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Competency Table

Number	*COMPETENCY* *The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
IM1.1	Describe and discuss the epidemiology, pathogenesis clinical evolution and course of common causes of heart disease including—rheumatic/valvular, ischemic, hypertrophic inflammatory	Y	Lecture, small group discussion	Written/viva voce	14	202–203
IM1.4	Stage heart failure	Y	Lecture, small group discussion	Written/viva voce	14	203
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 splenic palpation	Y	Bedside clinic, DOAP session	Skill assessment	15 12 14 203 2	216–242 148–161 203 23–61
IM1.12	Demonstrate peripheral pulse, volume, character, quality and variation in various causes of heart failure	Y	Bedside clinic, DOAP session	Skill assessment		
IM1.13	Measure the blood pressure accurately, recognize and discuss alterations in blood pressure in valvular heart disease and other causes of heart failure and cardiac tamponade	Y	Bedside clinic, DOAP session	Skill assessment	15 2	242 23–61
IM1.17	Order and interpret diagnostic testing based on the clinical diagnosis including 12 lead ECG, chest radiograph, blood cultures	Y	Bedside clinic, DOAP session	Skill assessment	16	245
IM1.18	Perform and interpret a 12 lead ECG	Y	Bedside clinic, DOAP session	Skill assessment	16	245
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	N	Lecture, small group discussion, bedside clinic	Skill assessment	16	263
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	Y	Small group discussion, lecture, bedside clinic	Written/skill assessment	16	245–272

Number	*COMPETENCY The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
IM1.26	Develop document and present a management plan for patients with heart failure based on type of failure, underlying etiology	Y	Bedside clinic, skill assessment, small group discussion	Bedside clinic/skill assessment/ written	17	273–276
IM2.1	Discuss and describe the epidemiology, antecedents and risk factors for atherosclerosis and ischemic heart disease	Y	Lecture, small group discussion	Written/viva voce	14	202–203
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	Y	Bedside clinic, DOAP session	Skill assessment	15	206–216
IM2.7	Perform, demonstrate and document a physical examination including a vascular and cardiac examination that is appropriate for the clinical presentation	Y	Bedside clinic, DOAP session	Skill assessment	15 2	216–225 23–61
IM2.8	Generate document and present a differential diagnosis based on the clinical presentation and prioritize based on "cannot miss", most likely diagnosis and severity	Y	Bedside clinic, DOAP session	Skill assessment	2	23–61
IM2.10	Order, perform and interpret an ECG	Y	Bedside clinic, DOAP session	Skill assessment	16	245
IM2.11	Order and interpret a chest X-ray and markers of acute myocardial infarction	Y	Bedside clinic, DOAP session	Skill assessment	16	245–272
IM2.13	Discuss and enumerate the indications for and findings on echocardiogram, stress testing and coronary angiogram	Y	Lecture, small group discussion	Written/viva voce	16	245–272
IM2.21	Observe and participate in a controlled environment an ACLS program	N	DOAP session	NA	17	274
IM2.22	Perform and demonstrate in a mannequin BLS	Y	DOAP session	Skill assessment	17	273
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	Y	Bedside clinic, DOAP session	Skill assessment	12	148–161
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	Y	Bedside clinic, DOAP session	Skill assessment	13	178–191
IM3.8	Demonstrate in a mannequin and interpret results of an arterial blood gas examination	Y	Bedside clinic, DOAP session	Skill assessment	13 2	178–191 23–61
IM3.9	Demonstrate in a mannequin and interpret results of a pleural fluid aspiration	Y	DOAP session	Skill assessment	13	178–191

