GENERAL MEDICINE

Number	COMPETENCY The student should be able to	Clinician	Leader	Communicator	Lifelong Learner	Professional	Critical Thinker	Researcher
Topic: H	eart Failure	Numbe	er of con	npetencies: (30)		Number of proc	edures that require	e certification : (01)
IM1.1	Describe and discuss the epidemiology, pathogenesis clinical evolution and course of common causes of heart disease including: rheumatic/ valvular, ischemic, hypertrophic inflammatory	3	2	3	3	3	3	3
IM1.2	Describe and discuss the genetic basis of some forms of heart failure	1	1	1	2	2	3	3
IM1.3	Describe and discuss the aetiology microbiology pathogenies and clinical evolution of rheumatic fever, criteria, degree of rheumatic activity and rheumatic valvular heart disease and its complications including infective endocarditis	3	3	3	3	3	3	3
IM1.4	Stage heart failure	2	2	2	2	2	2	3
IM1.5	Describe ,discuss and differentiate the processes involved in R Vs L heart failure, systolic vs diastolic failure	3	3	3	3	3	3	3
IM1.6	Describe and discuss the compensatory mechanisms involved in heart failure including cardiac remodelling and neurohormonal adaptations	1	3	3	2	2	3	3
IM1.7	Enumerate, describe and discuss the factors that exacerbate heart , , , , , , , , , , , , , , , , , , ,	2	3	2	3	2	3	3
IM1.8	Describe and discuss the pathogenesis and development of common arrythmias involved in heart failure particularly atrial fibrillation	3	3	3	3	3	3	3
IM1.9	Describe and discuss the clinical presentation and features, diagnosis, recognition and management of acute rheumatic fever	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM1.10	Elicit document and present an appropriate history that will establish the diagnosis, cause and severity of heart failure including: presenting complaints, precipitating and exacerbating factors, risk factors exercise tolerance, changes in sleep patterns, features suggestive of infective endocarditis	3	2	3	3	3	3	3
IM1.11	Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and estimate its severity including: measurement of pulse, blood pressure and respiratory rate, jugular venous forms and pulses, peripheral pulses, conjunctiva and fundus, lung, cardiac examination including palpation and auscultation with identification of heart sounds and murmurs, abdominal distension and splenicpalpation	3	3	3	2	3	3	3
IM1.12	Demonstrate peripheral pulse, volume, character, quality and variation in various causes of heart failure	3	3	3	3	3	3	3
IM1.13	Measure the blood pressure accurately, recognise and discuss alterations in blood pressure in valvular heart disease and other causes of heart failure and cardiac tamponade	3	3	3	3	3	3	3
IM1.14	Demonstrate and measure jugular venous distension	3	3	3	3	3	3	3
IM1.15	Identify and describe the timing, pitch quality conduction and significance of precordial murmurs and their variations	3	3	3	2	2	3	3
IM1.16	Generate a differential diagnosis based on the clinical presentation and prioritise it based on the most likely diagnosis	3	3	2	3	2	3	3
IM1.17	Order and interpret diagnostic testing based on the clinical diagnosis including 12 lead ECG, Chest radiograph, blood cultures	3	3	3	3	3	3	3
IM1.18	Perform and interpret a 12 lead ECG	3	3	3	3	3	3	3
IM1.19	Enumerate the indications for and describe the findings of heart failure with the following conditions including: 2D echocardiography, brain natriuretic peptide, exercise testing, nuclear medicine testing and coronary angiogram	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM1.20	Determine the severity of valvular heart disease based on the clinical and laboratory and imaging features and determine the level of intervention required including surgery	3	2	3	3	3	3	3
IM1.21	Describe and discuss and identify the clinical features of acute and subacute endocarditis, echocardiographic findings, blood culture and sensitivity and therapy	3	3	3	2	2	3	3
IM1.22	Assist and demonstrate the proper technique in collecting specimen for blood culture	3	3	3	3	3	3	3
IM1.23	Describe, prescribe and communicate non pharmacologic management of heart failure including sodium restriction, physical activity and limitations	2	2	2	2	2	2	3
IM1.24	Describe and discuss the pharmacology of drugs including indications, contraindications in the management of heart failure including diuretics, ACE inhibitors, Beta blockers, aldosterone antagonists and cardiac glycosides	3	3	3	3	3	3	3
IM1.25	Enumerate the indications for valvuloplasty, valvotomy, coronary revascularization and cardiac transplantation	2	3	3	2	2	3	3
IM1.26	Develop document and present a management plan for patients with heart failure based on type of failure, underlying aetiology	2	3	2	3	2	3	3
IM1.27	Describe and discuss the role of penicillin prophylaxis in the prevention of rheumatic heart disease	3	3	3	3	3	3	3
IM1.28	Enumerate the causes of adult presentations of congenital heart disease and describe the distinguishing features between cyanotic and acyanotic heart disease	3	3	3	3	3	3	3
IM1.29	Elicit document and present an appropriate history, demonstrate correctly general examination, relevant clinical findings and formulate document and present a management plan for an adult patient presenting with a common form of congenital heart disease	3	2	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM1.30	Administer an intramuscular injection with an appropriate explanation to the patient	3	2	3	3	3	3	2
IM2.1	Discuss and describe the epidemiology, antecedents and risk factors for atherosclerosis and ischemic heart disease	3	3	3	2	3	3	3
IM2.2	Discuss the aetiology of risk factors both modifiable and non modifiable of atherosclerosis and IHD	3	3	3	3	3	3	3
IM2.3	Discuss and describe the lipid cycle and the role of dyslipidemia in the pathogenesis of atherosclerosis	3	2	2	2	2	2	3
IM2.4	Discuss and describe the pathogenesis natural history, evolution and complications of atherosclerosis and IHD	3	3	3	3	3	3	3
IM2.5	Define the various acute coronary syndromes and describe their evolution, natural history and outcomes	3	3	3	2	2	3	3
IM2.6	Elicit document and present an appropriate history that includes onset evolution, presentation risk factors, family history, comorbid conditions, complications, medication, history of atherosclerosis, IHD and coronary syndromes	3	3	2	3	2	3	3
IM2.7	Perform, demonstrate and document a physical examination including a vascular and cardiac examination that is appropriate for the clinical presentation	3	3	3	3	3	3	3
IM2.8	Generate document and present a differential diagnosis based on the clinical presentation and prioritise based on "cannot miss", most likely diagnosis and severity	3	3	3	3	3	3	3
IM2.9	Distinguish and differentiate between stable and unstable angina and AMI based on the clinical presentation	3	2	3	3	3	3	3
IM2.10	Order, perform and interpret an ECG	3	2	3	3	3	3	1

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM2.11	Order and interpret a Chest X-ray and markers of acute myocardial infarction	3	2	3	3	3	3	2
IM2.12	Choose and interpret a lipid profile and identify the desirable lipid profile in the clinical context	3	3	3	2	3	3	3
IM2.13	Discuss and enumerate the indications for and findings on echocardiogram, stress testing and coronary angiogram	3	3	3	3	3	3	3
IM2.14	Discuss and describe the indications for admission to a coronary care unit and supportive therapy for a patient with acute coronary syndrome	3	2	2	2	2	2	3
IM2.15	Discuss and describe the medications used in patients with an acute coronary syndrome based on the clinical presentation	3	3	3	3	3	3	3
IM2.16	Discuss and describe the indications for acute thrombolysis, PTCA and CABG	3	3	3	2	2	3	3
IM2.17	Discuss and describe the indications and methods of cardiac rehabilitation	3	3	2	3	2	3	3
IM2.18	Discuss and describe the indications, formulations, doses, side effects and monitoring for drugs used in the management of dyslipidemia	3	3	3	3	3	3	3
IM2.19	Discuss and describe the pathogenesis, recognition and management of complications of acute coronary syndromes including arrhythmias, shock, LV dysfunction, papillary muscle rupture and pericarditis	3	3	3	3	3	3	3
IM2.20	Discuss and describe the assessment and relief of pain in acute coronary syndromes	3	2	3	3	3	3	3
IM2.21	Observe and participate in a controlled environment an ACLS program	3	3	3	3	3	3	3
IM2.22	Perform and demonstrate in a mannequin BLS	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM2.23	Describe and discuss the indications for nitrates, anti platelet agents, gpIIb IIIa inhibitors, beta blockers, ACE inhibitors etc in the management of coronary syndromes	3	3	3	3	3	3	3
IM2.24	Counsel and communicate to patients with empathy lifestyle changes in atherosclerosis / post coronary syndromes	3	3	3	3	3	3	3
IM3.1	Define, discuss, describe and distinguish community acquired pneumonia, nosocomial pneumonia and aspiration pneumonia	3	3	3	3	3	3	3
IM3.2	Discuss and describe the aetiologies of various kinds of pneumonia and their microbiology depending on the setting and immune status of the host	3	3	3	3	3	3	3
IM3.3	Discuss and describe the pathogenesis, presentation, natural history and complications of pneumonia	3	3	3	3	3	3	3
IM3.4	Elicit document and present an appropriate history including the evolution, risk factors including immune status and occupational risk	2	2	3	2	3	2	2
IM3.5	Perform, document and demonstrate a physical examination including general examination and appropriate examination of the lungs that establishes the diagnosis, complications and severity of disease	2	2	3	2	3	2	2
IM3.6	Generate document and present a differential diagnosis based on the clinical features, and prioritise the diagnosis based on the presentation	3	2	2	3	2	2	2
IM3.7	Order and interpret diagnostic tests based on the clinical presentation including: CBC, Chest X ray PA view, Mantoux, sputum gram stain, sputum culture and sensitivity, pleural fluid examination and culture, HIV testing and ABG	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM3.8	Demonstrate in a mannequin and interpret results of an arterial blood gas examination	3	1	1	2	3	3	1
IM3.9	Demonstrate in a mannequin and interpret results of a pleural fluid aspiration	3	1	1	2	3	3	1
IM3.10	Demonstrate the correct technique in a mannequin and interpret results of a blood culture	3	1	1	2	3	3	1
IM3.11	Describe and enumerate the indications for further testing including HRCT, Viral cultures, PCR and specialised testing	3	1	2	2	3	3	3
IM3.12	Select, describe and prescribe based on the most likely aetiology, an appropriate empirical antimicrobial based on the pharmacology and antimicrobial spectrum	3	3	3	3	3	3	3
IM3.13	Select, describe and prescribe based on culture and sensitivity appropriate empaling antimicrobial based on the pharmacology and antimicrobial spectrum.	3	2	3	2	2	2	3
IM3.14	Perform and interpret a sputum gram stain and AFB	3	1	1	2	3	3	1
IM3.15	Describe and enumerate the indications for hospitalisation in patients with pneumonia	3	3	3	3	3	2	3
IM3.16	Describe and enumerate the indications for isolation and barrier nursing in patients with pneumonia	3	3	3	3	3	2	1
IM3.17	Describe and discuss the supportive therapy in patients with pneumonia including oxygen use and indications for ventilation	3	2	3	3	2	3	2
IM3.18	Communicate and counsel patient on family on the diagnosis and therapy of pneumonia	3	3	3	3	3	3	1
IM3.19	Discuss, describe, enumerate the indications and communicate to patients on pneumococcal and influenza vaccines	3	2	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician		Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM4.1	Describe and discuss the febrile response and the influence of host immune status, risk factors and comorbidities on the febrile response	3	2	3	3	3	3	3
IM4.2	Describe and discuss the influence of special populations on the febrile response including: the elderly, immune suppression, malignancy and neutropenia, HIV and travel	3	3	3	3	3	3	3
IM4.3	Discuss and describe the common causes, pathophysiology and manifestations of fever in various regions in India including bacterial, parasitic and viral causes (e.g.Dengue, Chikungunya, Typhus)	3	3	3	3	3	3	3
IM4.4	Describe and discuss the pathophysiology and manifestations of inflammatory causes of fever	3	3	3	3	3	3	3
IM4.5	Describe and discuss the pathophysiology and manifestations of malignant causes of fever including hematologic and lymph node malignancies	3	3	3	3	3	3	3
IM4.6	Discuss and describe the pathophysiology and manifestations of malaria	3	3	3	2	3	3	3
IM4.7	Discuss and describe the pathophysiology and manifestations of the sepsis syndrome	3	2	3	2	3	2	2
IM4.8	Discuss and describe the pathophysiology, aetiology and clinical manifestations of fever of unknown origin (FUO) including in a normal host, neutropenic host, nosocomial host and a host with HIV disease	3	2	2	3	2	2	3
IM4.9	Elicit document and present a medical history that helps delineate the aetiology of fever that includes the evolution and pattern of fever, associated symptoms, immune status, comorbidities, risk factors, exposure through occupation, travel and environment and medication use	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Cliniciar	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM4.10	Perform a systematic examination that establishes the diagnosis and severity of presentation that includes: general skin mucosal and lymph node examination, chest and abdominal examination (including examination of the liver and spleen)	3	2	1	3	3	3	1
IM4.11	Generate a differential diagnosis and prioritise based on clinical features that help distinguish between infective, inflammatory, malignant and rheumatologic causes	3	3	3	3	3	3	3
IM4.12	Order and interpret diagnostic tests based on the differential diagnosis including: CBC with differential, peripheral smear, urinary analysis with sediment, Chest X ray, blood and urine cultures, sputum gram stain and cultures, sputum AFB and cultures, CSF analysis, pleural and body fluid analysis, stool routine and culture and QBC	3	3	3	3	3	3	3
IM4.13	Perform and interpret a sputum gram stain	3	1	1	2	3	3	2
IM4.14	Perform and interpret a sputum AFB	3	1	1	2	3	3	2
IM4.15	Perform and interpret a malarial smear	3	1	1	2	3	2	2
IM4.16	Enumerate the indications and describe the findings in tests of inflammation and specific rheumatologic tests, serologic testing for pathogens including HIV, bone marrow aspiration and biopsy	2	1	2	2	3	2	2
IM4.17	Observe and assist in the performance of a bone marrow aspiration and biopsy in a simulated environment	3	1	1	1	2	2	2
IM4.18	Enumerate the indications for use of imaging in the diagnosis of febrile syndromes	3	2	2	2	2	2	3
IM4.19	Assist in the collection of blood and wound cultures	3	1	1	1	1	1	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM4.20	Interpret a PPD (Mantoux)	3	2	2	2	2	2	1
IM4.21	Develop and present an appropriate diagnostic plan based on the clinical presentation, most likely diagnosis in a prioritised and cost effective manner	3	3	3	3	3	3	3
M4.22	Describe and discuss the pharmacology, indications, adverse reactions, interactions of antimalarial drugs and basis of resistance	3	3	3	3	3	3	3
M4.23	Prescribe drugs for malaria based on the species identified, prevalence of drug resistance and national programs	3	2	3	3	3	3	3
M4.24	Develop an appropriate empiric treatment plan based on the patient's clinical and immune status pending definitive diagnosis	3	3	3	3	3	3	3
M4.25	Communicate to the patient and family the diagnosis and treatment	3	3	3	3	3	3	1
M4.26	Counsel the patient on malarial prevention	3	3	3	2	3	2	2
M5.1	Describe and discuss the physiologic and biochemical basis of hyperbilirubinemia	2	3	3	2	3	2	2
M5.2	Describe and discuss the aetiology and pathophysiology of liver injury	2	2	2	3	2	2	2
M5.3	Describe and discuss the pathologic changes in various forms of liver disease	2	3	3	3	3	3	3
M5.4	Describe and discuss the epidemiology, microbiology, immunology and clinical evolution of infective (viral) hepatitis	3	2	2	2	2	3	3
M5.5	Describe and discuss the pathophysiology and clinical evolution of alcoholic liver disease	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM5.6	Describe and discuss the pathophysiology, clinical evolution and complications of cirrhosis and portal hypertension including ascites, spontaneous bacterial peritonitis, hepatorenal syndrome and hepatic encephalopathy	3	3	3	3	3	3	3
IM5.7	Enumerate and describe the causes and pathophysiology of drug induced liver injury	3	2	2	2	2	2	3
IM5.8	Describe and discuss the pathophysiology, clinical evolution and complications cholelithiasis and cholecystitis	3	3	2	2	2	2	2
IM5.9	Elicit document and present a medical history that helps delineate the aetiology of the current presentation and includes clinical presentation, risk factors, drug use, sexual history, vaccination history and family history	3	2	3	3	3	3	2
IM5.10	Perform a systematic examination that establishes the diagnosis and severity that includes nutritional status, mental status, jaundice, abdominal distension ascites, features of portosystemic hypertension and hepatic encephalopathy	3	2	2	2	3	2	1
IM5.11	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology for the presenting symptom	3	2	3	3	3	3	2
IM5.12	Choose and interpret appropriate diagnostic tests including: CBC, bilirubin, function tests, Hepatitis serology and ascitic fluid examination in patient with liver diseases.	3	2	2	2	3	2	2
IM5.13	Enumerate the indications for ultrasound and other imaging studies including MRCP and ERCP and describe the findings in liver disease	2	2	2	2	2	2	3
IM5.14	Outline a diagnostic approach to liver disease based on hyperbilirubinemia, liver function changes and hepatitis serology	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM5.15	Assist in the performance and interpret the findings of an ascitic fluid analysis	3	1	1	3	3	3	2
IM5.16	Describe and discuss the management of hepatitis, cirrhosis, portal hypertension, ascites spontaneous, bacterial peritonitis and hepatic encephalopathy	3	3	3	3	3	3	3
IM5.17	Enumerate the indications, precautions and counsel patients on vaccination for hepatitis	3	3	3	3	3	3	3
IM5.18	Enumerate the indications for hepatic transplantation	3	3	3	3	3	3	3
IM6.1	Describe and discuss the symptoms and signs of acute HIV seroconversion	3	2	3	3	3	3	3
IM6.2	Define and classify HIV AIDS based on the CDC criteria	3	2	3	2	3	2	2
IM6.3	Describe and discuss the relationship between CDC count and the risk of opportunistic infections	2	2	3	2	3	2	2
IM6.4	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related opportunistic infections	3	2	2	3	3	2	3
IM6.5	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related malignancies	3	2	3	3	3	3	3
IM6.6	Describe and discuss the pathogenesis, evolution and clinical features of common HIV related skin and oral lesions	3	2	2	2	2	2	3
IM6.7	Elicit document and present a medical history that helps delineate the aetiology of the current presentation and includes risk factors for HIV, mode of infection, other sexually transmitted diseases, risks for opportunistic infections and nutritional status		2	2	2	2	2	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM6.8	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology for the presenting symptom	3	1	3	3	3	3	3
IM6.9	Choose and interpret appropriate diagnostic tests to diagnose and classify the severity of HIV-AIDS including specific tests of HIV, CDC	3	2	3	3	3	2	3
IM6.10	Choose and interpret appropriate diagnostic tests to diagnose opportunistic infections including CBC, sputum examination and cultures, blood cultures, stool analysis, CSF analysis and Chest radiographs	3	3	3	3	2	3	3
IM6.11	Enumerate the indications and describe the findings for CT of the chest and brain and MRI	3	2	3	3	3	2	2
IM6.12	Enumerate the indications for and interpret the results of: pulse oximetry, ABG, Chest Radiograph	3	3	3	3	2	3	2
IM6.13	Describe and enumerate the indications and side effects of drugs for bacterial, viral and other types of diarrhea	2	2	3	2	3	2	2
IM6.14	Perform and interpret AFB sputum	3	2	3	2	3	2	2
IM6.15	Demonstrate in a model the correct technique to perform a lumbar puncture	3	2	2	3	2	2	2
IM6.16	Discuss and describe the principles of HAART, the classes of antiretrovirals used, adverse reactions and interactions	3	3	3	3	3	3	3
IM6.17	Discuss and describe the principles and regimens used in post exposure prophylaxis	3	3	3	3	3	3	3
IM6.18	Enumerate the indications and discuss prophylactic drugs used to prevent HIV related opportunistic infections	3	2	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM6.19	Counsel patients on prevention of HIV transmission	3	3	3	3	3	3	3
IM6.20	Communicate diagnosis, treatment plan and subsequent follow up plan to patients	2	2	2	2	2	2	1
IM6.21	Communicate with patients on the importance of medication adherence	3	3	3	3	3	3	2
IM6.22	Demonstrate understanding of ethical and legal issues regarding patient confidentiality and disclosure in patients with HIV	3	3	3	3	3	3	3
IM6.23	Demonstrate a non-judgemental attitude to patients with HIV and to their lifestyles	3	3	3	3	3	3	3
IM7.1	Describe the pathophysiology of autoimmune disease	2	1	2	2	2	2	2
IM7.2	Describe the genetic basis of autoimmune disease	2	1	1	2	3	2	2
IM7.3	Classify cause of joint pain based on the pathophysiology	3	2	2	3	2	2	2
IM7.4	Develop a systematic clinical approach to joint pain based on the pathophysiology	3	3	3	3	3	3	3
IM7.5	Describe and discriminate acute, subacute and chronic causes of joint pain	2	2	3	3	3	3	2
IM7.6	Discriminate, describe and discuss arthralgia from arthritis and mechanical from inflammatory causes of joint pain	2	1	1	2	2	2	2
IM7.7	Discriminate, describe and discuss distinguishing articular from periarticular complaints	2	2	2	1	2	2	2
IM7.8	Determine the potential causes of join pain based on the presenting features of joint involvement	2	2	2	2	2	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Comm nicato	uLifelong Learner	Professional	Critical Thinker	Researcher
IM7.9	Describe the common signs and symptoms of articular and periarticular diseases	3	3	3	3	3	3	3
IM7.10	Describe the systemic manifestations of rheumatologic disease	3	3	3	3	3	3	3
IM7.11	Elicit document and present a medical history that will differentiate the aetiologies of disease	3	3	3	3	3	3	3
IM7.12	Perform a systematic examination of all joints, muscle and skin that will establish the diagnosis and severity of disease	3	3	3	3	3	3	3
IM7.13	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	3	3	3	3	3	3	3
IM7.14	Describe the appropriate diagnostic work up based on the presumed aetiology	2	2	3	2	3	2	2
IM7.15	Enumerate the indications for and interpret the results of : CBC, anti- CCP, RA, ANA, DNA and other tests ofautoimmunity	2	2	3	2	3	2	2
IM7.16	Enumerate the indications for arthrocentesis	3	2	2	3	2	2	2
IM7.17	Enumerate the indications and interpret plain radiographs of joints	3	3	3	3	3	3	3
IM7.18	Communicate diagnosis, treatment plan and subsequent follow up plan to patients	2	3	3	3	2	2	3
IM7.19	Develop an appropriate treatment plan for patients with rheumatologic diseases	3	2	3	2	3	2	2
IM7.20	Select, prescribe and communicate appropriate medications for relief of joint pain	3	2	2	2	2	3	3
IM7.21	Select, prescribe and communicate preventive therapy for crystalline arthropathies	2	1	1	1	2	1	2

