.3	Enumerate and describe disease specific National Health Programs including their prevention and treatment of a case	<p>At the end of the session the 3rd Prof. Part I student should be able to</p> <ol style="list-style-type: none"> 1. Describe National health program associated with DM with mentioning all services provided under it. 2. Discuss the preventive measure of DM correctly. 3. Describe the treatment strategy of a case of DM as per program guidelines. 	K	KH	Y	Small group discussion, Lecture	Written / Viva voce	40 min 30 min 40 min
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CM8.5	Describe and discuss the principles of planning, implementing and evaluating control measures for disease at community level bearing in mind the public health importance of the disease	<p>3rd Prof. Part I student should be able to</p> <ol style="list-style-type: none"> 1. discuss the planning and implementation of strategy to control DM in a community. 2. describe the evaluation strategies for the control of DM in the same community. 	K	KH	Y	Small group discussion, Lecture	Written / Viva voce	<p>40 min</p> <p>40 min</p>
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CM8.6	Educate and train health workers in disease surveillance, control & treatment and health education	3rd Prof. Part I student should be 1. demonstrate the steps of educating and training a health care worker on DM disease surveillance, control and treatment correctly. 2. Discuss the health education materials related to the disease correctly.	S	SH	Y	DOAP	Skill assessment	45 min 30 min
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OPHTHALMOLOGY AITo - DIABETES MELLITUS								
No.	COMPETENCY	Specific learning objectives The student should be able to:	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method	Number required to certify P
	Describe the ophthalmic manifestations of diabetes mellitus and broad principles of management	1. Should be able to list the manifestations of diabetes in the eye	K	KH	Y	lecture	written	
		2. Should be able to describe the changes in the lens						
		3. Should be able to describe the changes in the retina						
		4.Should be able to enumerate the principles of management of diabetic retinopathy						
		5.should be able to enumerate the steps in cataract extraction						

GENERAL MEDICINE AITo - DIABETES MELLITUS						
1. No.	2. Objectives for the respective Competency	3. Domain	4. K/KH/SH/P	5. CORE	6. T/L Method	7. Assessment Method
	The third phase students should be able to Define DIABETES MELLITUS,	K	KH	Y	Small group Teaching	Written / Viva - Voce
	The third phase students should be able Classify types of DIABETES	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able Explain Epidemiology and pathogenesis of type 1 DM	K	KH	Y	Small group Teaching	Viva - Voce
	List risk factors OF TYPE 1 DM	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able EXPLAIN THE CLINICAL EVOLUTION OF TYPE 1 DM	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able Explain Epidemiology and pathogenesis of type 2 DM	K	KH	Y	Small group Teaching	Viva - Voce
	List risk factors OF TYPE 2 DM	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able EXPLAIN THE ECONOMIC IMPACT & CLINICAL EVOLUTION OF TYPE 1 DM	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able EXPLAIN THE PATHOGENESIS OF TYPE2 DM	K	KH	Y	Small group Teaching	Viva - Voce

	The third phase students should be able LIST THE PRECIPITATING FACTORS OF TYPE2 DM	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able DISCUSS THE RECOGNITION AND MANAGEMENT OF TYPE 2 DM	S	SH	Y	DOAP	FACULTY OBSERVATION
	The third phase students should be able ENUMERATE THE MICROVASCULAR & MACROVASCULAR COMPLICATIONS OF DM	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able ANALYSE A MEDICAL HISTORY THAT WILL DIFFERENTIATE THE ETIOLOGIES OF DIABETES INCLUDING RISK FACTORS,PRECIPITATING FACTORS,LIFE STYLE,NUTRITIONAL HISTORY,FAMILY HISTORY,MEDICATION HISTORY,CO-MORBIDITIES AND TARGET ORGAN DISEASE.	S	P	Y	BEDSIDE	OBSERVATION BY FACULTY
	The third phase students should be able to REPORT FINDINGS IN SYSTEMATIC EXAMINATION THAT ESTABLISHES THE DIAGNOSIS & SEVERITY THAT INCLUDES SKIN,PERIPHERAL PULSES,BP MEASUREMENT,FUNDUS EXAMINATION,DETAILED EXAMINATION OF THE FOOT(PULSES,NERVES,DEFORMITIES & INJURIES)	S	P	Y	BEDSIDE	OBSERVATION BY FACULTY
	The third phase students should be able ENUMERATE THE CLINICAL FEATURES OF DIABETIC EMERGENCIES	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able DESCRIBE HOW TO RECOGNISE PATIENT PRESENTING WITH DIABETIC EMERGENCIES	K	SH	Y	DOAP	OBSERVATION BY FACULTY
	The third phase students should be able LIST THE	K	SH	Y	DOAP	OBSERVATION BY

	DIFFERENTIAL DIAGNOSIS,ANALYSE THE CLINICAL FEATURES THAT SUGGEST A SPECIFIC ETIOLOGY					FACULTY
	The THIRD phase students should be able to ENNUMERATE THE VARIOUS LABORATORY TESTS TO DIAGNOSE DIABETES AND IT'S COMPLICATIONS	K	KH	Y	Small group Teaching	Viva - Voce
	The THIRD phase students should be able TO ANALYSE CAPELLARY BLOOD GLUCOSE TEST	S	P	Y	BEDSIDE CLINIC	SKILL ASSESSEMENT
	The THIRD phase students should be able TO ANALYSE URINE KETONE EXAMINATION WITH A DIP STICK	S	P	Y	BEDSIDE CLINIC	SKILL ASSESSEMENT
	The third phase students should be able DISCUSS THE PRESENTATION OF HYPOGLYCEMIA & EXPLAIN THE PRINCIPLES OF IT'S THERAPY	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able DISCUSS THE PRESENTATION OF DIABETEC EMERGENCIES & EXPLAIN THE PRINCIPLES OF IT'S THERAPY	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able CLASSIFY THE PHARMACOLOGICAL THERAPIES FOR DIABETES	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able DISCUSS THE THERAPEUTIC APPROACH TO TYPE 2 DM BASED ON PRESENTATION,SEVERITY AND COMPLICATIONS	S	P	Y	BEDSIDE CLINIC	SKILL ASSESSEMENT
	The THIRD phase students should be able TO DISCUSS THR PHARMACOLOGY,INDICATION,ADVERSEREACTION AND INTERACTION OF DRUGS USED IN PREVENTION AND TREATMENT OF TARGET ORGAN DAMAGE AND COMPLICATION OF TYPE 2 DM	K	K	Y	LECTURE	WRITTEN EXAMINATION