Number	COMPETENCY The student should be able to:	Core Y/N	Suggested learning methods	Suggested assessment methods	Chapter number	Page number
IM3.11	Describe and enumerate the indications for further testing including HRCT, viral cultures, PCR and specialized testing	Y	Bedside clinic, DOAP session	Skill assessment	13	178–191
IM3.14	Perform and interpret a sputum gram stain and AFB	Y	DOAP session	Skill assessment	13	178–191
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)	Y	Bedside clinic, DOAP session	Skill assessment	2	23–61
IM4.11	Generate a differential diagnosis and prioritize based on clinical features that help distinguish between infective, inflammatory, malignant and rheumatologic causes	Y	Bedside clinic, DOAP session	Written/viva voce	2	23–61
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	Y	Bedside clinic, skill assessment	Skill assessment	2	23–61
IM5.3	Describe and discuss the pathologic changes in various forms of liver disease	Y	Lecture, small group discussion	Written/viva voce	8	127–130
IM5.4	Describe and discuss the epidemiology, microbiology, immunology and clinical evolution of infective (viral) hepatitis	Y	Lecture, small group discussion	Written/viva voce	8	127–130
IM5.5	Describe and discuss the pathophysiology and clinical evolution of alcoholic liver disease	Y	Lecture, small group discussion	Written/viva voce	8	127–130
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	Y	Lecture, small group discussion	Written/viva voce	8	127–130
IM5.7	Enumerate and describe the causes and pathophysiology of drug induced liver injury	Y	Lecture, small group discussion	Written/viva voce	8	127–130
IM5.8	Describe and discuss the pathophysiology, clinical evolution and complications cholelithiasis and cholecystitis	Y	Lecture, small group discussion	Written/viva voce	8	127–130
IM5.9	Elicit document and present a medical history that helps delineate the etiology of the current presentation and includes clinical presentation, risk factors, drug use, sexual history, vaccination history and family history	Y	Bedside clinic, DOAP session	Skill assessment	8 5, 6	127–130 80–103

Number	*COMPETENCY* *The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
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	Y	Bedside clinic, DOAP session	Skill assessment	8 5, 6 6	127–130 80–103
IM5.11	Generate a differential diagnosis and prioritize based on clinical features that suggest a specific etiology for the presenting symptom	Y	Bedside clinic, DOAP session	Skill assessment/ viva voce	8	127–130
IM5.12	Choose and interpret appropriate diagnostic tests including—CBC, bilirubin, function tests, hepatitis serology and ascitic fluid examination in patient with liver diseases	Y	Bedside clinic, DOAP session	Skill assessment	9 7	132–135 107–123
IM5.13	Enumerate the indications for ultrasound and other imaging studies including MRCP and ERCP and describe the findings in liver disease	Y	Bedside clinic, small group discussion	Viva voce/ written	9 10	132–135 136
IM5.14	Outline a diagnostic approach to liver disease based on hyperbilirubinemia, liver function changes and hepatitis serology	Y	Bedside clinic, small group discussion	Viva voce/ written	9	132–135
IM5.15	Assist in the performance and interpret the findings of an ascitic fluid analysis	Y	DOAP session	documen-tation in log book	9	132–135
IM6.11	Enumerate the indications and describe the findings for CT of the chest and brain and MRI	N	Small group discussion, lecture, bedside clinic	Written/viva voce	16	269
IM6.15	Demonstrate in a model the correct technique to perform a lumbar puncture	Y	Simulation	Skill assessment	34	585
IM7.1	Describe the pathophysiology of autoimmune disease	Y	Lecture, small group discussion	Written/viva voce	18	279–280
IM7.3	Classify cause of joint pain based on the pathophysiology	Y	Lecture, small group discussion	Written/viva voce	18	279–280
IM7.4	Develop a systematic clinical approach to joint pain based on the pathophysiology	Y	Lecture, small group discussion	Written/viva voce	19	282–306
IM7.5	Describe and discriminate acute, subacute and chronic causes of joint pain	Y	Lecture, small group discussion	Written/viva voce	19	282–306
IM7.6	Discriminate, describe and discuss arthralgia from arthritis and mechanical from inflammatory causes of joint pain	Y	Lecture, small group discussion	Written/viva voce	19	282–306
IM7.7	Discriminate, describe and discuss distinguishing articular from periarticular complaints	Y	Lecture, small group discussion	Written/viva voce	19	282–306