Number	COMPETENCY The student should be able to	Clinician		Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM7.22	Select, prescribe and communicate treatment option for systemic rheumatologic conditions	3	3	3	3	3	3	3
IM7.23	Describe the basis for biologic and disease modifying therapy in rheumatologic diseases	3	3	3	3	3	3	3
IM7.24	Communicate and incorporate patient preferences in the choice of therapy	3	3	3	3	3	3	3
IM7.25	Develop and communicate appropriate follow up and monitoring plans for patients with rheumatologic conditions	3	3	3	3	3	3	3
IM7.26	Demonstrate an understanding of the impact of rheumatologic conditions on quality of life, well being, work and family	3	3	3	3	3	3	3
IM7.27	Determine the need for specialist consultation	2	2	3	2	3	2	2
IM8.1	Describe and discuss the epidemiology, aetiology and the prevalence of primary and secondary hypertension	2	2	3	2	3	2	2
IM8.2	Describe and discuss the pathophysiology of hypertension	3	2	2	3	2	2	2
IM8.3	Describe and discuss the genetic basis of hypertension	3	3	3	3	3	3	3
IM8.4	Define and classify hypertension	3	3	3	3	3	3	3
IM8.5	Describe and discuss the differences between primary and secondary hypertension	2	2	2	2	2	2	3
IM8.6	Define, describe and discuss and recognise hypertensive urgency and emergency	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM8.7	Describe and discuss the clinical manifestations of the various aetiologies of secondary causes of hypertension	3	2	2	3	2	2	2
IM8.8	Describe, discuss and identify target organ damage due to hypertension	3	3	3	3	3	3	3
IM8.9	Elicit document and present a medical history that includes: duration and levels, symptoms, comorbidities, lifestyle, risk factors, family history, psychosocial and environmental factors, dietary assessment, previous and concomitanttherapy	3	3	3	3	3	3	3
IM8.10	Perform a systematic examination that includes : an accurate measurement of blood pressure, fundus examination, examination of vasculature and heart	3	3	3	3	3	3	3
IM8.11	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	3	3	3	3	3	3	3
IM8.12	Describe the appropriate diagnostic work up based on the presumed aetiology	3	3	3	3	3	3	3
IM8.13	Enumerate the indications for and interpret the results of : CBC, Urine routine, BUN, Cr, Electrolytes, Uric acid, ECG	2	2	3	2	3	2	2
IM8.14	Develop an appropriate treatment plan for essential hypertension	2	2	3	2	3	2	2
IM8.15	Recognise, prioritise and manage hypertensive emergencies	3	2	2	3	2	2	2
IM8.16	Develop and communicate to the patient lifestyle modification including weight reduction, moderation of alcohol intake, physical activity and sodium intake	3	3	3	3	3	3	3
IM8.17	Perform and interpret a 12 lead ECG	3	3	3	3	3	3	2
IM8.18	Incorporate patient preferences in the management of HTN	2	3	3	3	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM8.19	Demonstrate understanding of the impact of Hypertension on quality of life, well being, work and family	3	3	3	3	2	2	3
IM8.20	Determine the need for specialist consultation	3	3	3	3	3	3	3
IM9.1	Define, describe and classify anemia based on red blood cell size and reticulocyte count	3	3	3	3	3	3	3
IM9.2	Describe and discuss the morphological characteristics, aetiology and prevalence of each of the causes of anemia	3	3	3	3	3	3	3
IM9.3	Elicit document and present a medical history that includes symptoms, risk factors including GI bleeding, prior history, medications, menstrual history, and family history	3	3	3	3	3	3	3
IM9.4	Perform a systematic examination that includes : general examination for pallor, oral examination, DOAP session of hyper dynamic circulation, lymph node and splenic examination	2	2	3	2	3	2	2
IM9.5	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	2	2	3	2	3	2	2
IM9.6	Describe the appropriate diagnostic work up based on the presumed aetiology	3	2	2	3	2	2	2
IM9.7	Describe and discuss the meaning and utility of various components of the hemogram	3	3	3	3	3	3	3
IM9.8	Describe and discuss the various tests for iron deficiency	3	3	3	3	3	3	3
IM9.9	Order and interpret tests for anemia including hemogram, red cell indices, reticulocyte count, iron studies, B12 and folate	3	2	3	3	3	3	3
3IM9.10	Describe, perform and interpret a peripheral smear and stool occult blood	3	2	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM9.11	Describe the indications and interpret the results of a bone marrow aspirations and biopsy	3	3	3	3	3	3	3
IM9.12	Describe, develop a diagnostic plan to determine the aetiology of anemia	3	3	3	3	3	3	3
IM9.13	Prescribe replacement therapy with iron, B12, folate	3	3	3	3	3	3	3
IM9.14	Describe the national programs for anemia prevention	3	3	3	3	3	3	3
IM9.15	Communicate the diagnosis and the treatment appropriately to patients	3	3	3	3	3	3	3
IM9.16	Incorporate patient preferences in the management of anemia	2	2	3	2	3	2	2
IM9.17	Describe the indications for blood transfusion and the appropriate use of blood components	2	2	3	2	3	2	2
IM9.18	Describe the precautions required necessary when performing a blood transfusion	3	2	2	3	2	2	2
IM9.19	Assist in a blood transfusion	3	1	3	3	3	1	2
IM9.20	Communicate and counsel patients with methods to prevent nutritional anemia	3	2	1	2	2	2	2
IM9.21	Determine the need for specialist consultation	2	2	2	2	2	2	2
IM10.1	Define, describe and differentiate between acute and chronic renal failure	3	3	3	3	3	3	3
IM10.2	Classify, describe and differentiate the pathophysiologic causes of acute renal failure	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM10.3	Describe the pathophysiology and causes of pre renal ARF, renal and post renal ARF	3	3	3	3	3	3	3
IM10.4	Describe the evolution, natural history and treatment of ARF	3	3	3	3	3	3	3
IM10.5	Describe and discuss the aetiology of CRF	3	3	3	3	3	3	3
IM10.6	Stage Chronic Kidney Disease	3	3	3	3	3	3	3
IM10.7	Describe and discuss the pathophysiology and clinical findings of uraemia	3	3	3	3	3	3	3
IM10.8	Classify, describe and discuss the significance of proteinuria in CKD	2	2	3	2	3	2	2
IM10.9	Describe and discuss the pathophysiology of anemia and hyperparathyroidism in CKD	2	2	3	2	3	2	2
IM10.10	Describe and discuss the association between CKD glycemia and hypertension	3	2	2	3	2	2	2
IM10.11	Describe and discuss the relationship between CAD risk factors and CKD and in dialysis	3	3	3	3	3	3	3
IM10.12	Elicit document and present a medical history that will differentiate the aetiologies of disease, distinguish acute and chronic disease, identify predisposing conditions, nephrotoxic drugs and systemic causes	3	3	3	3	3	3	3
IM10.13	Perform a systematic examination that establishes the diagnosis and severity including determination of volume status, presence of edema and heart failure, features of uraemia and associated systemic disease	3	2	3	3	3	3	3
IM10.14	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	3	2	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM10.15	Describe the appropriate diagnostic work up based on the presumed aetiology	3	3	3	3	3	3	3
IM10.16	Enumerate the indications for and interpret the results of : renal function tests, calcium, phosphorus, PTH, urine electrolytes, osmolality, Anion gap	3	2	3	3	3	3	3
IM10.17	Describe and calculate indices of renal function based on available laboratories including FENa (Fractional Excretion of Sodium) and CrCl (Creatinine Clearance)	3	2	3	3	3	3	3
IM10.18	Identify the ECG findings in hyperkalemia	3	3	3	3	3	3	3
IM10.19	Enumerate the indications and describe the findings in renal ultrasound	3	2	3	3	3	3	3
IM10.20	Describe and discuss the indications to perform arterial blood gas analysis: interpret the data	2	2	3	2	3	2	2
IM10.21	Describe and discuss the indications for and insert a peripheral intravenous catheter	2	2	3	2	3	2	2
IM10.22	Describe and discuss the indications, demonstrate in a model and assist in the insertion of a central venous or a dialysis catheter	3	2	2	3	2	2	2
IM10.23	Communicate diagnosis treatment plan and subsequent follow up plan to patients	3	3	3	3	3	3	3
IM10.24	Counsel patients on a renal diet	3	3	3	3	3	3	3
IM10.25	Identify and describe the priorities in the management of ARF including diet, volume management, alteration in doses of drugs, monitoring and indications for dialysis	3	3	3	3	3	3	3
IM10.26	Describe and discuss supportive therapy in CKD including diet, anti hypertensives, glycemic therapy, dyslipidemia, anemia, hyperkalemia, hyperphosphatemia and secondary hyperparathyroidism	3	2	3	2	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM10.27	Describe and discuss the indications for renal dialysis	3	3	3	3	3	3	3
IM10.28	Describe and discuss the indications for renal replacement therapy	3	3	3	3	3	3	3
IM10.29	Describe discuss and communicate the ethical and legal issues involved in renal replacement therapy	3	3	3	3	3	3	3
IM10.30	Recognise the impact of CKD on patient's quality of life well being work and family	3	3	3	3	3	3	3
IM10.31	Incorporate patient preferences in to the care of CKD	3	3	3	3	3	3	3
IM11.1	Define and classify diabetes	2	2	3	2	3	2	2
IM11.2	Describe and discuss the epidemiology and pathogenesis and risk factors and clinical evolution of type 1 diabetes	2	2	3	2	3	2	2
IM11.3	Describe and discuss the epidemiology and pathogenesis and risk factors economic impact and clinical evolution of type 2 diabetes	3	2	2	3	2	2	2
IM11.4	Describe and discuss the genetic background and the influence of the environment on diabetes	3	3	3	3	3	3	3
IM11.5	Describe and discuss the pathogenesis and temporal evolution of microvascular and macrovascular complications of diabetes	3	3	3	3	2	3	3
IM11.6	Describe and discuss the pathogenesis and precipitating factors, recognition and management of diabetic emergencies	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM11.7	Elicit document and present a medical history that will differentiate the aetiologies of diabetes including risk factors, precipitating factors, lifestyle, nutritional history, family history, medication history, co-morbidities and target organ disease	3	3	3	3	3	3	3
IM11.8	Perform a systematic examination that establishes the diagnosis and severity that includes skin, peripheral pulses, blood pressure measurement, fundus examination, detailed examination of the foot (pulses, nervous and deformities and injuries)	3	3	3	3	3	3	3
IM11.9	Describe and recognise the clinical features of patients who present with a diabetic emergency	3	3	3	3	3	3	3
IM11.10	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	3	3	3	3	3	3	3
IM11.11	Order and interpret laboratory tests to diagnose diabetes and its complications including: glucoses, glucose tolerance test, glycosylated hemoglobin, urinary micro albumin, ECG, electrolytes, ABG, ketones, renal function tests and lipid profile	3	3	3	3	3	3	3
IM11.12	Perform and interpret a capillary blood glucose test	2	2	3	2	3	2	2
IM11.13	Perform and interpret a urinary ketone estimation with a dipstick	2	2	3	2	3	2	2
IM11.14	Recognise the presentation of hypoglycaemia and outline the principles on its therapy	3	2	2	3	2	2	2
IM11.15	Recognise the presentation of diabetic emergencies and outline the principles of therapy	3	3	3	3	3	3	3
IM11.16	Discuss and describe the pharmacologic therapies for diabetes their indications, contraindications, adverse reactions and interactions	3	2	2	2	2	3	3
IM11.17	Outline a therapeutic approach to therapy of T2Diabetes based on presentation, severity and complications in a cost effective manner	3	3	3	3	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM11.18	Describe and discuss the pharmacology, indications, adverse reactions and interactions of drugs used in the prevention and treatment of target organ damage and complications of Type II Diabetes including neuropathy, nephropathy, retinopathy, hypertension, dyslipidemia and cardiovascular disease	3	3	3	3	3	3	3
IM11.19	Demonstrate and counsel patients on the correct technique to administer insulin	3	3	3	3	3	3	3
IM11.20	Demonstrate to and counsel patients on the correct technique of self monitoring of blood glucoses	3	3	3	3	3	3	3
IM11.21	Recognise the importance of patient preference while selecting therapy for diabetes	3	3	3	3	3	3	3
IM11.22	Enumerate the causes of hypoglycaemia and describe the counter hormone response and the initial approach and treatment	3	3	3	3	3	3	3
IM11.23	Describe the precipitating causes, pathophysiology, recognition, clinical features, diagnosis, stabilisation and management of diabetic ketoacidosis	2	2	3	2	3	2	2
IM11.24	Describe the precipitating causes, pathophysiology, recognition, clinical features, diagnosis, stabilisation and management of Hyperosmolar non ketotic state	2	2	3	2	3	2	2
IM12.1	Describe the epidemiology and pathogenesis of hypothyroidism and hyperthyroidism including the influence of iodine deficiency and autoimmunity in the pathogenesis of thyroid disease	3	2	2	3	2	2	2
IM12.2	Describe and discuss the genetic basis of some forms of thyroid dysfunction	3	3	3	3	3	3	3
IM12.3	Describe and discuss the physiology of the hypothalamopituitary - thyroid axis, principles of thyroid function testing and alterations in physiologic function	3	2	3	3	3	2	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM12.4	Describe and discuss the principles of radio iodine uptake in the diagnosis of thyroid disorders	2	2	2	2	2	2	2
IM12.5	Elicit document and present an appropriate history that will establish the diagnosis cause of thyroid dysfunction and its severity	3	3	3	3	3	3	3
IM12.6	Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and severity including systemic signs of thyrotoxicosis and hypothyroidism, palpation of the pulse for rate and rhythm abnormalities, neck palpation of the thyroid and lymph nodes and cardiovascular findings	3	3	3	3	3	3	3
IM12.7	Demonstrate the correct technique to palpate the thyroid	3	3	3	3	3	3	3
IM12.8	Generate a differential diagnosis based on the clinical presentation and prioritise it based on the most likely diagnosis	3	3	3	3	3	3	3
IM12.9	Order and interpret diagnostic testing based on the clinical diagnosis including CBC, thyroid function tests and ECG and radio iodine uptake and scan	3	3	3	3	3	3	3
IM12.10	Identify atrial fibrillation, pericardial effusion and bradycardia on ECG	2	2	3	2	3	2	2
IM12.11	Interpret thyroid function tests in hypo and hyperthyroidism	2	2	3	2	3	2	2
IM12.12	Describe and discuss the iodisation programs of the government of India	3	2	2	3	2	2	2
IM12.13	Describe the pharmacology, indications, adverse reaction, interactions of thyroxine and antithyroid drugs	3	3	3	3	3	3	3
IM12.14	Write and communicate to the patient appropriately a prescription for thyroxine based on age, sex, and clinical and biochemical status	2	3	2	3	3	3	3
IM12.15	Describe and discuss the indications of thionamide therapy, radio iodine therapy and surgery in the management of thyrotoxicosis	2	3	2	2	2	2	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM13.1	Describe the clinical epidemiology and inherited & modifiable risk factors for common malignancies in India	3	3	3	3	3	3	3