	The third phase students should be able TO EXPLAIN AND COUNSELL PATIENTS ON THE CORRECT TECHNIQUE OF SELF MONITORING OF BLOOD GLUCOSE.	S	P	Y	DOAP	SKILL ASSESSEMENT
	The third phase students should be able TO ANALYSE THE IMPORTANCE OF PATIENT PREFERENCE WHILE SELECTING THERAPY FOR DIABETES.	S	P	Y	DOAP	SKILL ASSESSEMENT
	The third phase students should be able TO ENUMERATE THE CAUSES OF HYPOGLYCEMIA AND DESCRIBE THE COUNTERHORMONE RESPONSE & INITIAL APPROACH AND TREATMENT	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able ENUMERATE THE PRECIPITATING CAUSES OF DIABETIC KETOACIDOSIS AND EXPLAIN THE PATHOPHYSIOLOGY AND RECOGNITION OF DIABETIC KETOACIDOSIS	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able TO DISCUSS THE CLINICAL FEATURES,DIAGNOSIS AND MANAGEMENT OF DIABETIC KETOACIDOSIS	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able ENUMERATE THE PRECIPITATING CAUSES AND EXPLAIN THE PATHOPHYSIOLOGY AND RECOGNITION OF HYPEROSMOLARNONKETOTIC STATE	K	KH	Y	Small group Teaching	Viva - Voce
	The third phase students should be able TO DISCUSS THE CLINICAL FEATURES,DIAGNOSIS AND MANAGEMENT OF HYPEROSMOLARNONKETOTIC STATE	K	KH	Y	Small group Teaching	Viva - Voce

GENERAL SURGERY AITo - DIABETES MELLITUS								
Topic	Number		Specific learning objectives (SLO)	Domain K/S/A/C	Level K/KH/S/SH/P	CORE (Y/N)	Teaching learning method	Assessment method
Diabetes			1. At the end of the session, student in phase-III must understand clearly how diabetes mellitus affects wound healing and spread of sepsis.	k	KH	Y	1. Lecture 2. Small group discussion	1. Written exam 2. Practical exam with viva 3. OSCE
			2. At the end of the session, student must understand the pathogenesis of diabetic foot.	k	KH	Y	1. Lecture 2. Small group discussion	1. Written exam 2. Practical exam with viva 3. OSCE
			3. At the end of the session, student must understand surgical treatment of diabetic foot and complications.	k	KH	Y	1. Lecture 2. Small group discussion	1. Written exam 2. Practical exam with viva 3. OSCE

OBSTETRICS & GYNAECOLOGY AITo - DIABETES MELLITUS						
Topic	COMPETENCY	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
Diabetes	Define, classify and describe the etiology, pathophysiology, diagnosis, investigations, adverse effects on the mother and fetus and the management during pregnancy and labour and complications of diabetes in pregnancy.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment
	1.At the end of the session, students must be able to understand the Carbohydrate metabolism in pregnancy.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment
	2.At the end of the session, students must be able to know the screening and diagnosis diabetes in pregnancy.	K	SH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment
	3. At the end of the session, students must be able to know the adverse effects of diabetes on the mother and fetus.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment
	4.At the end of the session, students must be able to know the management of diabetes during pregnancy and labour and follow up after delivery.	K	SH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment

PAEDIATRICS AITo - DIABETES MELLITUS						
Diabetes	objective for the respective competency	Domain	K/KH/SH/P	CORE	T/L METHOD	Assessment Method
1	Definition of Paediatric diabetes	K	K	Y	Lecture	Written
2	Etiological classification of Diabetes	K	K	Y	Lecture	Written
3	Diagnostic Criteria for Diabetes	K	K	Y	Lecture	Written/ viva
4	Type I Diabetes Mellitus clinical features, Patho physiology	K	KH	Y	Lecture	Written
5	Type I Diabetes Mellitus Diagnosis, management	K	K	Y	Lecture	Written
6	Diabetic Keto Acidosis, clinical features , patho physiology ,Investigations, Treatment.	K	KH	Y	Lecture	Written
7	Juvenile Diabetic Mellitus, Clinical features, patho physiology, Investigation, treatment	K	K	Y	Lecture	Written

AITo – Jaundice

ANATOMY AITo - JAUNDICE

Number	OBJECTIVES FOR THE RESPECTIVE COMPETENCY (At the end of the session the student should be able to)	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
	1.Explain anatomical position and external features of liver	K	KH	Y	SMALL GROUP	VIVA
	2.Explain the relations of liver with peritoneal reflections.	K,S	SH	Y	SMALL GROUP	VIVA
	3.Explain about segmentation of liver.	K	KH	Y	LECTURE	WRITTEN
	4.Explain about constituents,and relations of intra hepatic and extrahepatic billiary apparatus.	K,S	SH	Y	LECTURE/DOAP	SKILL ASSESSMENT /WRITTEN
	5.Define the boundaries of calot's triangle.	K	KH	Y	SMALL GROUP	VIVA
	6.Describe the development of LIVER AND EXTRA HEPATIC BILLIARY TREE.	K	KH	Y	LECTURE	WRITTEN
	7..Explain the anatomical basis of developmental deffects of Liver and Extra hepatic billiary apparatus.	k	KH	y	LECTURE	WRITTEN
	8.Identify the microscopic features of thyroid gland under the microscope in a given slide.	K/S	SH	Y	DOAP	SKILL ASSESSMENT.
	9.Demonstrate the surface marking of Liver and gall blader .on a mummified cadaver.	K/S	SH	Y	DOAP	SKILL ASSESSMENT.

PHYSIOLOGY AITo - JAUNDICE						
COMPETENCY	Specific learning objectives	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method
<p>The student should be able to:</p>	<p>The student should be able to:</p>					
<p>Jaundice</p> <p>Describe the physiology of jaundice</p>	<p>1.Describe the fate of bilirubin</p> <p>2.Discuss Entero hepatic circulation</p> <p>3.Explain the Physiological basis of types of jaundice</p>	K	KH	Y	Small group teaching	Written/ viva voce

BIOCHEMISTRY AITo - JAUNDICE

NUMBER	COMPETENCY <i>The student should be able to</i>	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
1.	Describe the metabolism of bilirubin and its physiological / pathological relevance	<p><i>At the end of session, the phase I MBBS student must be able to</i></p> <p>Explain Bilirubin metabolism in detail – Synthesis, degradation, secretion, conjugation and excretion</p> <p>List the types of Jaundice – Hereditary (Conjugated and unconjugated hyperbilirubinemias) and acquired (Adults (hemolytic, hepatic and Obstructive jaundice) infant (Physiological Jaundice of new born, breast milk jaundice)</p> <p>Explain the altered biochemical parameters in different types of Jaundice.</p>	K	KH	Y	Lecture, Small Group Discussion	Written/ Viva voce

PATHOLOGY AITo - JAUNDICE

Topic	COMPETENCY	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
Jaundice	Enumerate the etiology and describe the pathogenesis of jaundice.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	1. At the end of the session, students must be able to know the causes of jaundice accurately	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	2. At the end of the session, students must be able to understand the pathogenesis of jaundice correctly	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce

MICROBIOLOGY AITo - JAUNDICE						
	Objectives for the respective Competency	Domain	K/KH/SH/P	CORE	T/L Method	Assessment Method
JAUNDICE MI 13.8	1)The second phase students should be able to Describe the various etiological agents of jaundice.	K	KH	Y	Lecture	Written
	2)The second phase students should be able to Discuss the lab diagnosis of Hepatitis viruses	K/S	KH	Y	Small group Teaching	Written / Viva - Voce

FORENSIC MEDICINE AITo - JAUNDICE

Topic	objective	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching-Learning Methods	Assessment Methods
jaundice	1. At the end of the session, students must be able to identify the external postmortem features in cases of jaundice deaths	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce

COMMUNITY MEDICINE AITo - JAUNDICE

SN	Competency	SLO	Domain	Level	T/L method	Assessment Method	Duration
CM 3.3	Enumerate, describe and discuss the modes of transmission and measures for prevention and control of hepatitis.	At the end of the session the Phase III students will be able to describe the epidemiology of hepatitis A in detail	K	KH	Lecture	Written	30min
		At the end of the session the Phase III students will be able to discuss the common measures to prevent hepatitis A correctly	K	KH	Lecture	Written	30min
		At the end of the session the Phase III students will be able to describe the epidemiology of hepatitis B in detail	K	KH	Lecture	Written	30min
		At the end of the session the Phase III students will be able to discuss the common measures to prevent hepatitis B correctly	K	KH	Lecture	Written	30min
		At the end of the session the Phase III students will be able to describe the epidemiology of hepatitis C in detail	K	KH	Lecture	Written	30min
		At the end of the session the Phase III students will be able to discuss the common measures to prevent hepatitis C correctly	K	KH	Lecture	Written	30min
		At the end of the session the Phase III students will be able to discuss the common measures to prevent hepatitis D,E,F correctly	K	KH	Lecture	Written	30min

GENERAL MEDICINE AITo - JAUNDICE

COMPETENCY	SPECIFIC LEARNING OBJECTIVES	DOMAIN (K/S/A/C)	LEVEL (K/KH/SH/P)	CORE (Y/N)	METHOD OF TEACHING	METHOD OF ASSESSMENT
Describe how to approach a case of Jaundice, establish a differential diagnosis/ most probable diagnosis.	<p><i>At the end of the session Phase 3 student must be able to</i></p> <p>Take a detailed history when presented with a case of jaundice which includes symptoms of clinical presentation, risk factors, drug use, sexual history, vaccination history and family history accurately</p>	S	SH	Y	Bedside clinic, DOAP sessions	Skill assessment
	<p><i>At the end of the session Phase 3 student must be able to</i></p> <p>Perform a detailed systemic examination including nutritional and mental status</p> <p>Able to elicit signs pertaining to features of jaundice, ascites, porto systemic hypertension and hepatic encephalopathy correctly</p>	S	SH	Y	Bedside clinic, DOAP sessions	Skill assessment
	<p><i>At the end of the session Phase 3 student must be able to</i></p> <p>Analyse the case based on clinical history and systemic examination and generate a differential diagnosis/ most probable diagnosis</p>	K	SH	Y	Bedside clinic, DOAP sessions	Skill assessment

GENERAL SURGERY AIT_o - JAUNDICE

Number	Competency The should be able to	Specific Learning objective (SLO)	Domain K/S/A/C	Level K/KH/S/SH/P	Core (Y/N)	Teaching learning methods	Assessment methods
SU28.12	Describe the applied anatomy of Biliary system . Describe the clinical features , investigations and principles of management of diseases of Biliary system	<ol style="list-style-type: none"> 1. Define Obstructive Jaundice 2. List or enumerate the causes for obstructive jaundice 3. Describe in detail the effects of obstructive jaundice on the Hepatobiliary system 4. Explain the signs and symptoms seen in a patient with obstructive jaundice 5. List out the investigations to be done in obstructive jaundice 6. Describe the surgical management of a patient with obstructive jaundice 	K	KH	Y	Lecture Small group discussion	Written exam Viva

OBSTETRICS & GYNAECOLOGY AITo - JAUNDICE

Topic	COMPETENCY	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
Jaundice	Describe the clinical features,detection, effect of pregnancy on the disease and impact of the disease on pregnancy complications and management of liver disease in pregnancy.	K	KH	Y	Lecture, Small group discussion, bed side clinics	Written/ Viva voce/skill Assessment
	1. At the end of the session, students must be able to know the adverse effects of jaundice on mother and fetus.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment
	2.At the end of the session, students must be able to know the management of jaundice during pregnancy, labour and follow up after delivery.	K	SH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment

PAEDIATRICS AITo - JAUNDICE

	Objectives for the respective Competency	Domain	K/KH/SH/P	CORE	T/L Method	Assessment Method
1.	The third phase students should be able to Describe the etiology clinical features ,management of jaundice. Neonatal jaundice	K	KH	Y	Lecture	Written
2.	The third phase students should be able to Clasification of paediatrics jaundice	K/S	KH	Y	Lecture	Written / Viva - Voce
3.	The third phase students should be able to Etiology and clinical features of Jaundice	K	KH	Y	Lecture	Written / Viva - Voce
4.	The third phase students should be able to Approch to Jaundice in Paediatrics age group	Domain	k	Y	Small group Teaching	
5.	The third phase students should be able to Intepratation of Lab tests for Paediatric Jaundice	K	K	Y	Small group Teaching	Written
6.	The third phase students should be able to Management of Paediatric jaundice	K	K	Y	Lecture	Written

AITo – Malnutrition

PHYSIOLOGY AITo - MALNUTRITION						
COMPETENCY The student should be able to:	Specific learning objectives The student should be able to:	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method
Malnutrition Describe the physiology of absorption of nutrients.	1. Describe the physiology of carbohydrate absorption	K	KH	Y	Lecture	Written
	2. Describe the physiology of absorption of proteins	K	KH	Y	lecture	Written
	3. Describe the physiology of fat absorption	K	KH	Y	Lecture	Written

BIOCHEMISTRY AITo - MALNUTRITION

NUMBER	COMPETENCY <i>The student should be able to</i>	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
1.	Describe and discuss the causes, clinical manifestations, complications, diagnosis and management of Malnutrition	<p><i>At the end of session, the phase I MBBS student must be able to</i></p> <p>Discuss the causes of Protein Energy Malnutrition.</p> <p>Explain the biochemical basis for signs and symptoms of Protein Energy Malnutrition.</p> <p>List the relevant investigations done in Protein Energy Malnutrition.</p>	K	KH	Y	Lecture, Small Group Discussion	Written/ Viva voce
	Describe the causes, effects and health risks associated with obesity.	<p><i>At the end of session, the phase I MBBS student must be able to</i></p> <p>Define obesity.</p> <p>List the different methods of assessment of obesity.</p> <p>Explain briefly the regulation of energy intake and energy expenditure and the role of hormonal and neuronal factors related to it.</p> <p>Discuss the causes, effects and health risks of obesity.</p>					