Number	COMPETENCY The student should be able to:	Core Y/N	Suggested learning methods	Suggested assessment methods	Chapter number	Page number
IM7.8	Determine the potential causes of join pain based on the presenting features of joint involvement	Y	Lecture, small group discussion	Written/viva voce	19	282–306
IM7.9	Describe the common signs and symptoms of articular and periarticular diseases	Y	Lecture, small group discussion	Written/viva voce	19	282–306
IM7.10	Describe the systemic manifestations of rheumatologic disease	Y	Lecture, small group discussion	Written/viva voce	19	282–306
IM7.11	Elicit document and present a medical history that will differentiate the etiologies of disease	Y	Bedside clinic, DOAP session	Skill assessment	19	282–306
IM7.12	Perform a systematic examination of all joints, muscle and skin that will establish the diagnosis and severity of disease	Y	Bedside clinic, DOAP session	Skill assessment	19	282–306
IM7.13	Generate a differential diagnosis and prioritize based on clinical features that suggest a specific etiology	Y	Bedside clinic, small group discussion	Skill assessment/ written	19	282–306
IM7.14	Describe the appropriate diagnostic work up based on the presumed etiology	Y	Bedside clinic, small group discussion	Skill assessment/ written	20	309–317
IM7.15	Enumerate the indications for and interpret the results of—CBC, anti-CCP, RA, ANA, DNA and other tests of autoimmunity	Y	Bedside clinic, small group discussion	Skill assessment/ written	20	309
IM7.17	Enumerate the indications and interpret plain radiographs of joints	Y	Bedside clinic, small group discussion	Skill assessment/ written	20	314
IM8.10	Perform a systematic examination that includes—an accurate measurement of blood pressure, fundus examination, examination of vasculature and heart	Y	Bedside clinic, DOAP session	Skill assessment	14 2	203 23–61
IM8.11	Generate a differential diagnosis and prioritize based on clinical features that suggest a specific etiology	Y	Bedside clinic, DOAP session	Skill assessment	2	23–61
IM8.13	Enumerate the indications for and interpret the results of—CBC, urine routine, BUN, Cr, electrolytes, uric acid, ECG	Y	Small group discussion	Skill assessment/ written/viva voce	16	245
IM8.17	Perform and interpret a 12 lead ECG	Y	DOAP session	Documentation in log book/skills station	16	245
IM9.1	Define, describe and classify anemia based on red blood cell size and reticulocyte count	Y	Lecture, small group discussion	Written/viva voce	23	335–340
IM9.2	Describe and discuss the morphological characteristics, etiology and prevalence of each of the causes of anemia	Y	Lecture, small group discussion	Written/viva voce	24	358

Number	*COMPETENCY The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
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	Y	Bed side clinic, DOAP session	Skill assessment	22 24 5, 6	325–332 358 80–103
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	Y	Bedside clinic, DOAP session	Skill assessment	22 2	325–332 23–61
IM9.5	Generate a differential diagnosis and prioritize based on clinical features that suggest a specific etiology	Y	Bedside clinic, DOAP session	Skill assessment/ written	22	325–332
IM9.6	Describe the appropriate diagnostic work up based on the presumed etiology	Y	Bedside clinic, DOAP session	Skill assessment/ written	23	333–357
IM9.7	Describe and discuss the meaning and utility of various components of the hemogram	Y	Lecture, small group discussion	Written/viva voce/skill assessment	23	333–357
IM9.8	Describe and discuss the various tests for iron deficiency	Y	Lecture, small group discussion	Written/viva voce/skill assessment	23	333–357
IM9.9	Order and interpret tests for anemia including hemogram, red cell indices, reticulocyte count, iron studies, B12 and folate	Y	Bedside clinic, DOAP session	Skill assessment/ written	23	333–357
IM9.10	Describe, perform and interpret a peripheral smear and stool occult blood	P	Bedside clinic, DOAP session	Skill assessment/ written	23	333–357
IM9.11	Describe the indications and interpret the results of a bone marrow aspirations and biopsy	Y	Lecture, small group discussion	Written/viva voce/skill assessment	23	333–357
IM9.12	Describe, develop a diagnostic plan to determine the etiology of anemia	Y	Lecture, small group discussion	Written/viva voce/skill assessment	24	358
IM10.1	Define, describe and differentiate between acute and chronic renal failure	Y	Lecture, small group discussion	Written/viva voce	28	399–403
IM10.2	Classify, describe and differentiate the pathophysiologic causes of acute renal failure	Y	Lecture, small group discussion	Written/viva voce	28	399–403
IM10.5	Describe and discuss the etiology of CRF	Y	Lecture, small group discussion	Written/viva voce	28	399–403
IM10.6	Stage chronic kidney disease	Y	Lecture, small group discussion	Written/viva voce	28	399–403