IM13.2	Describe the genetic basis of selected cancers	3	3	3	3	3	3	3
IM13.3	Describe the relationship between infection and cancers	3	3	3	3	3	3	3
IM13.4	Describe the natural history, presentation, course, complications and cause of death for common cancers	3	3	3	3	3	3	3
IM13.5	Describe the common issues encountered in patients at the end of life and principles of management	3	3	3	3	3	3	3
IM13.6	Describe and distinguish the difference between curative and palliative care in patients with cancer	2	2	3	2	3	2	2
IM13.7	Elicit document and present a history that will help establish the aetiology of cancer and includes the appropriate risk factors, duration and evolution	2	2	3	2	3	2	2
IM13.8	Perform and demonstrate a physical examination that includes an appropriate general and local examination that excludes the diagnosis, extent spread and complications of cancer	3	2	2	3	2	2	2
IM13.9	Demonstrate in a mannequin the correct technique for performing breast exam, rectal examination and cervical examination and pap smear	3	3	3	3	3	3	3
IM13.10	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely diagnosis	3	2	3	3	3	2	3
IM13.11	Order and interpret diagnostic testing based on the clinical diagnosis including CBC and stool occult blood and prostate specific antigen	3	3	2	2	2	2	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Comm nicator	ıLifelong Learner	Professional	Critical Thinker	Researcher
IM13.12	Describe the indications and interpret the results of Chest X Ray, mammogram, skin and tissue biopsies and tumor markers used in common cancers	3	3	3	3	3	3	3
IM13.13	Describe and assess pain and suffering objectively in a patient with cancer	3	3	3	3	3	3	3
IM13.14	Describe the indications for surgery, radiation and chemotherapy for common malignancies	3	3	3	3	3	3	3
IM13.15	Describe the need, tests involved, their utility in the prevention of common malignancies	3	3	3	3	3	3	3
IM13.16	Demonstrate an understanding and needs and preferences of patients when choosing curative and palliative therapy	3	3	3	3	3	3	3
IM13.17	Describe and enumerate the indications, use, side effects of narcotics in pain alleviation in patients with cancer	2	2	3	2	3	2	2
IM13.18	Describe and discuss the ethical and the medico legal issues involved in end of life care	2	2	3	2	3	2	2
IM13.19	Describe the therapies used in alleviating suffering in patients at the end of life	3	2	2	3	2	2	2
IM14.1	Define and measure obesity as it relates to the Indian population	3	3	3	3	3	3	3
IM14.2	Describe and discuss the aetiology of obesity including modifiable and non-modifiable risk factors and secondary causes	2	2	2	2	2	2	2
IM14.3	Describe and discuss the monogenic forms of obesity	2	2	2	2	2	2	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM14.4	Describe and discuss the impact of environmental factors including eating habits, food, work, environment and physical activity on the incidence of obesity	3	3	3	3	3	3	3
IM14.5	Describe and discuss the natural history of obesity and its complications	3	3	3	3	3	3	3
IM14.6	Elicit and document and present an appropriate history that includes the natural history, dietary history, modifiable risk factors, family history, clues for secondary causes and motivation to lose weight	3	3	3	3	3	3	3
IM14.7	Perform, document and demonstrate a physical examination based on the history that includes general examination, measurement of abdominal obesity, signs of secondary causes and comorbidities	3	3	3	3	3	3	3
IM14.8	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely diagnosis	3	3	3	3	3	3	3
IM14.9	Order and interpret diagnostic tests based on the clinical diagnosis including blood glucose, lipids, thyroid function tests etc.	2	2	3	2	3	2	2
IM14.10	Describe the indications and interpret the results of tests for secondary causes of obesity	2	2	3	2	3	2	2
IM14.11	Communicate and counsel patient on behavioural, dietary and lifestyle modifications	3	2	2	3	2	2	2
IM14.12	Demonstrate an understanding of patient's inability to adhere to lifestyle instructions and counsel them in a non - judgemental way	3	3	3	3	3	3	3
IM14.13	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy for obesity	3	2	2	2	2	3	3
IM14.14	Describe and enumerate the indications and side effects of bariatric surgery	3	2	2	2	2	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM14.15	Describe and enumerate and educate patients, health care workers and the public on measures to prevent obesity and promote a healthy lifestyle	3	3	3	3	3	3	3
IM15.1	Enumerate, describe and discuss the aetiology of upper and lower GI bleeding	3	3	3	3	3	3	3
IM15.2	Enumerate, describe and discuss the evaluation and steps involved in stabilizing a patient who presents with acute volume loss and GI bleed	3	3	3	3	3	3	3
IM15.3	Describe and discuss the physiologic effects of acute blood and volume loss	3	3	3	3	3	3	3
IM15.4	Elicit and document and present an appropriate history that identifies the route of bleeding, quantity, grade, volume loss, duration, etiology, comorbid illnesses and risk factors	3	3	3	3	3	3	3
IM15.5	Perform, demonstrate and document a physical examination based on the history that includes general examination, volume assessment and appropriate abdominal examination	2	2	3	2	3	2	2
IM15.6	Distinguish between upper and lower gastrointestinal bleeding based on the clinical features	2	2	3	2	3	2	2
IM15.7	Demonstrate the correct technique to perform an anal and rectal examination in a mannequin or equivalent	3	1	1	3	2	2	2
IM15.8	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely diagnosis	3	3	3	3	3	3	3
IM15.9	Choose and interpret diagnostic tests based on the clinical diagnosis including complete blood count, PT and PTT, stool examination, occult blood, liver function tests, H.pylori test.	3	3	2	3	2	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM15.10	Enumerate the indications for endoscopy, colonoscopy and other imaging procedures in the investigation of Upper GI bleeding	3	3	3	3	3	3	3
IM15.11	Develop, document and present a treatment plan that includes fluid resuscitation, blood and blood component transfusion, and specific therapy for arresting blood loss	3	3	3	3	3	3	3
IM15.12	Enumerate the indications for whole blood, component and platelet transfusion and describe the clinical features and management of a mismatched transfusion		3	3	3	3	3	3
IM15.13	Observe cross matching and blood / blood component transfusion	3	3	3	3	3	3	3
IM15.14	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy of pressors used in the treatment of Upper GI bleed	3	3	3	3	3	3	3
IM15.15	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy of acid peptic disease including Helicobacter pylori	2	2	3	2	3	2	2
IM15.16	Enumerate the indications for endoscopic interventions and Surgery	2	2	3	2	3	2	2
IM15.17	Determine appropriate level of specialist consultation	3	2	2	3	2	2	2
IM15.18	Counsel the family and patient in an empathetic non-judgmental manner on the diagnosis and therapeutic options	3	3	3	3	3	3	3
IM16.1	Describe and discuss the aetiology of acute and chronic diarrhea including infectious and non infectious causes	3	2	2	2	3	3	3
IM16.2	Describe and discuss the acute systemic consequences of diarrhea including its impact on fluid balance	3	2	3	2	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM16.3	Describe and discuss the chronic effects of diarrhea including malabsorption	3	2	3	3	3	3	3
IM16.4	Elicit and document and present an appropriate history that includes the natural history, dietary history, travel , sexual history and other concomitant illnesses	3	2	2	2	3	2	3
IM16.5	Perform, document and demonstrate a physical examination based on the history that includes general examination, including an appropriate abdominal examination	3	2	2	2	3	2	2
IM16.6	Distinguish between diarrhea and dysentery based on clinical features	3	2	2	2	3	2	2
IM16.7	Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritise based on the most likely diagnosis	3	1	2	2	3	2	2
IM16.8	Choose and interpret diagnostic tests based on the clinical diagnosis including complete blood count, and stool examination	3	2	2	2	3	2	2
IM16.9	Identify common parasitic causes of diarrhea under the microscope in a stool specimen	3	2	2	3	3	2	2
IM16.10	Identify vibrio cholera in a hanging drop specimen	3	1	2	2	3	2	2
IM16.11	Enumerate the indications for stool cultures and blood cultures in patients with acute diarrhea	3	2	2	2	3	2	2
IM16.12	Enumerate and discuss the indications for further investigations including antibodies, colonoscopy, diagnostic imaging and biopsy in the diagnosis of chronic diarrhea	3	2	2	2	3	2	2
IM16.13	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy for parasitic causes of diarrhea	3	3	2	2	3	2	2
IM16.14	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy for bacterial and viral diarrhea	3	2	2	2	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM16.15	Distinguish based on the clinical presentation Crohn's disease from Ulcerative Colitis	3	2	2	2	3	2	3
IM16.16	Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy including immunotherapy	3	2	2	2	3	3	3
IM16.17	Describe and enumerate the indications for surgery in inflammatory bowel disease	3	2	2	2	3	3	3
IM17.1	Define and classify headache and describe the presenting features, precipitating factors, aggravating and relieving factors of various kinds of headache	3	2	2	2	3	3	3
IM17.2	Elicit and document and present an appropriate history including aura, precipitating aggravating and relieving factors, associated symptoms that help identify the cause of headaches	3	2	2	2	3	3	3
IM17.3	Classify migraine and describe the distinguishing features between classical and non classical forms of migraine	3	2	2	2	3	2	3
IM17.4	Perform and demonstrate a general neurologic examination and a focused examination for signs of intracranial tension including neck signs of meningitis	3	2	3	2	3	3	2
IM17.5	Generate document and present a differential diagnosis based on the clinical features, and prioritise the diagnosis based on the presentation	3	2	2	3	3	2	2
IM17.6	Choose and interpret diagnostic testing based on the clinical diagnosis including imaging	3	2	2	2	3	3	3
IM17.7	Enumerate the indications and describe the findings in the CSF in patients with meningitis	3	2	2	2	3	3	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM17.8	Demonstrate in a mannequin or equivalent the correct technique for performing a lumbar puncture	3	2	2	2	3	2	2
IM17.9	Interpret the CSF findings when presented with various parameters of CSF fluid analysis	3	2	2	2	3	3	2
IM17.10	Enumerate the indications for emergency care admission and immediate supportive care in patients with headache	3	3	2	2	3	2	3
IM17.11	Describe the indications, pharmacology, dose, side effects of abortive therapy in migraine	3	2	2	2	3	2	3
IM17.12	Describe the indications, pharmacology, dose, side effects of prophylactic therapy in migraine	3	3	2	2	3	2	3
IM17.13	Describe the pharmacology, dose, adverse reactions and regimens of drugs used in the treatment of bacterial, tubercular and viral meningitis	3	3	2	3	3	3	3
IM17.14	Counsel patients with migraine and tension headache on lifestyle changes and need for prophylactic therapy	3	2	3	2	3	2	3
IM18.1	Describe the functional and the vascular anatomy of the brain	3	2	2	2	3	3	3
IM18.2	Classify cerebrovascular accidents and describe the aetiology, predisposing genetic and risk factors pathogenesis of hemorrhagic and non hemorrhagic stroke	3	2	2	2	3	3	3
IM18.3	Elicit and document and present an appropriate history including onset, progression, precipitating and aggravating relieving factors, associated symptoms that help identify the cause of the cerebrovascular accident	3	2	3	2	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM18.4	Identify the nature of the cerebrovascular accident based on the temporal evolution and resolution of the illness	3	2	2	2	3	3	2
IM18.5	Perform, demonstrate & document physical examination that includes general and a detailed neurologic examination as appropriate, based on the history	3	2	3	2	3	3	2
IM18.6	Distinguish the lesion based on upper vs lower motor neuron, side, site and most probable nature of the lesion	3	2	2	2	3	3	2
IM18.7	Describe the clinical features and distinguish, based on clinical examination, the various disorders of speech	3	3	2	2	3	3	2
IM18.8	Describe and distinguish, based on the clinical presentation, the types of bladder dysfunction seen in CNS disease	3	3	2	2	3	3	2
IM18.9	Choose and interpret the appropriate diagnostic and imaging test that will delineate the anatomy and underlying cause of the lesion	3	3	2	2	3	3	3
IM18.10	Choose and interpret the appropriate diagnostic testing in young patients with a cerebrovascular accident (CVA)	3	3	2	2	3	3	3
IM18.11	Describe the initial supportive management of a patient presenting with a cerebrovascular accident (CVA)	3	2	2	2	3	3	3
IM18.12	Enumerate the indications for and describe acute therapy of non hemorrhagic stroke including the use of thrombolytic agents	3	2	2	2	3	3	3
IM18.13	Enumerate the indications for and describe the role of anti platelet agents in non hemorrhagic stroke	3	2	2	2	3	3	3
IM18.14	Describe the initial management of a hemorrhagic stroke	3	2	2	2	3	3	3
IM18.15	Enumerate the indications for surgery in a hemorrhagic stroke	3	2	2	2	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM18.16	Enumerate the indications describe and observe the multidisciplinary rehabilitation of patients with a CVA	3	2	3	2	3	2	3
IM18.17	Counsel patient and family about the diagnosis and therapy in an empathetic manner	3	2	3	2	3	2	2
IM19.1	Describe the functional anatomy of the locomotor system of the brain	3	2	1	2	3	2	2
IM19.2	Classify movement disorders of the brain based on distribution, rhythm, repetition, exacerbating and relieving factors	3	3	2	2	3	2	3
IM19.3	Elicit and document and present an appropriate history including onset, progression precipitating and aggravating relieving factors, associated symptoms that help identify the cause of the movement disorders	3	2	2	2	3	3	3
IM19.4	Perform, demonstrate and document a physical examination that includes a general examination and a detailed neurologic examination using standard movement rating scales	3	2	2	2	3	2	3
IM19.5	Generate document and present a differential diagnosis and prioritise based on the history and physical examination	3	3	2	2	3	2	3
IM19.6	Make a clinical diagnosis regarding on the anatomical location, nature and cause of the lesion based on the clinical presentation and findings	3	2	2	2	3	2	3
IM19.7	Choose and interpret diagnostic and imaging tests in the diagnosis of movement disorders	3	2	2	2	3	3	3
IM19.8	Discuss and describe the pharmacology, dose, side effects and interactions used in the drug therapy of Parkinson's syndrome	3	2	2	2	3	2	3
IM19.9	Enumerate the indications for use of surgery and botulinum toxin in the treatment of movement disorders	3	2	2	2	3	3	3