COMMUNITY MEDICINE - (AITo) Malnutrition

SN	Competency	SLO: At the end of the session the phase – III (Part 1) students must be able to	Domain	Level	T/L method	Assessment Method	Duration
CM5.3.1	Define malnutrition, describe types of malnutrition , problem statement and epidemiology of malnutrition	SLO: At the end of the session the phase – III (Part 1) students must be able to define malnutrition accurately, enumerate types of malnutrition correctly.	K	KH	Lecture	Written	10min
		SLO: At the end of the session the phase – III (Part 1) students must be able to know the problem statement of malnutrition with current rates ,	K	KH	Lecture	Written	10min
		SLO: At the end of the session the phase – III (Part 1) students must be able to explain ecology of malnutrition in short.	K	KH	Lecture	Written	15min
CM5.3.2	Describe methods of early detection of malnutrition	SLO: At the end of the session the phase – III (Part 1) students must be able to describe important methods of early detection of malnutrition including anthropometric measurements	S	SH	Lecture cum demonstration	Written, OSPE/OSCE	30 min
		SLO: At the end of the session the phase – III (Part 1) students must be able to identify and differentiate principal features of Marasmus and kwashiorkor	K/S	SH	SGD using charts and models	written,	30min
CM5.3.3	Classify malnutrition based on different methods of classification	SLO: At the end of the session the phase – III (Part 1) students must be able to enumerate different methods used for classification correctly	K	KH	Group Discussion	Viva Voce, Written	10 min
		SLO: At the end of the session the phase – III (Part 1) students must be able to accurately classify the malnutrition using different methods of classification	K	KH	SGD	Viva, Written	30min

		based on given clinical features and anthropometric measurements					
CM5.3.4	Describe preventive measures of malnutrition	SLO: At the end of the session the phase – III (Part 1) students must be able to explain primary, secondary and tertiary level prevention at individual, community, national and international level.	K	KH	Lecture , SGD	Written, viva voce	30 min
CM5.3.5	Describe Programmes / Yojanas for prevention of malnutrition	SLO: At the end of the session the phase – III (Part 1) students must be able to enumerate all the programmes / yojanas for prevention of malnutrition	K	KH	SGD	Written	15 min.
		SLO: At the end of the session the phase – III (Part 1) students must be able to explain aims, objectives and working patterns of programmes/ yojanas in detail.	K	KH	Lecture	Written	30 min

OPHTHALMOLOGY - (AITo) Malnutrition

No.	COMPETENCY	Specific learning objectives The student should be able to:	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method
	Describe the effects of malnutrition in the eye and treatment of vitamin A deficiency	1. Should be able to list the effects of the malnutrition in the eye	K	KH	Y	lecture	written
		2. Should be able to describe night blindness and treatment					
		3. Should be able to describe corneal xerosis , it's staging and treatment					

GENERAL MEDICINE - (ATo) Malnutrition

COMPETENCY	SPECIFIC LEARNING OBJECTIVES	DOMAIN (K/S/A/C)	LEVEL (K/KH/SH/P)	CORE (Y/N)	METHOD OF TEACHING	METHOD OF ASSESSMENT
Describe and document how to approach a case of Obesity, generate a differential diagnosis and how to counsel the patient regarding life style modifications	<i>At the end of the session Phase 3 student must be able to</i> Take a detailed history when presented with a case of Obesity which should include natural history, dietary history, modifiable risk factors, family history, clues for any secondary causes and motivation to lose weight	S	SH	Y	Bedside clinic, DOAP sessions	Skill assessment
	<i>At the end of the session Phase 3 student must be able to</i> Perform, document detailed physical examination that should include general examination, measurement of abdominal obesity, signs of secondary causes and comorbidities	S	SH	Y	Bedside clinic, DOAP sessions	Skill assessment
	<i>At the end of the session Phase 3 student must be able to</i> Analyse the case based on clinical history and clinical examination and generate a differential diagnosis and a most probable diagnosis	S	SH	Y	Bedside clinic, DOAP sessions	Skill assessment / Short note/ viva voce
	<i>At the end of the session Phase 3 student must be able to</i> Order and interpret laboratory tests based on the clinical diagnosis including blood glucose, lipids, thyroid function tests and other	S	SH	Y	Bedside clinic, DOAP sessions	Skill assessment / Short note/ viva voce

	hormonal tests if any depending on the secondary causes					
	<i>At the end of the session Phase 3 student must be able to</i> Communicate and counsel patient on behavioural, dietary and lifestyle modifications	C	SH	Y	Bedside clinic, Skill labs	Skill assessment

PAEDIATRICS - (AITo) Malnutrition

	Objectives for the respective Competency	Domain	K/KH/SH/P	CORE	T/L Method	Assessment Method
1	The third phase students should be able to define malnutrition	K	K	Y	Lecture	Written
2	The third phase students should be able to Etiology Clinical features of Malnutrition	K	K	Y	Lecture	Written
	The third phase students should be able to Epidemiology & classification of Malnutrition	K	KH	Y	Small group Teaching	Written
4	The third phase students should be able to Assessment of Severity of malnutrition	K	K	Y	Lecture	Written
5	The third phase students should be able to Management and prevention of malnutrition	K	K	Y	Small group Teaching	Written / Viva - Voce

AITo – Myocardial Infarction

ANATOMY AITo – MYOCARDIAL INFARCTION

Number	Competency The student should be able to	SLO	Domain K/S/A/C	LEVEL K/KH/S/SH/P	CORE (Y/N)	Teaching Learning methods	Assessment methods
AN22.3	1. Describe and demonstrate origin , course and branches of the coronary arteries 2. Describe anatomical basis of Ischaemic heart disease	1. Describe the course and branches of the Right coronary artery 2. Describe the course and branches of the Left Coronary artery 3. Explain the anatomical basis of Coronary dominance	K/S	KH/SH	Y	1. Lecture 2. Small group discussion 3. DOAP	1. Written exam 2. Practical exam and viva

PHYSIOLOGY AITo – MYOCARDIAL INFARCTION						
COMPETENCY The student should be able to:	Specific learning objectives The student should be able to:	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method
Myocardial infarction Describe physiology of myocardial infarction. And to understand the physiological basis of ECG changes	1.Physiological basis of localization of MI using ECG	K	KH	Y	Lecture	Written
	2. Physiological basis of ECG changes in acute and old myocardial infarction	K	KH	Y	Small group teaching	Written / viva voce