Number	COMPETENCY The student should be able to:	Core Y/N	Suggested learning methods	Suggested assessment methods	Chapter number	Page number
IM10.12	Elicit document and present a medical history that will differentiate the etiologies of disease, distinguish acute and chronic disease, identify predisposing conditions, nephrotoxic drugs and systemic causes	Y	Bedside clinic, DOAP session	Skill assessment	29	405–413
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 uremia and associated systemic disease	Y	Bedside clinic, DOAP session	Skill assessment	14 29	203 405–413
IM10.14	Generate a differential diagnosis and prioritize based on clinical features that suggest a specific etiology	Y	DOAP session, small group discussion	Skill assessment/ written/viva voce	29	405–413
IM10.15	Describe the appropriate diagnostic work up based on the presumed etiology	Y	DOAP session, small group discussion	Skill assessment/ written/viva voce	30	414–430
IM10.16	Enumerate the indications for and interpret the results of—renal function tests, calcium, phosphorus, PTH, urine electrolytes, osmolality, Anion gap	Y	DOAP session, small group discussion	Skill assessment/ written/viva voce	30	414–430
IM10.17	Describe and calculate indices of renal function based on available laboratories including FENa (Fractional excretion of sodium) and CrCl (Creatinine clearance)	Y	DOAP session, small group discussion	Skill assessment/ written/viva voce	30	414–430
IM10.18	Identify the ECG findings in hyperkalemia	Y	DOAP session, small group discussion	Skill assessment/ written/viva voce	30	414–430
IM10.19	Enumerate the indications and describe the findings in renal ultrasound	N	Lecture, small group discussion	Written/viva voce	30	414–430
IM10.20	Describe and discuss the indications to perform arterial blood gas analysis—interpret the data	Y	DOAP session	Documentation in log-book	30	414–430
IM11.2	Describe and discuss the epidemiology and pathogenesis and risk factors and clinical evolution of type 1 diabetes	Y	Lecture, small group discussion	Written/viva voce	25	366
IM11.3	Describe and discuss the epidemiology and pathogenesis and risk factors economic impact and clinical evolution of type 2 diabetes	Y	Lecture, small group discussion	Written/viva voce	25	366
IM11.4	Describe and discuss the genetic background and the influence of the environment on diabetes	N	Lecture, small group discussion	Written/viva voce	25	367

Number	*COMPETENCY The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
IM11.7	Elicit document and present a medical history that will differentiate the etiologies of diabetes including risk factors, precipitating factors, lifestyle, nutritional history, family history, medication history, co-morbidities and target organ disease	Y	Bedside clinic, DOAP session	Skill assessment	26	372–375
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 system findings and deformities and injuries)	Y	Bedside clinic, DOAP session	Skill assessment	26	372–375
IM11.11	Order and interpret laboratory tests to diagnose diabetes and its complications including—glucose, glucose tolerance test, glycosylated hemoglobin, urinary microalbumin, ECG, electrolytes, ABG, ketones, renal function tests and lipid profile	Y	Bedside clinic, DOAP session	Skill assessment	27	285
IM11.12	Perform and interpret a capillary blood glucose test	Y	Bedside clinic, DOAP session	Skill assessment	27	385
IM11.13	Perform and interpret a urinary ketone estimation with a dipstick	Y	Bedside clinic, DOAP session	Skill assessment	27	385
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	Y	Lecture, small group discussion	Written/viva voce	25	366
IM12.2	Describe and discuss the genetic basis of some forms of thyroid dysfunction	N	Lecture, small group discussion	Written/viva voce	25	367
IM12.3	Describe and discuss the physiology of the hypothalamopituitary-thyroid axis, principles of thyroid function testing and alterations in physiologic function	Y	Lecture, small group discussion	Short notes	26	369–375, 380
IM12.5	Elicit document and present an appropriate history that will establish the diagnosis cause of thyroid dysfunction and its severity	Y	Bedside clinic	Skill assessment/ short case	26	369–375
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	Y	Bed side clinic, DOAP session	Skill assessment	26	369–375, 380
IM12.7	Demonstrate the correct technique to palpate the thyroid	Y	Bedside clinic, DOAP session	Skill assessment	26	372–375