•	

Number	COMPETENCY The student should be able to	Clinician		Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM20.1	Enumerate the local poisonous snakes and describe the distinguishing marks of each	3	3	2	3	3	3	3
IM20.2	Describe, demonstrate in a volunteer or a mannequin and educate (to other health care workers / patients) the correct initial management of patient with a snake bite in the field	3	2	2	2	3	2	2
IM20.3	Describe the initial approach to the stabilisation of the patient who presents with snake bite	3	2	2	3	3	3	2
IM20.4	Elicit and document and present an appropriate history, the circumstance, time, kind of snake, evolution of symptoms in a patient with snake bite	3	2	2	3	3	2	2
IM20.5	Perform a systematic examination, document and present a physical examination that includes general examination, local examination, appropriate cardiac and neurologic examination	3	3	2	2	3	2	3
IM20.6	Choose and interpret the appropriate diagnostic testing in patients with snake bites	3	3	2	2	3	2	3
IM20.7	Enumerate the indications and describe the pharmacology, dose, adverse reactions, hypersensitivity reactions of anti snake venom	3	3	2	2	3	3	2
IM20.8	Describe the diagnosis, initial approach stabilisation and therapy of scorpion envenomation	3	3	2	2	3	2	2
IM20.9	Describe the diagnosis initial approach stabilisation and therapy of bee sting allergy	3	3	2	2	3	3	3
IM21.1	Describe the initial approach to the stabilisation of the patient who presents with poisoning	3	3	2	2	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM21.2	Enumerate the common plant poisons seen in your area and describe their toxicology, clinical features, prognosis and specific approach to detoxification	3	2	2	2	3	3	3
IM21.3	Enumerate the common corrosives used in your area and describe their toxicology, clinical features, prognosis and approach to therapy	3	3	2	2	3	3	3
IM21.4	Enumerate the commonly observed drug overdose in your area and describe their toxicology, clinical features, prognosis and approach to therapy	3	2	2	2	3	3	3
IM21.5	Observe and describe the functions and role of a poison center in suspected poisoning	3	3	2	2	3	3	3
IM21.6	Describe the medico legal aspects of suspected suicidal or homicidal poisoning and demonstrate the correct procedure to write a medico legal report on a suspected poisoning	3	2	2	2	3	3	3
IM21.7	Counsel family members of a patient with suspected poisoning about the clinical and medico legal aspects with empathy	3	2	2	2	3	3	3
IM21.8	Enumerate the indications for psychiatric consultation and describe the precautions to be taken in a patient with suspected suicidal ideation / gesture	3	3	2	2	3	3	3
IM22.1	Enumerate the causes of hypercalcemia and distinguish the features of PTH vs non PTH mediated hypercalcemia	3	2	2	2	3	3	3
IM22.2	Describe the aetiology, clinical manifestations, diagnosis and clinical approach to primary hyperparathyroidism	3	2	2	2	3	2	3
IM22.3	Describe the approach to the management of hypercalcemia	3	2	2	2	3	3	2
IM22.4	Enumerate the components and describe the genetic basis of the multiple endocrine neoplasia syndrome	3	3	2	2	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM22.5	Enumerate the causes and describe the clinical features and the correct approach to the diagnosis and management of the patient with hyponatremia	3	3	3	3	3	3	3
IM22.6	Enumerate the causes and describe the clinical and laboratory features and the correct approach to the diagnosis and management of the patient with hyponatremia	3	3	3	3	3	3	3
IM22.7	Enumerate the causes and describe the clinical and laboratory features and the correct approach to the diagnosis and management of the patient with hypokalemia	3	3	3	3	3	3	3
IM22.8	Enumerate the causes and describe the clinical and laboratory features and the correct approach to the diagnosis and management of the patient with hyperkalemia	3	3	3	3	3	3	3
IM22.9	Enumerate the causes and describe the clinical and laboratory features of metabolic acidosis	3	3	3	3	3	3	2
IM22.10	Enumerate the causes of describe the clinical and laboratory features of metabolic alkalosis	3	3	3	3	3	3	3
IM22.11	Enumerate the causes and describe the clinical and laboratory features of respiratory acidosis	3	3	3	3	3	3	3
IM22.12	Enumerate the causes and describe the clinical and laboratory features of respiratory alkalosis	3	3	3	3	3	3	3
IM22.13	Identify the underlying acid based disorder based on an ABG report and clinical situation	3	3	3	2	3	3	3
IM23.1	Discuss and describe the methods of nutritional assessment in an adult and calculation of caloric requirements during illnesses	3	3	3	3	3	3	3
IM23.2	Discuss and describe the causes and consequences of protein caloric malnutrition in the hospital	3	3	3	3	3	3	3

2	
1	
2	

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM23.3	Discuss and describe the aetiology, causes, clinical manifestations, complications, diagnosis and management of common vitamin deficiencies	3	2	2	2	3		3
IM23.4	Enumerate the indications for enteral and parenteral nutrition in critically ill patients	3	2	2	3	3	3	3
IM23.5	Counsel and communicate to patients in a simulated environment with illness on an appropriate balanced diet	3	2	2	2	3	2	3
IM24.1	Describe and discuss the epidemiology, pathogenesis, clinical evolution, presentation and course of common diseases in the elderly	3	2	2	2	3	2	3
IM24.2	Perform multidimensional geriatric assessment that includes medical, psycho-social and functional components	3	2	2	2	3	2	3
IM24.3	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of acute confusional states	3	2	2	2	3	2	3
IM24.4	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vascular events in the elderly	3	2	2	2	3	3	3
IM24 5	Describe and discuss the aetiopathogenesis clinical presentation identification, functional changes, acute care, stabilization, management and rehabilitation of depression in the elderly	3	2	2	2	3	2	3
IM24.6	Describe and discuss the aetiopathogenesis causes, clinical presentation, difference in discussion presentation identification, functional changes, acute care, stabilization, management and rehabilitation of dementia in the elderly	3	2	2	2	3	2	3