BIOCHEMISTRY AITo – MYOCARDIAL INFARCTION

NUMBER	COMPETENCY <i>The student should be able to</i>	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
1.	Discuss and Interpret the tests that are commonly done in clinical practice in a case of Ischemic Heart Disease	<p><i>At the end of session, the phase I MBBS student must be able to</i></p> <p>List the cardiac biomarkers in Ischemic Heart Disease.</p> <p>Explain their role in diagnosis and prognosis of Ischemic Heart Disease.</p> <p>.</p>	K	KH	Y	Lecture, Small Group Discussion	Written/ Viva voce

PATHOLOGY AITo – MYOCARDIAL INFARCTION

Topic	COMPETENCY	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching-Learning Methods	Assessment Methods
Myocardial Infarction	Describe the, etiology, pathophysiology, gross and microscopic features of Myocardial Infarction (MI)	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	1. At the end of the session, students must be able to know the definition of MI	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	2. At the end of the session, students must be able to know the causes of MI accurately	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	3. At the end of the session, students must be able to know the pathogenesis of MI correctly	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	4. At the end of the session, students must be able to describe the gross & microscopic features of MI correctly	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce

PHARMACOLOGY AITo – MYOCARDIAL INFARCTION

Number	OBJECTIVES FOR THE RESPECTIVE COMPETENCY (At the end of the session the student should be able to)	Domain K/S/A/C	Level K/KH/SH/P	Core (Y/N)	Teaching-Learning Methods	Assessment Methods
	1. list out the drug used in myocardial infarction	K	K	Y	LECTURE	VIVA/WRITTEN
	2. list out the drugs used in secondary prevention of myocardial infarction	K	K	Y	LECTURE	VIVA/WRITTEN
	3. classify antiplatelet drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	4. explain the mechanism of action of each class of antiplatelet drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	5. enumerate the uses of antiplatelet drugs	K	K	Y	LECTURE	VIVA/WRITTEN
	6. Explain the adverse effect of each class of antiplatelet drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	7. Classify fibrinolytic drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	8. Explain the mechanism of action of fibrinolytic drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	9. list out the adverse effects of fibrinolytic drugs	K	K	Y	LECTURE	VIVA/WRITTEN

MICROBIOLOGY AITo – MYOCARDIAL INFARCTION						
	Objectives for the respective Competency	Domain	K/KH/SH/P	CORE	T/L Method	Assessment Method
MYOCARDIAL INFARCTION	The second phase students should be able to List out the various etiological agents of myocarditis and endocarditis	K	K	Y	Lecture	Written

FORENSIC MEDICINE AITo – MYOCARDIAL INFARCTION						
Topic	objective	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
myocardial infarction	1. At the end of the session, students must know medico legal aspects of MI and sudden death	K	K	Y	Lecture	Written/ Viva voce

COMMUNITY MEDICINE AITo – MYOCARDIAL INFARCTION

Number	Competency	SLO	Domain	Level of Competency K/KH/SH/P	Core	T/L Method	Assessment Method	Duration
CM8.2	Describe and discuss the epidemiological and control measures including the use of essential laboratory tests at the primary care level for Non Communicable diseases (CVD/MI)	<p>The 3rd Prof. Part I student should be able to</p> <ol style="list-style-type: none"> 1. Define CVD and discuss MI correctly 2. discuss all epidemiological factors responsible for causing the disease. 3. understand the criteria for diagnosis of MI and interpret lab report for MI. 4. List out different laboratory investigations available for it. 5. Identify the control measures and discuss its prevention at 3 levels 	K	KH	Y	Small group discussion, Lecture	Written / Viva voce	30 min 40 min 30 min 30 min 40 min

CM8.3	Enumerate and describe disease specific National Health Programs including their prevention and treatment of a case	<p>At the end of the session the 3rd Prof. Part I student should be able to</p> <ol style="list-style-type: none"> 1. Describe National health program associated with CVD/MI with mentioning all services provided under it. 2. Discuss the preventive measure of CVD/MI correctly. 3. Describe the treatment strategy of a case of MI as per program guidelines. 	K	KH	Y	Small group discussion, Lecture	Written / Viva voce	40 min 30 min 40 min
CM8.5	Describe and discuss the principles of planning, implementing and evaluating control measures for disease at community level bearing in mind the public health importance of the disease	<p>3rd Prof. Part I student should be able to 1. discuss the planning and implementation of strategy to control CVD/MI in a community.</p> <p>2. describe the evaluation strategies for the CVD/MI in the same community.</p>	K	KH	Y	Small group discussion, Lecture	Written / Viva voce	40 min 40 min
CM8.6	Educate and train health workers in disease	<p>3rd Prof. Part I student should be</p> <ol style="list-style-type: none"> 1. demonstrate the steps of educating and training a health care worker on 	S	SH	Y	DOAP	Skill assessment	45 min 30 min

	surveillance, control & treatment and health education	<p>CVD/MI disease surveillance, control and treatment correctly.</p> <p>2. Discuss the health education materials related to the disease correctly.</p>						
IM2.1	Discuss and describe the epidemiology, antecedents and risk factors for atherosclerosis and ischemic heart disease	<p>3rd Prof. Part I student should be able to</p> <ol style="list-style-type: none"> 1. Enumerate the risk factors for atherosclerosis and ischemic heart disease 2. Describe the epidemiology of CVD/MI correctly . 	K	KH	Y	Small group discussion, Lecture	Written / Viva voce	40 min 30 min

GENERAL MEDICINE AITo – MYOCARDIAL INFARCTION

	Objectives for the respective Competency	Domain	K/KH/SH/P	CORE	T/L Method	Assessment Method
1	Discuss and describe the epidemiology, antecedents and risk factors for atherosclerosis	K	K	Y	Lecture	Written
2	Discuss and describe the epidemiology, antecedents and risk factors for ischemic heart disease	K	K	Y	Lecture	Written
3	Discuss and describe the epidemiology, antecedents and risk factors for Angina-typical and atypical	K/S	KH/SH	Y	Small group Teaching	Viva – Voce/ Skill Assessment
4	Discuss and describe the epidemiology, antecedents and risk factors for Coronary syndrome	K/S	KH/SH	Y	Small group Teaching	Viva – Voce/ Skill Assessment
5	Discuss and describe the epidemiology, antecedents and risk factors for Acute MI	K	KH	Y	Lecture	Written
6	Order, perform and interpret an ECG	S	P	Y	DOAP	Skill Assessment
7	Order and interpret a Chest X-ray and markers of acute myocardial infarction	S	SH	Y	DOAP	Skill Assessment
8	Discuss and enumerate the	K	KH	Y	Small	Viva – Voce

	indications for and findings on echocardiogram, stress testing and coronary angiogram				group Teaching	
9	Discuss and describe the indications for acute thrombolysis, PTCA and CABG	K	KH	Y	Lecture	Written
10	Describe complications of acute MI	K	KH	Y	Lecture	Written
11	Perform and demonstrate in a mannequin BLS	K/S	P	Y	DOAP	Skill Assessment