Number	*COMPETENCY The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
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	Y	Bedside clinic, DOAP session	Skill assessment	27	383–384, 388
IM12.11	Interpret thyroid function tests in hypo- and hyperthyroidism	Y	Bedside clinic, lab	Skill assessment	27	388
IM13.9	Demonstrate in a mannequin the correct technique for performing breast exam, rectal examination and cervical examination and pap smear	Y	Bedside clinic	Skill assessment/ short case	26 2	380 23–61
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	Y	Bedside clinic, skills lab	Skill assessment	2	23–61
IM15.1	Enumerate, describe and discuss the etiology of upper and lower GI bleeding	Y	Lecture, small group discussion	Short note/ viva voce	5, 6	80–103
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	Y	Bedside clinic	Skill assessment	24	358
IM15.5	Perform, demonstrate and document a physical examination based on the history that includes general examination, volume assessment and appropriate abdominal examination	Y	Bedside clinic, skills lab	Skill assessment	5, 6	80–103
IM15.7	Demonstrate the correct technique to perform an anal and rectal examination in a mannequin or equivalent	Y	DOAP session	Skill assessment	5, 6	80–103
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	Y	Bedside clinic, DOAP session, small group discussion	Skill assessment/ short note/ viva voce	7 23	107–123 344–354
IM15.10	Enumerate the indications for endoscopy, colonoscopy and other imaging procedures in the investigation of upper GI bleeding	Y	Lecture, small group discussion	Written/viva voce	7	107–123
IM16.4	Elicit and document and present an appropriate history that includes the natural history, dietary history, travel , sexual history and other concomitant illnesses	Y	Bedside clinic, skills lab	Skill assessment	5, 6	80–103
IM16.5	Perform, document and demonstrate a physical examination based on the history that includes general examination, including an appropriate abdominal examination	Y	Bedside clinic, skills lab	Skill assessment	5, 6	80–103

Number	*COMPETENCY The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
IM16.8	Choose and interpret diagnostic tests based on the clinical diagnosis including complete blood count, and stool examination	Y	Bedside clinic, skills lab, small group discussion	Skill assessment/ short note/ viva voce	7	107–123
IM16.9	Identify common parasitic causes of diarrhea under the microscope in a stool specimen	Y	DOAP session	Skill assessment	7	107–123
IM16.11	Enumerate the indications for stool cultures and blood cultures in patients with acute diarrhea	Y	Lecture, small group discussion	Written/viva voce	7	107–123
IM16.12	Enumerate and discuss the indications for further investigations including antibodies, colonoscopy, diagnostic imaging and biopsy in the diagnosis of chronic diarrhea	Y	Lecture, small group discussion	Written/viva voce	7	107–123
IM17.1	Define and classify headache and describe the presenting features, precipitating factors, aggravating and relieving factors of various kinds of headache	Y	Lecture, small group discussion	Short note/ viva voce	33	561
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	Y	Bedside clinic, small group discussion	Bedside clinic/skill assessment	33	561
IM17.4	Perform and demonstrate a general neurologic examination and a focused examination for signs of intracranial tension including neck signs of meningitis	Y	Bedside clinic, small group discussion	Bedside clinic/skill assessment	32	452–555
IM17.5	Generate document and present a differential diagnosis based on the clinical features, and prioritize the diagnosis based on the presentation	Y	Bedside clinic, small group discussion	Bedside clinic/skill assessment	33	562–574
IM17.6	Choose and interpret diagnostic testing based on the clinical diagnosis including imaging	Y	Lecture, small group discussion, bedside clinic	Skill assessment	34	580–598
IM17.7	Enumerate the indications and describe the findings in the CSF in patients with meningitis	Y	Small group discussion, bedside clinic	Skill assessment	34	585
IM17.8	Demonstrate in a mannequin or equivalent the correct technique for performing a lumbar puncture	Y	DOAP session	Skill assessment	34	585
IM17.9	Interpret the CSF findings when presented with various parameters of CSF fluid analysis	Y	Small group discussion, bedside clinic	Skill assessment	34	585
IM18.1	Describe the functional and the vascular anatomy of the brain	Y	Lecture, small group discussion	Written/viva voce	31	436–442