Number	COMPETENCY	Clinician L	eader	Commu	Lifelong Learner	Professional	Critical	Researcher
	The student should be able to			nicator	_		Thinker	
IM24.7	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of personality changes in the elderly	3	2	2	2	3	2	3
IM24.8	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of osteoporosis in the elderly	3	2	2	2	3	2	3
IM24.9	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of CVA in the elderly	3	2	2	2	3	3	3
IM24.10	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of COPD in the elderly	3	2	2	2	3	3	3
IM24.11	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of the elderly undergoing surgery	3	2	3	2	3	3	3
IM24.12	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of degenerative joint disease	3	2	2	2	3	2	3
IM24.13	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of falls in the elderly	3	2	2	2	3	2	2
IM24.14	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of common fractures in the elderly	3	2	2	2	3	2	2
IM24.15	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vision and visual loss in the elderly	3	2	2	2	3	3	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Comm nicator	ıLifelong Learner	Professional	Critical Thinker	Researcher
IM24.16	Describe and discuss the principles of physical and social rehabilitation, functional assessment, role of physiotherapy and occupational therapy in the management of disability in the elderly	3	2	2	3	3	2	2
IM24.17	Describe and discuss the aetiopathogenesis,clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of hearing loss in the elderly	3	3	2	2	3	2	2
IM24.18	Describe the impact of the demographic changes in ageing on the population	3	2	2	2	3	2	2
IM24.19	Enumerate and describe the social problems in the elderly including isolation, abuse, change in family structure and their impact on health.	3	2	2	2	3	2	2
IM24.20	Enumerate and describe social interventions in the care of elderly including domiciliary discussion services, rehabilitation facilities, old age homes and state interventions	3	2	2	2	3	2	2
IM24.21	Enumerate and describe ethical issues in the care of the elderly	3	2	2	2	3	2	2
IM24.22	Describe and discuss the aetiopathogenesis, clinical presentation, complications, assessment and management of nutritional disorders in the elderly	3	2	2	2	3	2	2
IM25.1	Describe and discuss the response and the influence of host immune status, risk factors and comorbidities on zoonotic diseases (e.g. Leptospirosis, Rabies) and non-febrile infectious disease (e.g. Tetanus)	3	3	3	3	3	3	2
IM25.2	Discuss and describe the common causes, pathophysiology and manifestations of these diseases	3	3	3	3	3	3	2
IM25.3	Describe and discuss the pathophysiology and manifestations of these diseases	3	3	3	3	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	ıLifelong Learner	Professional	Critical Thinker	Researcher
IM25.4	Elicit document and present a medical history that helps delineate the aetiology of these diseases that includes the evolution and pattern of symptoms, risk factors, exposure through occupation and travel	3	2	2	2	3	3	3
IM25.5	Perform a systematic examination that establishes the diagnosis and severity of presentation that includes: general skin, mucosal and lymph node examination, chest and abdominal examination (including examination of the liver and spleen)	3	2	2	2	3	2	3
IM25.6	Generate a differential diagnosis and prioritise based on clinical features that help distinguish between infective, inflammatory, malignant and rheumatologic causes	3	2	2	2	3	2	3
IM25.7	Order and interpret diagnostic tests based on the differential diagnosis including: CBC with differential, blood biochemistry, peripheral smear, urinary analysis with sediment, Chest X ray,blood and urine cultures, sputum gram stain and cultures, sputum AFB and cultures, CSF analysis, pleural and body fluid analysis, stool routine and culture andQBC	3	2	2	2	3	3	3
IM25.8	Enumerate the indications for use of newer techniques in the diagnosis of these infections	3	2	2	2	3	3	3
IM25.9	Assist in the collection of blood and other specimen cultures	3	2	2	2	3	3	3
IM25.10	Develop and present an appropriate diagnostic plan based on the clinical presentation, most likely diagnosis in a prioritised and cost effective manner	3	2	2	2	3	2	3
IM25.11	Develop an appropriate empiric treatment plan based on the patient's clinical and immune status pending definitive diagnosis	3	2	2	2	3	2	3
IM25.12	Communicate to the patient and family the diagnosis and treatment of identified infection	3	2	2	2	3	2	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM25.13	Counsel the patient and family on prevention of various infections due to environmental issues	3	2	2	2	3	2	2
IM26.1	Enumerate and describe professional qualities and roles of a physician	3	2	2	2	3	2	2
IM26.2	Describe and discuss the commitment to lifelong learning as an important part of physician growth	3	2	2	2	3	3	2
IM26.3	Describe and discuss the role of non maleficence as a guiding principle in patient care	3	2	2	2	3	2	2
IM26.4	Describe and discuss the role of autonomy and shared responsibility as a guiding principle in patient care	3	2	2	2	3	2	2
IM26.5	Describe and discuss the role of beneficence of a guiding principle in patient care	3	2	2	2	3	2	2
IM26.6	Describe and discuss the role of a physician in health care system	3	2	2	2	3	3	2
IM26.7	Describe and discuss the role of justice as a guiding principle in patient care	3	2	2	2	3	2	2
IM26.8	Identify discuss medicolegal, socioeconomic and ethical issues as it pertains to organ donation	3	2	2	2	3	3	2
IM26.9	Identify, discuss and defend medicolegal, sociocultural, economic and ethical issues as it pertains to rights, equity and justice in access to health care	3	2	2	2	3	2	2
IM26.10	Identify, discuss and defend medicolegal, socio-cultural and ethical issues as it pertains to confidentiality in patient care	3	2	2	2	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM26.11	Identify, discuss and defend medicolegal, socio-cultural and ethical issues as it pertains to patient autonomy, patient rights and shared responsibility in health care	3	3	3	3	3	2	2
	Identify, discuss and defend medicolegal, socio-cultural and ethical issues as it pertains to decision making in health care including advanced directives and surrogate decision making	3	3	3	3	3	2	2
	Identify, discuss and defend medicolegal, socio-cultural and ethical issues as it pertains to decision making in emergency care including situations where patients do not have the capability or capacity to give consent	3	3	3	3	3	2	2
IM26.14	Identify, discuss and defend medicolegal, socio-cultural and ethical issues as it pertains to research in human subjects	3	3	3	3	2	2	1
IM26.15	Identify, discuss and defend, medicolegal,socio-cultural and ethical issues as they pertain to consent for surgical procedures	3	3	3	2	2	1	1
	Identify, discuss and defend medicolegal, socio-cultural, professional and ethical issues as it pertains to the physician patient relationship (including fiduciary duty)	3	3	2	2	2	2	2
	Identify, discuss physician's role and responsibility to society and the community that she/ he serves	3	3	2	2	2	1	1
	Identify, discuss and defend medicolegal, socio-cultural, professional and ethical issues in physician- industry relationships	3	3	2	2	2	1	1
IM26.19	Demonstrate ability to work in a team of peers and superiors	3	3	2	2	2	1	1
	Demonstrate ability to communicate to patients in a patient, respectful, non threatening, non judgemental and empathetic manner	3	3	2	2	3	1	1
IM26.21	Demonstrate respect to patient privacy	3	3	2	2	2	1	1

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM26.22	Demonstrate ability to maintain confidentiality in patient care	3	3	3	2	2	1	2
IM26.23	Demonstrate a commitment to continued learning	3	3	3	2	2	1	1
IM26.24	Demonstrate respect in relationship with patients, fellow team members, superiors and other health care workers	3	3	3	1	2	1	1
IM26.25	Demonstrate responsibility and work ethics while working in the health care team	3	3	3	2	2	1	2
IM26.26	Demonstrate ability to maintain required documentation in health care (including correct use of medical records)	3	3	3	1	1	1	2
IM26.27	Demonstrate personal grooming that is adequate and appropriate for health care responsibilities	3	3	3	2	2	2	1
IM26.28	Demonstrate adequate knowledge and use of information technology that permits appropriate patient care and continued learning	3	3	3	1	1	1	1
IM26.29	Communicate diagnostic and therapeutic opitons to patient and family in a simulated environment	3	3	3	1	2	1	1
IM26.30	Communicate care opitons to patient and family with a terminal illness in a simulated environment	3	3	3	1	1	1	2
IM26.31	Demonstrate awareness of limitations and seeks help and consultations appropriately	3	3	3	1	2	1	1
IM26.32	Demonstrate appropriate respect to colleagues in the profession	3	3	3	1	2	1	2
IM26.33	Demonstrate an understanding of the implications and the appropriate procedures and response to be followed in the event of medical errors	3	3	3	1	2	1	1
IM26.34	Identify conflicts of interest in patient care and professional relationships and describe the correct response to these conflicts	3	3	3	1	2	1	1

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM26.35	Demonstrate empathy in patient encounters	2	2	1	2	3	1	1
IM26.36	Demonstrate ability to balance personal and professional priorities	2	1	1	2	3	1	1
IM26.37	Demonstrate ability to manage time appropriately	2	2	2	2	3	1	1
IM26.38	Demonstrate ability to form and function in appropriate professional networks	2	2	2	2	3	1	1
IM26.39	Demonstrate ability to pursue and seek career advancement	2	1	2	2	3	1	1
IM26.40	Demonstrate ability to follow risk management and medical error reduction practices where appropriate	2	2	1	2	3	1	1
IM26.41	Demonstrate ability to work in a mentoring relationship with junior colleagues	2	1	2	2	3	1	1
IM26.42	Demonstrate commitment to learning and scholarship	2	2	1	2	3	1	1
IM26.43	Identify, discuss and defend medicolegal, sociocultural, economic and ethical issues as they pertain to in vitro fertilisation donor insemination and surrogate motherhood	2	1	2	2	3	1	1
IM26.44	Identify, discuss and defend medicolegal, socio-cultural professional and ethical issues pertaining to medical negligence	2	2	1	2	3	1	1
IM26.45	Identify, discuss and defend medicolegal, socio-cultural professional and ethical issues pertaining to malpractice	2	1	2	2	3	1	1
IM26.46	Identify, discuss and defend medicolegal, socio-cultural professional and ethical issues in dealing with impaired physicians	2	1	2	2	3	1	1

Number	COMPETENCY The student should be able to	Clinician		Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
IM26.47	Identify, discuss and defend medicolegal, socio-cultural and ethical issues as they pertain to refusal of care including do not resuscitate and withdrawal of life support	3	2	3	2	2	1	1
IM26.48	Demonstrate altruism	2	2	2	2	2	1	1
IM26.49	Administer informed consent and approriately adress patient queries to a patient being enrolled in a research protocol in a simulated environment	2	2	2	2	2	1	1
222AN5.	Describe the concept of anastomoses and collateral circulation with	3	2	2	2	3	2	2
6	significance of end-arteries							
AN7.5	Describe principles of sensory and motor innervation of muscles	3	2	2	2	3	2	2
AN7.6	Describe concept of loss of innervation of a muscle with its applied anatomy	3	2	2	2	3	2	2
AN20.8	Identify & demonstrate palpation of femoral, popliteal, post tibial, anti tibial & dorsalis pedis blood vessels in a simulated environment	2	2	2	2	3	2	2
AN20.9	Identify & demonstrate Palpation of vessels (femoral, popliteal,dorsalis pedis,post tibial), Mid inguinal point, Surface projection of: femoral nerve, Saphenous opening, Sciatic, tibial,	2	2	2	2	3	2	2
	common peroneal & deep peroneal nerve, great and small saphenous veins							

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
AN22.7	Mention the parts, position and arterial supply of the conducting system of heart	3	2	1	2	3	2	1
AN24.1	Mention the blood supply, lymphatic drainage and nerve supply of pleura, extent of pleura and describe the pleural recesses and their applied anatomy	3	2	2	2	3	2	1
AN24.2	Identify side, external features and relations of structures which form root of lung & bronchial tree and their clinical correlate	3	2	1	2	3	2	1
AN24.3	Describe a bronchopulmonary segment	3	2	2	2	3	2	1
AN25.3	Describe fetal circulation and changes occurring at birth	3	2	2	2	3	2	2
AN25.4	Describe embryological basis of: 1) atrial septal defect, 2)ventricular septal defect, 3) Fallot's tetralogy & 4) tracheo-oesophageal fistula	3	2	2	2	3	2	1
AN25.5	Describe developmental basis of congenital anomalies, transposition of great vessels, dextrocardia, patent ductus arteriosus and coarctation of aorta	3	2	1	2	3	3	2
AN25.7	Identify structures seen on a plain x-ray chest (PA view)	3	2	2	2	3	3	2
AN25.8	Identify and describe in brief a barium swallow	3	2	2	2	3	2	2
AN25.9	Demonstrate surface marking of lines of pleural reflection, Lung borders and fissures, Trachea, Heart borders, Apex beat & Surface projection of valves of heart	3	2	2	2	3	2	2
AN28.7	Explain the anatomical basis of facial nerve palsy	3	2	2	2	3	2	2
AN50.3	Describe lumbar puncture (site, direction of the needle, structures pierced during the lumbar puncture)	3	2	2	2	3	3	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
AN56.1	Describe & identify various layers of meninges with its extent & modifications	3	2	2	2	3	2	2
AN56.2	Describe circulation of CSF with its applied anatomy	3	2	2	2	3	2	2
AN57.4	Enumerate ascending & descending tracts at mid thoracic level of spinal cord	3	2	2	2	3	2	2
AN57.5	Describe anatomical basis of syringomyelia	3	2	2	2	3	2	1
AN58.4	Describe anatomical basis & effects of medial & lateral medullary syndrome	3	2	2	2	3	2	2
AN60.3	Describe anatomical basis of cerebellar dysfunction	3	2	2	2	3	2	1
AN61.3	Describe anatomical basis & effects of Benedict's and Weber's syndrome	3	2	2	2	3	1	2
AN62.2	Describe & demonstrate surfaces, sulci, gyri, poles, & functional areas of cerebral hemisphere	3	2	2	2	3	2	1
AN62.3	Describe the white matter of cerebrum	3	2	2	2	3	2	2
AN62.5	Describe boundaries, parts, gross relations, major nuclei and connections of dorsal thalamus, hypothalamus, epithalamus, metathalamus and subthalamus	3	2	2	2	3	1	1
AN62.6	Describe & identify formation, branches & major areas of distribution of circle of Willis	3	2	2	2	3	2	2
AN74.1	Describe the various modes of inheritance with examples	3	1	2	2	3	2	1

Number	COMPETENCY The student should be able to	Clinician	Leader		Lifelong Learner	Professional	Critical	Researcher
				nicator			Thinker	
AN74.2	Draw pedigree charts for the various types of inheritance & give examples of diseases of each mode of inheritance	3	2	2	2	3	2	2
AN74.3	Describe multifactorial inheritance with examples	3	1	2	2	3	1	2
AN74.4	Describe the genetic basis & clinical features of Achondroplasia, Cystic Fibrosis, Vitamin D resistant rickets, Hemophilia, Duchene's muscular dystrophy & Sickle cell anaemia	3	1	2	2	3	1	2
PY3.12	Explain the gradation of muscular activity	3	2	2	2	3	1	2
PY3.13	Describe muscular dystrophy: myopathies	3	1	2	2	3	2	2
PY4.9	Discuss the physiology aspects of: peptic ulcer, gastro- oesophageal reflux disease, vomiting, diarrhoea, constipation, Adynamic ileus, Hirschsprung's disease	3	2	2	2	3	1	1
PY5.5	Describe the physiology of electrocardiogram (E.C.G), its applications and the cardiacaxis	3	1	2	2	3	3	2
PY5.6	Describe abnormal ECG, arrythmias, heart block and myocardial Infarction	3	2	2	2	3	3	1
PY5.10	Describe & discuss regional circulation including microcirculation, lymphatic circulation, coronary, cerebral, capillary, skin, foetal, pulmonary and splanchnic circulation		2	2	2	3	1	1
PY5.13	Record and interpret normal ECG in a volunteer or simulated environment	3	1	2	2	3	2	1