GENERAL SURGERY AITo – MYOCARDIAL INFARCTION

Number	Competency The student should be able to	Specific learning objectives (SLO)	Domain K/S/A/C	Level K/KH/S/SH/P	Core (Y/N)	Teaching learning method	Assessment method
SU26.1	Outline the role of surgery in the management of Coronary heart disease Valvular heart disease and Congenital heart diseases	1. Enumerate the causes of Coronary heart disease 2. Describe in detail the surgical management (Coronary Artery Bypass Graft and Coronary Balloon Angioplasty)of patient with coronary heart disease	K	KH	Y	Lecture Small group discussion	Written exam Viva

AITo – Stroke

ANATOMY AITo - STROKE

Number	Competency The student should be able to	Specific Learning Objective (SLO)	Domain K/S/A/C	Level K/KH/S/SH/P	Core (Y/N)	Teaching learning method	Assessment method
62.6	1. Describe the blood supply of brain in detail 2. Describe and identify formation branches and major areas of distribution of Circle of Willis	1. Describe the blood supply of brain in detail supplied by the vertebral system 2. Describe the blood supply of brain in detail supplied by the Carotid system 3. Enumerate the parts of the Circle of Willis 4. Explain the anatomical basis of Ischaemic stroke	K	KH	Y	Lecture Small group discussion	Written exam Practical exam with Viva

PHYSIOLOGY AITo - STROKE

COMPETENCY	Specific learning objectives	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method
The student should be able to:	The student should be able to:					
Stroke Describe connections of different motor areas of the brain and spinal cord and Somato-sensory Feedback to the Motor Cortex to provide overall synthesis of voluntary motor function.	1.list the connections between motor areas and spinal cord	K	KH	Y	Small group teaching	Viva voce
	2.Discuss theSomatosensory Feedback to the Motor Cortex and the cortical relay	K	KH	Y	Lecture	Written

BIOCHEMISTRY AITo - STROKE

NUMBER	COMPETENCY <i>The student should be able to</i>	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
1.	Describe the etiology of stroke.	<p><i>At the end of session, the phase I MBBS student must be able to</i></p> <p>Discuss the role of biochemical parameters in the etiology of Stroke.</p>	K	KH	Y	Lecture, Small Group Discussion	Written/ Viva voce

PATHOLOGY AITo - STROKE						
Topic	COMPETENCY	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching-Learning Methods	Assessment Methods
Stroke	Describe the, etiology & pathophysiology of stroke	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	1. At the end of the session, students must be able to know the causes of stroke accurately	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	2. At the end of the session, students must be able to understand the pathogenesis of stroke correctly	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce

MICROBIOLOGY AITo - STROKE						
	Objectives for the respective Competency	Domain	K/KH/SH/P	CORE	T/L Method	Assessment Method
	The second phase students should be able to List out the microbial etiological agents of stroke	K	K	Y	Small group Teaching	Written / Viva - Voce

FORENSIC MEDICINE AITo - STROKE						
Topic	objective	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
stroke	1. At the end of the session, students must be able to know the natural and trumatic causes of stroke	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	2. At the end of the session, students must know medicolegal importance of stroke	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce

PHARMACOLOGY AITo - STROKE

Number	OBJECTIVES FOR THE RESPECTIVE COMPETENCY (At the end of the session the student should be able to)	Domain K/S/A/C	Level K/KH/SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
	1. Classify anticoagulant drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	2. Explain the mechanism of action of each class of anticoagulant drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	3. enumerate uses of anticoagulant drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	4. list out the drug interactions of warfarin	K	K	Y	LECTURE	VIVA/WRITTEN

COMMUNITY MEDICINE AITo - STROKE

SN	Competency	SLO	Domain	Level	T/L method	Assessment Method	Duration
C M 8.2	Describe history and classification of stroke	At the end of the session the Phase III students will be able to briefly describe the history of stroke.	K	K	Lecture	Written	05 min
		At the end of the session the Phase III students will be able to classify stroke in detail.	K	KH	Lecture	Written	05 min
	Describe the magnitude and epidemiology of stroke	At the end of the session the Phase III students will be able to explain the epidemiology of stroke in detail.	K	KH	Small Group Discussion	VIVA	20 min
		At the end of the session the Phase III students will be able to accurately present the magnitude of stroke	K	K	Lecture	Written	10 min
	Explain the role of risk factors on stroke	At the end of the session the Phase III students will be able to explain all possible modifiable and non modifiable risk factors of stroke.	K	KH	Small Group Discussion	VIVA	20 min
	Elaborate the various levels of prevention and control of stroke.	At the end of the session the Phase III students will be able to explain in detail primordial preventive measures.	K	KH	Small Group Discussion	VIVA	15 min
		At the end of the session the Phase III students will be able to briefly describe secondary level of prevention.	K	KH	Lecture	Written	15 min
		At the end of the session the Phase III students will be able to list the commonly available rehabilitative measures.	K	KH	Small Group Discussion	VIVA	15 min
	Describe the National	At the end of the session the Phase III students will be able to list the major objectives of NPCDCS.	K	K	Lecture	Written	10 min

	Health Programme for prevention of stroke.	At the end of the session the Phase III students will be able to describe in detail the infrastructure and services provided under this programme.	K	KH	Small Group Discussion	VIVA	25 min
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GENERAL MEDICINE AITo - STROKE						
STROKE	Objectives for the respective Competency	Domain	K/KH/SH/P	CORE	T/L Method	Assessment Method
	Describe epidemiology and risk factors of CVA	K	KH	Y	Lecture	Written
	Classify cerebrovascular accidents and describe the aetiology, predisposing genetic and risk factors pathogenesis of hemorrhagic and non hemorrhagic stroke	K	KH	Y	Lecture	Written
	Demonstration of Neuromuscular weakness	K/S/A/C	P	Y	DOAP	Skill Assessment
	Describe the initial supportive management of a patient presenting with a cerebrovascular accident (CVA)	K	KH	Y	Lecture	Written
	Describe the management of patient with non hemorrhagic stroke	K	KH	Y	Lecture	Written

	Describe the management of patient with hemorrhagic stroke	K	KH	Y	Lecture	Written
	Enumerate the indications for surgery in a hemorrhagic stroke	K	KH	Y	Lecture	Written
	Enumerate the indications describe and observe the multidisciplinary rehabilitation of patients with a CVA	S	KH	Y	Small group Teaching	Viva – Voce
	Describe how to counsel the family about the diagnosis, therapy & sequel in an empathetic manner	A/C	SH	Y	DOAP	Skill Assessment