Number	COMPETENCY The student should be able to:	Core Y/N	Suggested learning methods	Suggested assessment methods	Chapter number	Page number
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	Y	Bedside clinic	Skill assessment	33	562–574
IM18.5	Perform, demonstrate and document physical examination that includes general and a detailed neurologic examination as appropriate, based on the history	Y	Bedside clinic, DOAP session	Skill assessment	32 31	452–555 436–445
IM18.6	Distinguish the lesion based on upper vs lower motor neuron, side, site and most probable nature of the lesion	Y	Bedside clinic, DOAP session	Skill assessment	33	562–574
IM18.8	Describe and distinguish, based on the clinical presentation, the types of bladder dysfunction seen in CNS disease	Y	Small group discussion, bedside clinic	Written/viva voce	32	548
IM18.9	Choose and interpret the appropriate diagnostic and imaging test that will delineate the anatomy and underlying cause of the lesion	Y	Bedside clinic, DOAP session, small group discussion	Written/viva voce/skill assessment	34	580–598
IM19.1	Describe the functional anatomy of the locomotor system of the brain and controlling parts of locomotor system	Y	Lecture, small group discussion	Written/viva voce	31	436–442
IM19.7	Choose and interpret diagnostic and imaging tests in the diagnosis of movement disorders	Y	Bedside clinic, small group session	Skill assessment/ written/viva voce	20	315–317
IM22.1	Enumerate the causes of hypercalcemia and distinguish the features of PTH vs non-PTH mediated hypercalcemia	N	Lecture, small group discussion	Written/viva voce	26	369–375
IM22.2	Describe the etiology, clinical manifestations, diagnosis and clinical approach to primary hyperparathyroidism	N	Lecture, small group discussion	Written/viva voce	26	369–375
IM22.4	Enumerate the components and describe the genetic basis of the multiple endocrine neoplasia syndrome	N	Lecture, small group discussion	Written/viva voce	25	368
IM23.4	Enumerate the indications for enteral and parenteral nutrition in critically-ill patients	Y	Lecture, small group discussion	Written/viva voce	2	23–61
IM24.1	Describe and discuss the epidemiology, pathogenesis, clinical evolution, presentation and course of common diseases in the elderly	Y	Lecture, small group discussion	Written/viva voce	11 18 36	141 280 632–637
IM24.2	Perform multidimensional geriatric assessment that includes medical, psycho-social and functional components	Y	Bedside clinic, DOAP session	Skill assessment	36	632–637

Number	*COMPETENCY* *The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
IM24.3	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of acute confusional states	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.4	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vascular events in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24 5	Describe and discuss the etiopathogenesis clinical presentation identification, functional changes, acute care, stabilization, management and rehabilitation of depression in the elderly	Y	Lecture Small group discussion	Written/viva voce	36	632–637
IM24.6	Describe and discuss the etiopathogenesis causes, clinical presentation, presentation identification, functional changes, acute care, stabilization, management and rehabilitation of dementia in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.7	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of personality changes in the elderly	N	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.8	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of osteoporosis in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.9	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of CVA in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.10	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of COPD in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.11	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of the elderly undergoing surgery	Y	Lecture, small group discussion	Written/viva voce	36	632–637

Number	COMPETENCY The student should be able to:	Core Y/N	Suggested learning methods	Suggested assessment methods	Chapter number	Page number
IM24.12	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of degenerative joint disease	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.13	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of falls in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.14	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of common fractures in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.15	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vision and visual loss in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
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	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.17	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of hearing loss in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.18	Describe the impact of the demographic changes in aging on the population	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.19	Enumerate and describe the social problems in the elderly including isolation, abuse, change in family structure and their impact on health	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.20	Enumerate and describe social interventions in the care of elderly including domiciliary services, rehabilitation facilities, old age homes and state interventions	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.21	Enumerate and describe ethical issues in the care of the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637
IM24.22	Describe and discuss the etiopathogenesis, clinical presentation, complications, assessment and management of nutritional disorders in the elderly	Y	Lecture, small group discussion	Written/viva voce	36	632–637