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PY5.16	Record Arterial pulse tracing using finger plethysmography in a volunteer or simulated environment	3	2	2	2	3	2	1
PY7.7	Describe artificial kidney, dialysis and renal transplantation	3	2	1	2	3	1	2
PY11.14	Demonstrate Basic Life Support in a simulated environment	3	1	2	2	3	2	2
BI2.4	Describe and discuss enzyme inhibitors as poisons and drugs, therapeutic enzymes and the clinical utility of various serum enzymes as markers of pathological conditions	3	2	2	2	3	1	2
BI2.5	Describe and discuss the clinical utility of various serum enzymes as markers of pathological conditions	3	2	1	2	3	1	1
BI2.6	Discuss use of enzymes in laboratory investigations (Enzyme- based assays)	3	1	2	2	3	1	2
BI2.7	Interpret laboratory results of enzyme activities & describe the clinical utility of various enzymes as markers of pathological conditions	3	2	1	2	3	1	2
BI3.4	Define and differentiate the pathways of carbohydrate metabolism (glycolysis, gluconeogenesis, glycogen metabolism, HMP shunt)	3	1	2	2	3	2	2
BI3.5	Describe and discuss the regulation, functions and integration of carbohydrate along with associated diseases/disorders	3	1	2	2	3	1	2
BI3.8	Discuss and interpret laboratory results of analytes associated with metabolism of carbohydrates	3	2	2	2	3	2	2
BI3.9	Discuss the mechanism and significance of blood glucose regulation in health and disease	3	2	2	2	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
BI3.10	Interpret the results of blood glucose levels and other laboratory investigations related to disorders of carbohydrate metabolism	3	2	2	2	3	2	1
BI4.1	Describe and discuss main classes of lipids (Essential/non- essential fatty acids, cholesterol and hormonal steroids, triglycerides, major phospholipids and sphingolipids) relevant to human system and their major functions	3	2	2	2	3	1	2
BI4.2	Describe the processes involved in digestion and absorption of dietary lipids and also the key features of their metabolism	3	2	2	2	3	2	3
BI4.3	Explain the regulation of lipoprotein metabolism & associated disorders	3	2	2	2	3	2	2
BI4.4	Describe the structure and functions of lipoproteins, their functions, interrelations & relations with atherosclerosis	3	2	2	2	3	2	3
BI4.5	Interpret laboratory results of analytes associated with metabolism of lipids	3	2	2	2	3	2	2
BI4.6	Describe the therapeutic uses of prostaglandins and inhibitors of eicosanoid synthesis	3	2	2	2	3	2	2
BI4.7	Interpret laboratory results of analytes associated with metabolism of lipids	3	2	2	2	3	2	2
BI5.2	Describe and discuss functions of proteins and structure-function relationships in relevant areas e.g., hemoglobin and selected hemoglobinopathies	3	2	2	2	3	2	2
BI5.5	Interpret laboratory results of analytes associated with metabolism of proteins	3	2	2	2	3	2	2
BI6.1	Discuss the metabolic processes that take place in specific organs in the body in the fed and fasting states	3	2	2	2	3	1	2
BI6.4	Discuss the laboratory results of analytes associated with gout & Lesch Nyhan syndrome	3	2	2	2	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
316.5	Describe the biochemical role of vitamins in the body and explain the manifestations of their deficiency	3	2	2	2	3	2	3
BI6.7	Describe the processes involved in maintenance of normal pH, water & electrolyte balance of body fluids and the derangements associated with these	3	2	2	2	3	2	2
BI6.8	Discuss and interpret results of Arterial Blood Gas (ABG) analysis in various disorders	3	2	2	2	3	2	3
BI6.9	Describe the functions of various minerals in the body, their metabolism and homeostasis	3	2	2	2	3	2	2
BI6.10	Enumerate and describe the disorders associated with mineral metabolism	3	1	2	2	3	2	3
BI6.11	Describe the functions of haem in the body and describe the processes involved in its metabolism and describe porphyrin metabolism	3	2	2	2	3	2	2
BI6.12	Describe the major types of haemoglobin and its derivatives found in the body and their physiological/ pathological relevance	3	1	2	2	3	1	2
BI6.13	Describe the functions of the kidney, liver, thyroid and adrenal glands	3	1	2	2	3	1	2
BI6.14	Describe the tests that are commonly done in clinical practice to assess the functions of these organs (kidney, liver, thyroid and adrenal glands)	3	2	2	2	3	2	3
BI6.15	Describe the abnormalities of kidney, liver, thyroid and adrenal glands.	3	1	2	2	3	1	2
317.4	Describe applications of recombinant DNA technology, PCR in the diagnosis and treatment of diseases with genetic basis	3	2	2	2	3	2	2

Number	COMPETENCY The student should be able to	Clinician		Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
BI7.7	Describe the role of oxidative stress in the pathogenesis of conditions such as cancer, complications of diabetes mellitus and atherosclerosis	3	2	2	2	3	2	3
BI8.1	Discuss the importance of various dietary components and explain importance of dietary fibre	3	2	2	2	3	1	3
BI8.2	Describe the types and causes of protein energy malnutrition and its effects	3	2	2	1	3	2	3
BI8.3	Provide dietary advice for optimal health in childhood and adult, in disease conditions like diabetes mellitus, coronary artery disease and inpregnancy.	3	2	1	1	3	1	3
BI8.4	Describe the causes (including dietary habits), effects and health risks associated with being overweight/ obesity	3	2	2	2	3	2	2
BI8.5	Summarize the nutritional importance of commonly used items of food including fruits and vegetables (macro-molecules & its importance)	3	2	2	2	3	2	1
BI9.2	Discuss the involvement of ECM components in health and disease	3	2	1	2	3	2	3
BI10.4	Describe & discuss innate and adaptive immune responses, self/non-self recognition and the central role of T-helper cells in immune responses	3	2	2	2	3	2	2
BI11.4	Perform urine analysis to estimate and determine normal and abnormal constituents	3	2	2	2	3	2	1
BI11.5	Describe screening of urine for inborn errors & describe the use of paper chromatography	3	2	2	2	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
BI11.17	Explain the basis and rationale of biochemical tests done in the following conditions: - diabetesmellitus, - dyslipidemia, - myocardialinfarction, - renal failure,gout, - proteinuria, - nephrotic syndrome, - edema, - jaundice, - liver diseases, pancreatitis, disorders of acid- base balance, thyroiddisorders.	3	2	2	2	3	2	2
BI11.22	Calculate albumin: globulin (AG) ratio and creatinine clearance	3	2	2	2	3	2	1
BI11.23	Calculate energy content of different food Items, identify food items with high and low glycemic index and explain the importance of these in the diet	3	2	2	2	3	1	2
BI11.24	Enumerate advantages and/or disadvantages of use of unsaturated, saturated and trans fats in food.	3	2	2	2	3	2	1
BI1.26	Calculate albumin: globulin (AG) ratio and creatinine clearance	3	2	2	2	3	1	2
BI1.27	Calculate energy content of different food Items, identify food items with high and low glycemic index and explain the importance of these in the diet	3	2	2	2	3	2	1
BI1.28	Enumerate advantages and/or disadvantages of use of unsaturated, saturated and trans fats in food	3	2	2	2	3	2	1
PA6.1	Define and describe edema its types pathogenesis and clinical correlations	3	2	2	2	3	2	1
PA9.4	Define autoimmunity. Enumerate autoimmune disorders	3	2	2	2	3	2	2

Number	COMPETENCY The student should be able to	Clinician		Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PA9.5	Define and describe the pathogenesis of systemic lupus erythematosus	3	2	3	2	3	1	2
PA9.6	Define and describe the pathogenesis and pathology of HIV and AIDS	3	2	2	2	3	1	1
PA9.7	Define and describe the pathogenesis of other common autoimmune diseases	3	2	3	2	3	1	1
PA10.1	Define and describe the pathogenesis and pathology of malaria	3	2	3	2	3	1	2
PA10.2	Define and describe the pathogenesis and pathology of cysticercosis	3	2	1	2	3	1	2
PA10.3	Define and describe the pathogenesis and pathology of leprosy	3	2	3	2	3	1	3
PA10.4	Define and describe the pathogenesis and pathology of common bacterial, viral, protozoal and helminthic diseases	3	2	3	2	3	2	2
PA12.3	Describe the pathogenesis of obesity and its consequences	3	2	2	2	3	3	3
PA13.1	Describe hematopoiesis and extramedullary hematopoiesis	3	2	1	2	3	1	2
PA13.2	Describe the role of anticoagulants in hematology	3	2	1	2	3	2	2
PA13.3	Define and classify anemia	3	2	1	2	3	1	2
PA13.4	Enumerate and describe the investigation of anemia	3	2	1	2	3	2	2
PA13.5	Perform, Identify and describe the peripheral blood picture in anemia	3	2	1	2	3	2	2
PA14.2	Describe the etiology, investigations and differential diagnosis of microcytic hypochromic anemia	3	2	1	2	3	2	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PA14.3	Identify and describe the peripheral smear in microcytic anemia	3	2	1	2	3	1	2
PA15.1	Describe the metabolism of Vitamin B12 and the etiology and pathogenesis of B12 deficiency	3	2	3	2	3	1	3
PA15.2	Describe the laboratory investigations of macrocytic anemia	3	2	3	2	3	2	2
PA15.4	Enumerate the differences and describe the etiology and distinguishing features of megaloblastic and non-megaloblastic macrocytic anemia	3	2	2	2	3	3	3
PA16.1	Define and classify hemolytic anemia	3	2	1	2	3	1	2
PA16.2	Describe the pathogenesis and clinical features and hematologic indices of hemolytic anemia	3	2	1	2	3	2	2
PA16.3	Describe the pathogenesis, features, hematologic indices and peripheral blood picture of sickle cell anemia and thalassemia	3	2	1	2	3	1	2
PA16.4	Describe the etiology pathogenesis, hematologic indices and peripheral blood picture of Acquired hemolytic anemia	3	2	1	2	3	2	2
PA16.5	Describe indices and peripheral blood smear	3	2	1	2	3	2	2
PA 17.1	Enumerate the etiology, pathogenesis and findings in aplastic anemia	3	2	1	2	3	2	2
PA17.2	Enumerate the indications and describe the findings in bone marrow aspiration and biopsy	3	3	3	2	3	3	3
PA19.6	Enumerate and differentiate the causes of splenomegaly	3	2	3	3	3	3	3
PA21.3	Differentiate platelet from clotting disorders based on the clinical and hematologic features	2	2	2	2	3	2	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PA21.4	Define and describe disseminated intravascular coagulation, its laboratory findings and diagnosis of disseminated intravascular coagulation	3	2	1	2	3	3	2
PA21.5	Define and describe disseminated intravascular coagulation its laboratory findings and diagnosis of Vitamin K deficiency	3	2	3	2	3	3	3
PA22.4	Enumerate blood components and describe their clinical uses	3	2	3	2	3	2	2
PA22.6	Describe transfusion reactions and enumerate the steps in the investigation of a transfusion reaction	3	2	2	2	3	3	3
PA24.2	Describe the etiology, pathogenesis, pathology, microbiology, clinical and microscopic features of peptic ulcer disease	3	2	1	2	3	3	2
PA24.3	Describe and identify the microscopic features of peptic ulcer	3	2	1	2	3	3	2
PA25.1	Describe bilirubin metabolism, enumerate the etiology and pathogenesis of jaundice, distinguish between direct and indirect hyperbilirubinemia	3	2	1	2	3	3	2
PA25.2	Describe the pathophysiology and pathologic changes seen in hepatic failure and their clinical manifestations, complications and consequences	3	2	1	2	3	3	2
PA25.3	Describe the etiology and pathogenesis of viral and toxic hepatitis: distinguish the causes of hepatitis based on the clinical and laboratory features. Describe the pathology, complications and consequences of hepatitis	3	2	1	2	3	3	2
PA25.4	Describe the pathophysiology, pathology and progression of alcoholic liver disease including cirrhosis	3	2	1	2	3	3	2
PA25.5	Describe the etiology, pathogenesis and complications of portal hypertension	3	2	3	3	3	3	2