AITo – Thyroid

ANATOMY AITo - THYROID

Number	OBJECTIVES FOR THE RESPECTIVE COMPETENCY (At the end of the session the student should be able to)	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
1	Explain the location, parts and external features of thyroid gland	K	KH	Y	LECTURE	WRITTEN
2	Describe the relations of lobes and isthmus of thyroid gland.	K	KH	Y	LECTURE	WRITTEN
3	Describe Blood supply of thyroid gland.	K	KH	Y	LECTURE	WRITTEN
4	Describe nerve supply of thyroid gland	K	KH	Y	LECTURE	WRITTEN
5	Describe the development of thyroid gland	K	KH	Y	LECTURE	WRITTEN
6	Explain the anatomical basis of developmental defects of thyroid gland.	K	KH	Y	LECTURE	WRITTEN
7	Identify the microscopic features of thyroid gland under the microscope in a given slide.	K/S	SH	Y	DOAP,PRACTICAL	SKILL ASSESSMENT
8	Describe the microscopic features of thyroid gland.	K	KH	Y	LECTURE	WRITTEN
9	Demonstrate the surface marking of thyroid gland on a mummified cadaver.	K/S	SH	Y	DOAP,SMALL GROUP	SKILL ASSESSMENT

PHYSIOLOGY AITo - THYROID

COMPETENCY The student should be able to:	Specific learning objectives The student should be able to:	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method
Thyroid Describe the synthesis, , transport, regulation of thyroid hormone	1.Explain the synthesis and steps of thyroid hormone synthesis	K	KH	Y	Lecture	Written
	2.Describe the factors regulating thyroid hormone synthesis	K	KH	Y	Lecture	Written

BIOCHEMISTRY AITo - THYROID

NUMBER	COMPETENCY <i>The student should be able to</i>	Specific Learning Objectives	DOMAIN K/S/A/C	LEVEL K/KH/SH/P	CORE Y/N	Suggested Teaching Learning Method	Suggested Assessment Method
1.	Describe the tests that are commonly done in clinical practice to assess the abnormalities of Thyroid gland.	<p><i>At the end of session, the phase I MBBS student must be able to</i></p> <p>List and classify all the thyroid function tests.</p> <p>Explain in detail the important tests done and their significance.</p> <p>List the normal serum levels of Thyroid hormones, significance of the timed specimens.</p>	K	KH	Y	Lecture, Small Group Discussion	Written/ Viva voce

PATHOLOGY AITo - THYROID

Topic	COMPETENCY	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching-Learning Methods	Assessment Methods
Thyroid	Enumerate, classify and describe the etiology, pathogenesis & pathology of thyroid swellings	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	1.At the end of the session, students must be able to know the different types, etiopathogenesis , cytological and histopathological features of inflammatory thyroid conditions.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	2.At the end of the session, students must be able to know the different types, etiopathogenesis , cytological and histopathological features of Benign thyroid lesions.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce
	3.At the end of the session, students must be able to know the different types, etiopathogenesis , cytological and histopathological features of Malignant thyroid lesions.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce

MICROBIOLOGY AITo - THYROID						
	Objectives for the respective Competency	Domain	K/KH/SH/P	CORE	T/L Method	Assessment Method
MI 1.10	1) The second phase students should be able to Discuss about LATS (Long acting thyroid stimulator) in type –V hypersensitivity.	K	K	Y	Lecture	Written
	2)The second phase students should be able to Explain the mechanism of Autoimmune thyroiditis.	K	K	Y	Lecture	Written

FORENSIC MEDICINE AITo - THYROID						
Topic	objective	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching- Learning Methods	Assessment Methods
thyroid	1.At the end of the session, students must know the legal implications of damage to recurrent laryngeal nerve in thyroid surgeries	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce

PHARMACOLOGY AIT_o - THYROID

Number	OBJECTIVES FOR THE RESPECTIVE COMPETENCY (At the end of the session the student should be able to)	Domain K/S/A/C	Level K/KH/SH/P	Core (Y/N)	Teaching-Learning Methods	Assessment Methods
	1.Classify anti thyroid Drugs	K	KH	Y	LECTURE	VIVA/WRITTEN
	2.Explain the mechanism of action of each class of anti thyroid drugs.	K	KH	Y	LECTURE	VIVA/WRITTEN
	3.enumerate adverse effect of each class of anti thyroid drugs.	K	KH	Y	LECTURE	VIVA/WRITTEN
	4. Explain the Pharmacological actions of Thyroxine	K	KH	Y	LECTURE	VIVA/WRITTEN
	5. Explain the treatment of thyroid storm	K	KH	Y	LECTURE	VIVA/WRITTEN

COMMUNITY MEDICINE AITo - THYROID

Number	Competency	SLO	Domain	Level of Competency K/KH/SH/P	Core	T/L Method	Assessment Method	Duration
CM5.1	Describe the common sources of various nutrients and special nutritional requirements according to age, sex, activity, physiological conditions	At the end of the session the 3rd Prof. Part I student should be able to Describe common source of iodine ,its requirement as per age, sex, activity and physiological conditions.	K	KH	Y	Small group discussion, Lecture	Written/ Viva Voice	30 min
CM5.3	Define and describe common nutrition related health disorders (including macro-PEM, Micro-iron, Zn, iodine, Vit. A), their control and management	At the end of the session the 3rd Prof. Part I student should be able to -define thyroid disorders (hypo and hyper thyroid state) and describe in detail iodine deficiency disorders. 2.Describe the control measures and management for iodine deficiency disorders.	K	KH	Y	Small group discussion, Lecture	Written/ Viva Voice	1 hr

CM5.4	Plan and recommend a suitable diet for the individuals and families based on local availability of foods and economic status, etc in a simulated environment	<p>At the end of the session the 3rd Prof. Part I student should be able to</p> <ul style="list-style-type: none"> -discuss a suitable diet plan and recommend it to a person having iodine deficiency disorders also to its family - demonstrate the steps of diet planning for a person having thyroid disorder pt. in a simulated as per the local availability of food and economic status. 	S	SH	Y	DOAP	Skill Assessment	40 min 1 hr
CM5.8	Describe and discuss the importance and methods of food fortification and effects of additives and adulteration	<p>At the end of the session the 3rd Prof. Part I student should be able to</p> <ul style="list-style-type: none"> - Describe the methods of food fortification with iodine and discuss its importance in correctly. - Enumerate the common benefits of food fortification with iodine. - Differentiate between fortification and enrichment. <p>-Describe about food additive and adulteration.</p>	K	KH	Y	Small group discussion, Lecture	Written/ Viva Voice	30 min 30 min 10 min 30 min

IM12.12	Describe and discuss the iodisation programs of the government of India	<p>At the end of the session the 3rd Prof. Part I student should be able to</p> <ul style="list-style-type: none"> -Describe the iodination programme in detail as per guidelines given by GOI. -Discuss most common strategies of iodination programme correctly 	K	KH	Y	Lecture/ Bed side clinic	Short notes	1 hr 30 min
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OPHTHALMOLOGY AIT_o - THYROID