Number	*COMPETENCY* *The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
IM26.19	Demonstrate ability to work in a team of peers and superiors	Y	Bedside clinic, DOAP session	Skill assessment	1	3–13
IM26.20	Demonstrate ability to communicate to patients in a patient, respectful, non-threatening, non-judgmental and empathetic manner	Y	Bedside clinic, DOAP session	Skill assessment	1	3–13
IM26.21	Demonstrate respect to patient privacy	Y	Bedside clinic, DOAP session	Skill assessment	1	3–13
IM26.22	Demonstrate ability to maintain confidentiality in patient care	Y	Bedside clinic, DOAP session	Skill assessment	1	3–13
IM26.23	Demonstrate a commitment to continued learning	Y	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.24	Demonstrate respect in relationship with patients, fellow team members, superiors and other healthcare workers	Y	Bedside clinic, DOAP session	Skill assessment/ viva voce	1	3–13
IM26.25	Demonstrate responsibility and work ethics while working in the healthcare team	Y	Bedside clinic, DOAP session	Skill assessment/ viva voce	1	3–13
IM26.26	Demonstrate ability to maintain required documentation in health care (including correct use of medical records)	Y	Small group discussion	Skill assessment/ viva voce	1 59	3–13 871–885
IM26.27	Demonstrate personal grooming that is adequate and appropriate for healthcare responsibilities	Y	Small group discussion	Skill assessment	1	3–13
IM26.28	Demonstrate adequate knowledge and use of information technology that permits appropriate patient care and continued learning	Y	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.29	Communicate diagnostic and therapeutic options to patient and family in a simulated environment	Y	Bedside clinic, DOAP session	Skill assessment/ viva voce	1	3–13
IM26.30	Communicate care options to patient and family with a terminal illness in a simulated environment	Y	Bedside clinic, DOAP session	Skill assessment/ viva voce	1	3–13
IM26.31	Demonstrate awareness of limitations and seeks help and consultations appropriately	Y	Bedside clinic, DOAP session	Skill assessment/ viva voce	1	3–13
IM26.32	Demonstrate appropriate respect to colleagues in the profession	N	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.33	Demonstrate an understanding of the implications and the appropriate procedures and response to be followed in the event of medical errors	N	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.34	Identify conflicts of interest in patient care and professional relationships and describe the correct response to these conflicts	Y	Small group discussion	Skill assessment/ viva voce	1	3–13

Number	COMPETENCY The student should be able to:	Core Y/N	Suggested learning methods	Suggested assessment methods	Chapter number	Page number
IM26.35	Demonstrate empathy in patient encounters	Y	Bedside clinic, DOAP session	Skill assessment/ viva voce	1	3–13
IM26.36	Demonstrate ability to balance personal and professional priorities	N	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.37	Demonstrate ability to manage time appropriately	Y	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.38	Demonstrate ability to form and function in appropriate professional networks	N	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.39	Demonstrate ability to pursue and seek career advancement	N	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.40	Demonstrate ability to follow risk management and medical error reduction practices where appropriate	N	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.41	Demonstrate ability to work in a mentoring relationship with junior colleagues	N	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.42	Demonstrate commitment to learning and scholarship	N	Small group discussion	Skill assessment/ viva voce	1	3–13
IM26.49	Administer informed consent and appropriately address patient queries to a patient being enrolled in a research protocol in a simulated environment	Y	Bedside clinic, DOAP session	Written/viva voce	1	3–13
INTEGRATIONS						
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	Y	Lecture, small group discussion, bedside clinics	Written/viva voce/skill assessment	37–40	643–667
OG12.2	Define, classify and describe the etiology, pathophysiology, diagnosis, investigations, adverse effects on the mother and fetus and the management during pregnancy and labor, and complications of anemia in pregnancy	Y	Lecture, small group discussion, bedside clinics	Written/viva voce/skill assessment	37–40	643–667
OG12.3	Define, classify and describe the etiology, pathophysiology, diagnosis, investigations, criteria, adverse effects on the mother and fetus and the management during pregnancy and labor, and complications of diabetes in pregnancy	Y	Lecture, small group discussion, bedside clinics	Written/viva voce/skill assessment	37–40	643–667
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	Y	Lecture, small group discussion, bedside clinics	Written/viva voce/skill assessment	37–40	643–667