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PA25.6	Interpret a liver function and viral hepatitis serology panel. Distinguish obstructive from non obstructive jaundice based on clinical features and liver function tests	3	2	2	3	3	2	3
PA26.1	Define and describe the etiology, types, pathogenesis, stages, morphology and complications of pneumonia	3	3	3	3	3	3	3
PA26.2	Describe the etiology, gross and microscopic appearance and complications of lung abscess	3	2	2	2	2	2	2
PA26.3	Define and describe the etiology, types, pathogenesis, stages, morphology and complications and evaluation of Obstructive airway disease (OAD) and bronchiectasis	3	2	2	2	2	3	3
PA26.4	Define and describe the etiology, types, pathogenesis, stages, morphology microscopic appearance and complications of tuberculosis	3	3	3	3	3	3	3
PA26.5	Define and describe the etiology, types, exposure, environmental influence, pathogenesis, stages, morphology, microscopic appearance and complications of Occupational lung disease	3	2	2	2	2	3	3
PA26.6	Define and describe the etiology, types, exposure, genetics environmental influence, pathogenesis, stages, morphology, microscopic appearance,metastases and complications of tumors of the lung and pleura	3	1	1	2	2	3	3
PA26.7	Define and describe the etiology, types, exposure, genetics environmental influence, pathogenesis, morphology, microscopic appearance and complications of mesothelioma	3	1	1	1	2	3	3
PA27.1	Distinguish arteriosclerosis from atherosclerosis. Describe the pathogenesis and pathology of various causes and types of arteriosclerosis	3	2	2	2	2	3	3
PA27.2	Describe the etiology, dynamics, pathology types and complications of aneurysms including aortic aneurysms	3	1	1	2	2	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PA27.3	Describe the etiology, types, stages pathophysiology pathology and complications of heart failure	3	3	3	3	3	3	3
PA27.4	Describe the etiology, pathophysiology, pathology, gross and microscopic, features, criteria and complications of rheumatic fever	3	3	3	3	3	3	3
PA27.5	Describe the epidemiology, risk factors, etiology, pathophysiology, pathology, presentations, gross and microscopic, features, diagnostic tests and complications of ischemic heart disease	3	3	3	3	3	3	3
PA27.6	Describe the etiology, pathophysiology, pathology, gross and microscopic, features diagnosis and complications of infective endocarditis	3	2	2	2	3	3	3
PA27.7	Describe the etiology, pathophysiology, pathology, gross and microscopic, features diagnosis and complications of pericarditis and pericardial effusion	3	1	1	2	3	2	3
PA27.8	Interpret abnormalities in cardiac function testing in acute coronary syndromes	3	1	1	1	3	3	3
PA27.9	Classify and describe the etiology, types, pathophysiology, pathology, gross and microscopic features, diagnosis and complications of cardiomyopathies	3	3	3	3	3	3	3
PA27.10	Describe the etiology, pathophysiology, pathology features and complications of syphilis on the cardiovascular system	3	2	2	2	2	3	3
PA28.3	Define and describe the etiology, precipitating factors, pathogenesis, pathology, laboratory urinary findings, progression and complications of acute renal failure	3	3	3	3	3	3	3
PA28.4	Define and describe the etiology, precipitating factors, pathogenesis, pathology, laboratory urinary findings progression and complications of chronic renal failure	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PA28.5	Define and classify glomerular diseases. Enumerate and describe the etiology, pathogenesis, mechanisms of glomerular injury, pathology, distinguishing features and clinical manifestations of glomerulonephritis	3	3	3	3	3	3	3
PA28.6	Define and describe the etiology, pathogenesis, pathology, laboratory, urinary findings, progression and complications of IgA nephropathy	3	2	2	2	3	3	3
PA28.7	Enumerate and describe the findings in glomerular manifestations of systemic disease	3	1	1	2	3	3	3
PA28.8	Enumerate and classify diseases affecting the tubular interstitium	3	1	1	1	3	3	3
PA28.9	Define and describe the etiology, pathogenesis, pathology, laboratory, urinary findings, progression and complications of acute tubular necrosis	3	2	2	2	3	3	3
PA28.11	Define classify and describe the etiology, pathogenesis pathology, laboratory, urinary findings, distinguishing features, progression and complications of vascular disease of the kidney	3	1	1	2	3	3	3
PA28.12	Define classify and describe the genetics, inheritance etiology, pathogenesis, pathology, laboratory, urinary findings, distinguishing features, progression and complications of cystic disease of the kidney	3	1	1	1	1	3	3
PA28.15	Describe the etiology, genetics, pathogenesis, pathology, presenting features and progression of thrombotic angiopathies	3	1	1	2	2	3	3
PA31.4	Enumerate and describe the etiology, hormonal dependency and pathogenesis of gynecomastia	3	1	1	1	1	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PA32.1	Enumerate, classify and describe the etiology, pathogenesis, pathology and iodine dependency of thyroid swellings	3	3	3	3	3	3	3
PA32.2	Describe the etiology, cause, iodine dependency, pathogenesis, manifestations, laboratory and imaging features and course of thyrotoxicosis	3	3	3	3	3	3	3
PA32.3	Describe the etiology, pathogenesis, manifestations, laboratory and imaging features and course of thyrotoxicosis/ hypothyroidism	3	3	3	3	3	3	3
PA32.4	Classify and describe the epidemiology, etiology, pathogenesis, pathology, clinical laboratory features, complications and progression of diabetes mellitus	3	3	3	3	3	3	3
PA32.5	Describe the etiology, genetics, pathogenesis, manifestations, laboratory and morphologic features of hyperparathyroidism	3	2	2	2	2	3	3
PA32.7	Describe the etiology, pathogenesis, manifestations, laboratory, morphologic features, complications of adrenal insufficiency	3	2	2	2	3	3	3
PA32.8	Describe the etiology, pathogenesis, manifestations, laboratory, morphologic features, complications of Cushing's syndrome	3	3	3	3	3	3	3
PA32.9	Describe the etiology, pathogenesis, manifestations, laboratory and morphologic features of adrenal neoplasms	3	1	1	2	2	3	3
PA33.5	Classify and describe the etiology, immunology, pathogenesis, manifestations, radiologic and laboratory features, diagnostic criteria and complications of rheumatoid arthritis	3	3	3	3	3	3	3
PA35.1	Describe the etiology, types and pathogenesis, differentiating factors, CSF findings in meningitis	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PA35.3	Identify the etiology of meningitis based on given CSF parameters	3	2	2	2	3	3	3
MI2.1	Describe the etiologic agents in rheumatic fever and their diagnosis	3	3	3	3	3	3	3
MI2.2	Describe the classification, etio-pathogenesis, clinical features and discuss the diagnostic modalities of Infective endocarditis	3	3	3	3	3	3	3
MI2.3	Identify the microbial agents causing Rheumatic heart disease & infective Endocarditis	3	3	3	3	3	3	3
MI2.4	List the common microbial agents causing anemia. Describe the morphology, mode of infection and discuss the pathogenesis, clinical course, diagnosis and prevention and treatment of the common microbial agents causingAnemia	3	2	2	3	3	3	3
MI2.5	Describe the etio-pathogenesis and discuss the clinical evolution and the laboratory diagnosis of kalazaar, malaria, filariasis and other common parasites prevalent in India	3	2	2	2	2	3	3
MI2.6	Identify the causative agent of malaria and filariasis	3	3	3	3	3	3	3
MI2.7	Describe the epidemiology, the etio- pathogenesis evolution complications, opportunistic infections, diagnosis prevention and the principles of management of HIV	3	3	3	3	3	3	3
MI3.1	Enumerate the microbial agents causing diarrhea and dysentery. Describe the epidemiology, morphology, pathogenesis, clinical features, and diagnostic modalities of these agents	3	3	3	3	3	3	3
MI3.2	Identify the common etiologic agents of diarrhea and dysentery	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
MI3.3	Describe the enteric fever pathogens and discuss the evolution of the clinical course, the laboratory diagnosis of the diseases caused by them	3	3	3	3	3	3	3
MI3.4	Identify the different modalities for diagnosis of enteric fever. Choose the appropriate test related to the duration of illness	3	3	3	3	3	3	3
MI3.5	Enumerate the causative agents of food poisoning and discuss the pathogenesis, clinical course and laboratory diagnosis	3	3	3	3	3	3	3
MI3.6	Describe the etio-pathogenesis of Acid peptic disease (APD) and the clinical course. Discuss the diagnosis and management of the causative agent of APD	3	3	3	3	3	3	3
MI3.7	Describe the epidemiology, the etio- pathogenesis and discuss the viral markers in the evolution of Viral hepatitis. Discuss the modalities in the diagnosis, and prevention of viral hepatitis	3	3	3	3	3	3	3
MI3.8	Choose the appropriate laboratory test in the diagnosis of viral hepatitis	3	3	3	3	3	3	3
MI4.1	Enumerate the microbial agents causing anaerobic infections. Describe the etiopathogenesis, clinical course and discuss the laboratory diagnosis of anaerobic infections	3	2	2	2	3	3	3
MI5.1	Describe the etiopathogenesis, clinical course and discuss the laboratory diagnosis of meningitis	3	3	3	3	3	3	3
MI5.2	Describe the etiopathogenesis, clinical course and discuss the laboratory diagnosis of encephalitis	3	3	3	3	3	3	3
MI5.3	Identify the microbial agents causing meningitis	3	3	3	3	3	3	3
MI6.1	Describe the etio-pathogenesis, laboratory diagnosis and prevention of Infections of upper and lower respiratory tract	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
MI6.2	Identify the common etiologic agents of upper respiratory tract infections (Gram Stain)	3	2	2	2	3	3	3
MI6.3	Identify the common etiologic agents of lower respiratory tract infections (Gram Stain & Acid fast stain).	3	3	2	3	3	3	3
MI7.3	Describe the etio-pathogenesis, clinical features, the appropriate method for specimen collection, and discuss the laboratory diagnosis of Urinary tract infections	3	3	3	3	3	3	3
MI8.1	Enumerate the microbial agents and their vectors causing Zoonotic diseases. Describe the morphology, mode of transmission, pathogenesis and discuss the clinical course, laboratory diagnosis and prevention	3	2	2	3	3	3	3
MI8.2	Describe the etio-pathogenesis of opportunistic infections (OI) and discuss the factors contributing to the occurrence of OI, and the laboratory diagnosis	3	2	2	2	2	3	3
MI8.3	Describe the role of oncogenic viruses in the evolution of virus associated malignancy	3	2	2	2	2	3	3
MI8.4	Describe the etiologic agents of emerging Infectious diseases. Discuss the clinical course and diagnosis	3	2	2	2	2	2	2
MI8.5	Define Healthcare Associated Infections (HAI) and enumerate it types. Discuss the factors that contribute to the development of HAI and the methods for prevention	3	2	2	2	2	3	3
PH1.12	Calculate the dosage of drugs using appropriate formulae for an individual patient, including children, elderly and patient with renal dysfunction	3	2	1	2	2	3	3