No.	COMPETENCY	Specific learning objectives The student should be able to:	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method	Suggested Assessment method
	Describe the ophthalmic manifestations of thyrotoxicosis in the eye	1. Should be able to list the manifestations of thyrotoxicosis in the eye	K	KH	Y	lecture	written
		2. Should be able to describe the measurement of proptosis					

GENERAL MEDICINE AITo - THYROID						
	Objectives for the respective Competency	Domain	K/KH/SH/P	CORE	T/L Method	Assessment Method
	The third phase students should be able TO ANALYSE THE INFLUENCE OF IODINE DEFICIENCY ON THYROID DISORDERS	K	KH	Y	Small group Teaching	Viva - Voce
1	The third phase students should be able TO DISCUSS THE GENETIC BASIS OF SOME FORMS OF THYROIDDYSFUNCTION THYROID DISORDERS	K	K	N	Lecture	Written
	The third phase students should be able TO ANALYSE THE THYROID FUNCTION TEST AND DIAGNOSE	K	KH	Y	Small group Teaching	Viva - Voce
2	The THIRD phase students should be able to TO DISCUSS PRICIPLES OF RADIOIODINE UPTAKE IN DIAGNOSIS OF THYROID DISORDERS	K	KH	Y	Small group Teaching	Viva - Voce
	The THIRD phase students should be able to ANALYSE DOCUMENT AND PRESENT AN APPROPRIATE HISTORY THAT WILL ESTABLISH THE DIAGNOSIS ,CAUSE OF THYROID DYSFUNCTION AND IT'S SEVERITY	S	P	Y	BEDSIDE	OBSERVATION BY FACULTY
	The THIRD phase students should be able toANALYSE THE HISTORY,GENERAL EXAMINATION AND SYSTEMIC EXAMINATION OF HYPOTHYROIDISM AND THYROTOXICOSIS	S	P	Y	BEDSIDE	OBSERVATION BY FACULTY

	AND REPORT IT'S SEVERITY					
	The THIRD phase students should be able to ENUMERATE THE DIFFERENTIAL DIAGNOSIS BASED CLINICAL EXAMINATION AND REPORT THE MOST LIKELY DIAGNOSIS	S	P	Y	BEDSIDE	OBSERVATION BY FACULTY
	The THIRD phase students should be able to ANALYSE AND INTERPRET DIAGNOSTIC TESTIMG BASED ON THE CLINICAL DIAGNOSIS INCLUDING CBC,TFT,ECG & RADIOIODINE UPTAKE AND SCAN	S	P	Y	SHORT GROUP	VIVA VOCE
	The THIRD phase students should be able to ANALYSE THE ECG FINDINGS OF AF,PERICARDIAL EFFUSION AND BRADYCARDIA	S	P	Y	SHORT GROUP	VIVA VOCE
	The THIRD phase students should be able toANALYSE TFT IN HYPO & HYPERTHYROIDISM	S	P	Y	SHORT GROUP	VIVA VOCE
	The THIRD phase students should be able to DISCUSS THE IODISATION PROGRAMME OF GOVT OF INDIA	K	KH	Y	LECTURE	WRITTEN EXAMINATION
	The THIRD phase students should be able to CLASSIFY ANTI THYROID DRUGS AND THYROXINE WITH IT'S ADVERSE EFFECTS	K	KH	Y	LECTURE	WRITTEN EXAMINATION
	The THIRD phase students should be able to	K	KH	Y	SHORT GROUP	VIVA VOCE

	CHOOSE APPROPRIATE DOSE OF THYROXINE BASED ON AGE,SEX,CLINICAL & BIOCHEMICAL STATUS					
	The THIRD phase students should be able to ENUMERATE THE INDICATIONS OF THIONAMIDE THERAPY,RADIOIODINE THERAPY IN MANAGEMENT OF THYROTOXICOSIS	K	KH	Y	SHORT GROUP	VIVA VOCE

GENERAL SURGERY AITo - THYROID

Topic	Number		Specific learning objectives (SLO)	Domain K/S/A/C	Level K/KH/S/SH/P	CORE (Y/N)	Teaching learning method	Assessment method
Thyroid	SU 22.1	Describe the applied anatomy and physiology of thyroid	1.At the end of the session, student in phase-III must know how to ligate thyroid arteries to prevent damage to the nerves. 2. Describe pathogenesis of parenchymatous and multi nodular goiters.	k	KH	Y	1. Lecture 2. Small group discussion	1. Written exam 2. Practical exam with viva 3. OSCE
	SU 22.2	Describe the etiopathogenesis of thyroid swellings	2. At the end of the session, student must know the classification of goiters.	k	KH	Y	1. Lecture 2. Small group discussion	1. Written exam 2. Practical exam with viva 3. OSCE

	SU 22.3	Demonstrate and document the correct clinical examination of thyroid swellings and discuss the differential diagnosis and their management	3. At the end of the session, student must demonstrate correct method of examination of thyroid swelling and also narrate the investigations and methods of management.	k	KH	Y	1. Lecture 2. Small group discussion	1. Written exam 2. Practical exam with viva 3. OSCE
	SU 22.4	Describe the clinical features, classification and principles of management of thyroid cancer	4. At the end of the session, student must be able to describe the clinical features classification and principles of management of thyroid cancer and complications of thyroid surgery.	k	KH	Y	1. Lecture 2. Small group discussion	1. Written exam 2. Practical exam with viva 3. OSCE
	SU 22.5	Describe the applied anatomy of parathyroid	5. At the end of the session, student should understand method of avoiding loss of parathyroid glands during thyroid surgery.	k	KH	Y	1. Lecture 2. Small group discussion	1. Written exam 2. Practical exam with viva 3. OSCE

	SU 22.6	Describe and discuss the clinical features of hypo - and hyperparathyroidism and the principles of their management	6. At the end of the session, student should understand the clinical features and indications for surgery in hyper parathyrodism.	k	KH	Y	1. Lecture 2. Small group discussion	1. Written exam 2. Practical exam with viva 3. OSCE
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OBSTETRICS & GYNAECOLOGY AITo - THYROID

Topic	COMPETENCY	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	Teaching-Learning Methods	Assessment Methods
Thyroid	Describe the clinical features,detection, effect of pregnancy on the disease and impact of the disease on pregnancy complications and management of thyroid disorders in pregnancy.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment
	1.At the end of the session, students must be able to know the screening of thyroid disorders in pregnancy.	K	SH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment
	2. At the end of the session, students must be able to know the adverse effects of thyroid disorders on the mother and fetus.	K	KH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment
	3.At the end of the session, students must be able to know the management of thyroid disorders during pregnancy and labour and follow up after delivery.	K	SH	Y	Lecture, Small group discussion	Written/ Viva voce/skill Assessment