Number	*COMPETENCY The student should be able to:*	*Core Y/N*	*Suggested learning methods*	*Suggested assessment methods*	*Chapter number*	*Page number*
OG12.5	Describe the clinical features, detection, effect of pregnancy and impact of the disease on pregnancy complications and management in pregnancy of urinary tract infections disease and impact of the disease on pregnancy complications and management in pregnancy of liver disease	Y	Lecture, small group discussion, bedside clinics	Written/viva voce/skill assessment	37–40	643–667
OG12.7	Describe and discuss screening, risk factors, management of mother and newborn with HIV	Y	Lecture, small group discussion, bedside clinics	Written/viva voce/skill assessment	37–40	643–667
DR9.1	Classify, describe the epidemiology, etiology, microbiology pathogenesis and clinical presentations and diagnostic features of leprosy	Y	Lecture, small group discussion	Written /viva voce	41–42	671–688
DR9.2	Demonstrate (and classify based on) the clinical features of leprosy including an appropriate neurologic examination	Y	Lecture, small group discussion	Bedside clinic session/skill assessment	41–42	671–688
DR9.4	Enumerate, describe and identify lepra reactions and supportive measures and therapy of lepra reactions	Y	Lecture, small group discussion	Written /viva voce	41–42	671–688
DR10.1	Identify and classify syphilis based on the presentation and clinical manifestations	Y	Bedside clinic	Skill assessment	43	690–691
DR10.6	Describe the etiology, diagnostic and clinical features of non-syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)	Y	Lecture, small group discussion	Written /viva voce	43	690–691
PS3.7	Enumerate and describe common organic psychiatric disorders, magnitude, etiology and clinical features	Y	Lecture, small group discussion	Written/viva voce	44–45	697–708
PS3.8	Enumerate and describe the essential investigations in patients with organic psychiatric disorders	Y	Lecture, small group discussion	Written/viva voce	46	712
PS10.1	Enumerate and describe the magnitude and etiology of somatoform, dissociative and conversion disorders	Y	Lecture, small group discussion	Written/viva voce	44–45	697–708
PS10.2	Enumerate, elicit, describe and document clinical features in patients with somatoform, dissociative and conversion disorders	Y	Bedside clinic, DOAP session	Skill assessment	44–45	697–708
PS10.3	Enumerate and describe the indications and interpret laboratory and other tests used in somatoform, dissociative and conversion disorders	Y	Bedside clinic, DOAP session	Skill assessment	46	712
PS12.2	Enumerate, elicit, describe and document clinical features in patients with psychosomatic disorders	Y	Bedside clinic, DOAP session	Skill assessment	44–45	697–708

Number	COMPETENCY The student should be able to:	Core Y/N	Suggested learning methods	Suggested assessment methods	Chapter number	Page number
PS12.3	Enumerate and describe the indications and interpret laboratory and other tests of psychosomatic disorders	Y	Bedside clinic, DOAP session	Skill assessment	46	712
PS16.1	Enumerate and describe common psychiatric disorders in the elderly including dementia, depression and psychosis	Y	Lecture, small group discussion	Written/viva voce	44–45	697–708
CM6.1	Formulate a research question for a study of your choice	Y	Small group discussion, lecture, DOAP sessions	Written/viva voce/skill assessment	56–57	837–852
CM6.2	Describe and discuss the principles and demonstrate the methods of collection, classification, analysis, interpretation and presentation of statistical data	Y	Small group discussion, lecture, DOAP sessions	Written/viva voce/skill assessment	56–57	837–852
CM6.3	Describe, discuss and demonstrate the application of elementary statistical methods including test of significance in various study designs	Y	Small group discussion, lecture, DOAP sessions	Written/viva voce/skill assessment	56–57	837–852
CM6.4	Enumerate, discuss and demonstrate common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion	Y	Small group discussion, lecture, DOAP sessions	Written/viva voce/skill assessment	56–57	837–852
CM7.1	Define epidemiology and describe and enumerate the principles, concepts and uses	Y	Small group discussion, lecture	Written/viva voce	56–57	837–852
CM7.2	Enumerate, describe and discuss the modes of transmission and measures for prevention and control of communicable and non-communicable diseases	Y	Small group discussion, lecture	Written/viva voce	56–57	837–852
CM7.3	Enumerate, describe and discuss the sources of epidemiological data	Y	Small group discussion, lecture	Written/viva voce	56–57	837–852
CM7.4	Define, calculate and interpret morbidity and mortality indicators based on given set of data	Y	Small group discussion, DOAP sessions	Written/skill assessment	56–57	837–852
CM7.5	Enumerate, define, describe and discuss epidemiological study designs	Y	Small group discussion, lecture	Written /viva voce	56–57	837–852
CM7.6	Enumerate and evaluate the need of screening tests	Y	Small group discussion, DOAP sessions	Written/skill assessment	56–57	837–852
CM8.3	Enumerate and describe disease-specific National Health Programs including their prevention and treatment of a case	Y	Small group discussion, lecture	Written/viva voce	58	856–865
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	Y	Small group discussion, lecture	Written/viva voce	58	856–865