Number	COMPETENCY The student should be able to	Clinician L	.eader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PH1.16	Describe mechanism/s of action, types, doses, side effects, indications and contraindications of the drugs which act by modulating autacoids, including: Anti-histaminics, 5-HT modulating drugs, NSAIDs, Drugs for gout, Anti-rheumatic drugs, drugs for migraine	3	2	2	2	2	3	3
PH1.21	Describe the symptoms and management of methanol and ethanol poisonings	3	2	2	2	2	3	3
PH1.25	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of the drugs acting on blood, like anticoagulants, antiplatelets, fibrinolytics, plasma expanders	3	2	2	3	2	3	3
PH1.26	Describe mechanisms of action, types, doses, side effects, indications and contraindications of the drugs modulating the renin angiotensin and aldosterone system	3	2	2	3	2	3	3
PH1.27	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of Antihypertensive drugs and drugs used in shock	3	2	2	2	2	3	3
PH1.28	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used in ischemic heart disease (stable, unstable angina and myocardial infarction), peripheral vascular disease	3	2	2	2	3	3	3
PH1.29	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used in congestive heart failure	3	3	3	3	3	3	3
PH1.30	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used as Antiarrhythmics	3	2	2	2	2	3	3
PH1.31	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used in the management of dyslipidemia	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PH1.34	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of the drugs used as below: 1. Acid-peptic disease and GERD 2. Antiemetics and prokinetics 3. Antidiarrhoeals 4. Laxatives 5. Inflammatory BowelDisease 6. Irritable Bowel Disorders, biliary and pancreaticdiseases	3	3	3	3	3	3	3
PH1.35	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of drugs used in hematological disorders like: 1. Drgs used inanemias 2. Colony Stimulatingfactors	3	3	3	3	3	3	3
PH1.36	Describe the mechanism of action, types, doses, side effects, indications and contraindications of drugs used in endocrine disorders (diabetes mellitus, thyroid disorders and osteoporosis)	3	3	3	3	3	3	3
PH1.43	Describe and discuss the rational use of antimicrobials including antibiotic stewardship program	3	3	3	3	3	3	3
PH1.47	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used in malaria, KALA AZAR, amebiasis and intestinal helminthiasis	3	2	2	2	2	3	3
PH1.52	Describe management of common poisoning, insecticides, common sting and bites	3	3	3	3	3	3	3
PH2.4	Demonstrate the correct method of calculation of drug dosage in patients including those used in special situations	3	2	2	2	3	.3	3
PH3.1	Write a rational, correct and legible generic prescription for a given condition and communicate the same to the patient	3	3	3	3	3	3	3
PH3.3	Perform a critical evaluation of the drug promotional literature	3	2	2	2	2	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PH3.5	To prepare and explain a list of P-drugs for a given case/condition	3	2	2	1	1	3	3
PH5.1	Communicate with the patient with empathy and ethics on all aspects of drug use	3	3	3	3	3	3	3
PH5.4	Explain to the patient the relationship between cost of treatment and patient compliance	3	3	3	3	3	3	3
CM3.1	Describe the health hazards of air, water, noise, radiation and pollution	3	3	3	3	3	3	3
CM3.3	Describe the aetiology and basis of water borne diseases/jaundice/hepatitis/ diarrheal diseases	3	3	3	3	3	3	3
CM5.1	Describe the common sources of various nutrients and special nutritional requirements according to age, sex, activity, physiological conditions	3	3	3	3	3	3	3
CM5.2	Describe and demonstrate the correct method of performing a nutritional assessment of individuals, families and the community by using the appropriate method	3	3	3	3	3	3	3
CM5.3	Define and describe common nutrition related health disorders (including macro-PEM, Micro-iron, Zn, iodine, Vit. A), their control and management	3	3	3	3	3	3	3
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	3	3	3	3	3	3	3
CM5.5	Describe the methods of nutritional surveillance, principles of nutritional education and rehabilitation in the context of socio- cultural factors	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
CM6.1	Formulate a research question for a study	3	3	3	3	3	3	3
CM6.2	Describe and discuss the principles and demonstrate the methods of collection, classification, analysis, interpretation and presentation of statistical data	3	3	3	3	3	3	3
CM6.3	Describe, discuss and demonstrate the application of elementary statistical methods including test of significance in various study designs	3	3	3	3	3	3	3
CM6.4	Enumerate, discuss and demonstrate common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion	3	3	2	2	3	3	3
CM7.1	Define Epidemiology and describe and enumerate the principles, concepts and uses	3	3	3	3	3	3	3
CM7.2	Enumerate, describe and discuss the modes of transmission and measures for prevention and control of communicable and non-communicable diseases	3	3	3	3	3	3	3
CM7.3	Enumerate, describe and discuss the sources of epidemiological data	3	3	3	3	3	3	3
CM7.4	Define, calculate and interpret morbidity and mortality indicators based on given set of data	3	3	3	3	3	3	3
CM7.5	Enumerate, define, describe and discuss epidemiological study designs.	3	3	3	3	3	3	3
CM7.6	Enumerate and evaluate the need of screening tests	3	2	2	2	2	3	3
CM7.7	Describe and demonstrate the steps in the Investigation of an epidemic of communicable disease and describe the principles of control measures.	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
CM7.8	Describe the principles of association, causation and biases in epidemiological studies	3	2	2	3	3	3	3
CM8.1	Describe and discuss the epidemiological and control measures including the use of essential laboratory tests at the primary care level for communicable diseases	3	2	2	2	3	3	3
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, Hypertension, Stroke, obesity and cancer etc.)	3	3	3	3	3	3	3
CM8.3	Enumerate and describe disease-specific National Health Programs including their prevention and treatment of a case	3	3	3	3	3	3	3
CM8.4	Describe the principles and enumerate the measures to control a disease epidemic	3	2	2	2	3	3	3
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	3	3	3	3	3	3	3
CM12.1	Define and describe the concept of Geriatric services	2	2	2	2	2	2	2
CM12.2	Describe health problems of aged population	3	3	3	3	3	3	3
CM12.3	Describe the prevention of health problems of aged population	3	3	3	3	3	3	3
CM12.4	Describe National program for elderly	3	3	3	3	3	3	3
CM13.1	Define and describe the concept of Disaster management	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	ıLifelong Learner	Professional	Critical Thinker	Researcher
CM13.2	Describe disaster management cycle	3	3	3	3	3	3	3
CM13.3	Describe man made disasters in the world and in India	3	3	3	3	3	3	3
CM13.4	Describe the details of the National Disaster management Authority	3	2	2	3	3	3	3
FM1.9	 Describe the importance of documentation in medical practice in regard to medicolegal examinations, Medical Certificates and medicolegal reports especially maintenance of patient case records, discharge summary, prescribed registers to be maintained in Health Centres. maintenance of medico-legal register like accident register. documents of issuance of woundcertificate documents of issuance of drunkennesscertificate. documents for issuance of deathcertificate. documents of Medical Certification of Cause of Death - Form Number4 and4A documents for estimation of age by physical, dental and radiological examination and issuance of certificate 	3	3	3	3	3	3	3
FM2.34	Demonstrate ability to use local resources whenever required like in mass disaster situations	3	3	3	3	3	3	3
FM3.22	Define and discuss impotence, sterility, frigidity, sexual dysfunction, premature ejaculation. Discuss the causes of impotence and sterility in male and female		3	3	3	3	3	3
FM5.5	Describe & discuss Delirium tremens	3	2	2	2	2	3	3
FM8.6	Describe the general symptoms, principles of diagnosis and management of common poisons encountered in India.	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
FM8.7	Describe simple Bedside clinic tests to detect poison/drug in a patient's body fluids	3	3	3	3	3	3	3
FM8.8	Describe basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhancedelimination		3	3	3	3	3	3
FM9.1	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to: Caustics Inorganic – sulphuric, nitric, and hydrochloric acids Organic- Carboloic Acid (phenol), Oxalic and acetylsalicylic acids .		3	3	3	3	3	3
FM9.2	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Phosphorus, lodine,Barium		2	2	2	2	3	3
FM9.3	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Arsenic, lead, mercury, copper, iron, cadmium andthallium		2	2	2	2	3	3
FM9.4	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Ethanol, methanol, ethyleneglycol		2	2	2	2	3	3
FM9.5	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Organophosphates, Carbamates, Organochlorines, Pyrethroids, Paraquat, Aluminium and Zincphosphide		3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
FM9.6	Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to Ammonia, carbon monoxide, hydrogen cyanide & derivatives, methyl isocyanate, tear (riot control)gases		3	3	3	3	3	3
FM10.1	 Describe General Principles and basic methodologies in treatment of poisoning: decontamination, supportive therapy, antidote therapy, procedures of enhanced elimination with regard to: Antipyretics – Paracetamol, Salicylates Anti-Infectives (Common antibiotics – anoverview) buropsychotoxicology Barbiturates, benzodiazepines, phenytoin, lithium, haloperidol, neuroleptics,tricyclics brcotic Analgesics, Anaesthetics, and MuscleRelaxants CardiovascularToxicologyCardiotoxicplants–oleander, odollam, aconite,digitalis Gastro-Intestinal and Endocrinal Drugs –Insulin 	3	3	3	3	3	3	3
FM11.1	Describe features and management of Snake bite, scorpion sting, bee and wasp sting and spider bite	3	3	3	3	3	3	3
FM12.1	Describe features and management of abuse/poisoning with following camicals: Tobacco, cannabis, amphetamines, cocaine, hallucinogens, designer drugs& solvent		3	3	3	3	3	3
FM13.1	Describe toxic pollution of environment, its medico-legal aspects & toxic hazards of occupation and industry	3	2	2	2	3	3	3
FM14.2	Demonstrate the correct technique of clinical examination in a suspected case of poisoning & prepare medico-legal report in a simulated/ supervised environment		3	3	3	3	3	3
FM14.3	Assist and demonstrate the proper technique in collecting, preserving and dispatch of the exhibits in a suspected case of poisoning, along with clinical examination .		3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Comm nicator	ıLifelong Learner	Professional	Critical Thinker	Researcher
DR9.1	Classify, describe the epidemiology, etiology, microbiology pathogenesis and clinical presentations and diagnostic features of Leprosy	3	2	2	2	3	3	3
DR9.2	Demonstrate (and classify based on) the clinical features of leprosy including an appropriate neurologic examination	3	2	2	2	3	3	3
DR9.4	Enumerate, describe and identify lepra reactions and supportive measures and therapy of lepra reactions	3	3	3	3	3	3	3
DR9.5	Enumerate the indications and describe the pharmacology, administration and adverse reaction of pharmacotherapies for various classes of leprosy based on national guidelines	3	3	3	3	3	3	3
DR9.6	Describe the treatment of Leprosy based on the WHO guidelines	3	3	3	3	3	3	3
DR9.7	Enumerate and describe the complications of leprosy and its management, including understanding disability and stigma.	3	3	3	3	3	3	3
DR10.1	Identify and classify syphilis based on the presentation and clinical manifestations	3	3	3	3	3	3	3
DR10.3	Enumerate the indications and describe the pharmacology, administration and adverse reaction of pharmacotherapies for syphilis	3	3	3	3	3	3	3
DR10.4	Describe the prevention of congenital syphilis	3	2	2	2	3	3	3
DR10.5	Counsel in a non-judgemental and empathetic manner patients on prevention of sexually transmitted diseases	3	2	2	2	3	3	3
DR10.6	Describe the etiology, diagnostic and clinical features of non- syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
DR10.7	Identify and differentiate based on the clinical features non-syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)	3	2	2	2	3	3	3
DR10.8	Enumerate the indications and describe the pharmacology, indications and adverse reactions of drugs used in the non-syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)	3	2	2	2	3	3	3
DR10.9	Describe the syndromic approach to ulcerative sexually transmitted disease	3	3	3	3	3	3	3
DR10.10	Describe the etiology, diagnostic and clinical features and management of gonococcal and non gonococcal urethritis	3	3	3	3	3	3	3
DR11.1	Describe the etiology, pathogenesis and clinical features of the dermatologic manifestations of HIV and its complications including opportunistic infections	3	3	3	3	3	3	3
DR11.2	Identify and distinguish the dermatologic manifestations of HIV its complications, opportunistic infections and adverse reactions	3	2	2	2	2	3	3
DR11.3	Enumerate the indications and describe the pharmacology, administration and adverse reaction of pharmacotherapies for dermatologic lesions in HIV	3	2	2	2	2	3	3
DR12.7	Identify and distinguish fixed drug eruptions and Steven Johnson syndrome from other skin lesions	3	2	2	2	2	3	3
DR16.1	Identify and distinguish skin lesions of SLE	3	3	3	3	3	3	3
DR16.2	Identify and distinguish Raynaud's phenomenon	3	2	2	2	2	3	3
DR17.1	Enumerate and identify the cutaneous findings in vitamin A deficiency	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
DR17.2	Enumerate and describe the various skin changes in Vitamin B complex deficiency	3	3	3	3	3	3	3
DR17.3	Enumerate and describe the various changes in Vitamin C deficiency	3	3	3	3	3	3	3
DR17.4	Enumerate and describe the various changes in Zinc deficiency	3	3	3	3	3	3	3
DR18.1	Enumerate the cutaneous features of Type 2 diabetes	3	3	3	3	3	3	3
DR18.2	Enumerate the cutaneous features of hypo- & hyperthyroidism	3	3	3	3	3	3	3
AS2.1	Enumerate the indications, describe the steps and demonstrate in a simulated environment basic life support in adults children and neonates	3	2	2	2	2	3	3
AS2.2	Enumerate the indications, describe the steps and demonstrate in a simulated environment advanced life support in adults and children	3	3	3	3	3	3	3
AS3.1	Describe the principles of preoperative evaluation	3	2	2	2	3	3	3
AS3.2	Elicit, present and document an appropriate history including medication history in a patient undergoing Surgery as it pertains to a preoperative anaesthetic evaluation	3	3	3	3	3	3	3
AS3.3	Demonstrate and document an appropriate clinical examination in a patient undergoing General Surgery	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
AS3.4	Choose and interpret appropriate testing for patients undergoing Surgery	3	3	3	3	3	3	3
AS3.5	Determine the readiness for General Surgery in a patient based on the preoperative evaluation	3	3	3	3	3	3	3
AS7.2	Enumerate and describe the criteria for admission and discharge of a patient to an ICU	3	3	3	3	3	3	3
AS7.3	Observe and describe the management of an unconscious patient	3	3	3	3	3	3	3
AS7.4	Observe and describe the basic setup process of a ventilator	3	3	3	3	3	3	3
AS7.5	Observe and describe the principles of monitoring in an ICU	3	3	3	3	3	3	3
AS8.4	Describe the principles of pain management in palliative care	3	3	3	3	3	3	3
AS8.5	Describe the principles of pain management in the terminally ill	3	3	3	3	3	3	3
AS10.4	Define and describe common medical and medication errors in anaesthesia	3	3	3	3	3	3	3
EN4.53	Describe the Clinical features, Investigations and principles of management of HIV manifestations of the ENT	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
OP5.2	Define, enumerate and describe the aetiology, associated systemic conditions, clinical features, complications, indications for referral and management of scleritis	3	2	2	2	3	3	3
OP6.3	Enumerate systemic conditions that can present as iridocyclitis and describe their ocular manifestations	3	2	2	2	3	3	3
OP9.3	Describe the role of refractive error correction in a patient with headache and enumerate the indications for referral	3	3	3	3	3	3	3
DE1.4	Discuss the role of dental caries as a focus of sepsis	3	2	2	2	3	3	3
PS3.7	Enumerate and describe common organic psychiatric disorders, magnitude, etiology and clinical features	3	2	2	2	2	3	3
PS3.8	Enumerate and describe the essential investigations in patients with organic psychiatric disorders	3	2	2	2	2	3	3
PS4.1	Describe the magnitude and etiology of alcohol and substance use disorders	3	2	2	2	2	3	3
PS4.2	Elicit, describe and document clinical features of alcohol and substance use disorders	3	3	3	3	3	3	3
PS4.3	Enumerate and describe the indications and interpret laboratory and other tests used in alcohol and substance abuse disorders	3	3	3	3	3	3	3
PS4.4	Describe the treatment of alcohol and substance abuse disorders including behavioural and pharmacologic therapy	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PS4.6	Enumerate and describe the pharmacologic basis and side effects of drugs used in alcohol and substance abuse	3	3	3	3	3	3	3
PS10.1	Enumerate and describe the magnitude and etiology of somatoform, dissociative and conversion disorders	3	2	2	2	3	3	3
PS10.2	Enumerate, elicit, describe and document clinical features in patients with somatoform, dissociative and conversion disorders	3	2	2	2	2	3	3
PS10.3	Enumerate and describe the indications and interpret laboratory and other tests used in somatoform, dissociative and conversion disorders	3	2	2	2	2	3	3
PS10.4	Describe the treatment of somatoform disorders including behavioural, psychosocial and pharmacologic therapy	3	3	2	2	2	2	3
PS10.6	Enumerate and describe the pharmacologic basis and side effects of drugs used in somatoform, dissociative and conversion disorders	3	2	2	2	2	2	3
PS12.1	Enumerate and describe the magnitude and etiology of psychosomatic disorders	3	2	2	2	2	3	3
PS12.2	Enumerate, elicit, describe and document clinical features in patients with magnitude and etiology of psychosomatic disorders	3	2	2	2	2	3	3
PS12.3	Enumerate and describe the indications and interpret laboratory and other tests of psychosomatic disorders	3	2	2	2	2	3	3
PS12.4	Describe the treatment of psychosomatic disorders including behavioural psychosocial and pharmacologic therapy	3	2	2	2	2	2	3
PS16.1	Enumerate and describe common psychiatric disorders in the elderly including dementia, depression and psychosis	3	2	2	2	2	3	3
PS16.2	Describe the aetiology and magnitude of psychiatric illness in the elderly	3	2	2	2	3	3	3
PS16.3	Describe the therapy of psychiatric illness in elderly including psychosocial and behavioural therapy	3	2	2	2	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PS16.4	Demonstrate family education in a patient with psychiatric disorders occurring in the elderly in a simulated environment	3	2	2	2	2	3	3
OG12.1	Define, classify and describe the etiology and pathophysiology, early detection, investigations; principles of management of hypertensive disorders of pregnancy and eclampsia, complications of eclampsia	3	2	2	2	2	3	3
OG12.2	Define, Classify and describe the etiology, pathophysiology, diagnosis, investigations, adverse effects on the mother and foetus and the management during pregnancy and labor, and complications of anemia in pregnancy	3	3	3	3	3	3	3
OG12.3	Define, Classify and describe the etiology, pathophysiology, diagnosis, investigations, criteria, adverse effects on the mother and foetus and the management during pregnancy and labor, and complications of diabetes in pregnancy	3	3	3	3	3	3	3
OG12.4	Define, classify and describe the etiology, pathophysiology, diagnosis, investigations, criteria, adverse effects on the mother and foetus and the management during pregnancy and labor, and complications of heart diseases in pregnancy	3	2	2	2	2	3	3
OG12.5	Describe the clinical features, detection, effect of pregnancy on the disease and impact of the disease on pregnancy complications and management in pregnancy of urinary tract infections	3	2	2	3	3	3	3
	disease and impact of the disease on pregnancy complications and management in pregnancy of liver disease							
OG12.7	Describe and discuss Screening, risk factors, management of mother and newborn with HIV	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PE14.3	Discuss the risk factors, clinical features, diagnosis and management of Organophosphorous poisoning	3	3	3	3	3	3	3
PE32.3	Interpret normal Karyotype and recognize Trisomy 21	3	3	3	3	3	3	3
PE32.9	Discuss the referral criteria and multidisciplinary approach to management of Turner Syndrome	3	3	3	3	3	3	3
SU22.6	Describe and discuss the clinical features of hypo- & hyperparathyroidism and the principles of their management	3	2	2	2	2	3	3
SU23.2	Describe the etiology, clinical features and principles of management of disorders of adrenal gland	3	3	3	3	3	3	3
OR5.1	Describe and discuss the aetiopathogenesis, clinical features, Investigations and principles of management of various inflammatory disorder of joints	3	3	3	3	3	3	3
OR11.1	Describe and discuss the aetiopathogenesis, Clinical features, Investigations and principles of management of peripheral nerve injuries in diseases like foot drop, wrist drop, claw hand, palsies of Radial, Ulnar, Median, Lateral Popliteal and Sciatic Nerves	3	3	2	2	2	3	3
PM1.2	Define and describe disability, its cause, and magnitude, identification and prevention of disability	3	2	2	2	2	3	3
PM1.3	Define and describe the methods to identify and prevent disability	3	2	2	2	2	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PM1.4	Enumerate the rights and entitlements of differently abled persons	3	2	2	2	2	3	3
PM2.1	Describe the causes of disability in the patient with a cerebrovascular accident	3	3	3	3	3	3	3
PM2.2	Describe and discuss the treatment of rigidity and spasticity	3	2	2	2	3	3	3
PM2.3	Describe and discuss the principles of early mobilizations, mobility aids and splints	3	2	2	2	3	3	3
PM2.4	Describe and discuss the impact of comorbidities on the rehabilitation of the patient with cerebrovascular accident	3	2	2	2	2	3	3
PM4.1	Describe the common patterns, clinical features, investigations, diagnosis and treatment of common causes of arthritis	3	3	3	3	3	3	3
PM4.5	Demonstrate correct assessment of muscle strength and range of movements	3	3	3	3	3	3	3
PM6.1	Perform and demonstrate a clinical examination of sensory and motor deficits of peripheral nerve	3	3	3	3	3	3	3
PM6.2	Enumerate the indications and describe the principles of nerve conduction velocity and EMG	3	2	2	2	2	3	3
PM7.4	Assess bowel and bladder function and identify common patterns of bladder dysfunction	3	3	3	3	3	3	3
PM7.6	Enumerate the indications and describe the pharmacology and side effects of commonly used drugs in neuropathic bladder	3	3	3	3	3	3	3
PM7.7	Enumerate and describe common life threatening complications following SCI like Deep vein Thrombosis, Aspiration Pneumonia, Autonomic dysreflexia	3	3	3	3	3	3	3

Number	COMPETENCY The student should be able to	Clinician	Leader	Commu nicator	Lifelong Learner	Professional	Critical Thinker	Researcher
PM8.1	Describe the clinical features, evaluation, diagnosis and management of disability following traumatic brain injury	3	2	2	2	3	3	3
PM8.2	Describe and discuss cognitive dysfunction like deficits in attention, memory and communication	3	2	2	3	2	3	3
PM8.3	Describe and discuss common behavior and mood changes following TBI	3	2	2	2	2	3	3
PM8.4	Describe metabolic co-morbidities like SIADH, diabetes mellitus, insipidus and endocrine dysfunction following TBI	3	2	2	2	2	3	3
PM8.5	Describe the Vocational opportunities and community based rehabilitation following TBI	3	2	2	2	2	3	3
PM 9.1	Describe rehabilative aspects as they pertain to the elderly including patients with dementia, depression, incontinence immobility and nutritional needs	3	2	2	2	2	3	3
RT1.3	Enumerate, describe and discuss classification and staging of cancer (AJCC, FIGO etc.)	3	З	3	3	3	3	3