

<b>Number</b>	<b>COMPETENCY</b> <b>The student should be able to</b>	<b>Domain</b> <b>K/S/A/C</b>	<b>Level</b> <b>K/KH/SH/P</b>	<b>Core</b> <b>(Y/N)</b>
CT1.1	Describe and discuss the epidemiology of tuberculosis and its impact on the work, life and economy of India	K	KH	Y
CT1.2	Describe and discuss the microbiology of tubercle bacillus, mode of transmission, pathogenesis, clinical evolution and natural history of pulmonary and extra pulmonary forms (including lymph node, bone and CNS)	K	KH	Y
CT1.3	Discuss and describe the impact of co-infection with HIV and other co-morbid conditions. Like diabetes on the natural history of tuberculosis	K	K	Y
CT1.4	Describe the epidemiology, the predisposing factors and microbial and therapeutic factors that determine resistance to drugs	K	KH	Y
CT1.5	Elicit, document and present an appropriate medical history that includes risk factor, contacts, symptoms including cough and fever CNS and other manifestations	S	SH	Y
CT1.6	Demonstrate and perform a systematic examination that establishes the diagnosis based on the clinical presentation that includes a a) general examination, b) examination of the chest and lung including loss of volume, mediastinal shift, percussion and auscultation (including DOAP session of lung sounds and added sounds) c) examination of the lymphatic system and d) relevant CNS examination	S	SH	Y
CT1.7	Perform and interpret a PPD (mantoux) and describe and discuss the indications and pitfalls of the test	S	P	Y
CT1.8	Generate a differential diagnosis based on the clinical history and evolution of the disease that prioritises the most likely diagnosis	K	K	Y
CT1.9	Order and interpret diagnostic tests based on the clinical presentation including: CBC, Chest X ray PA view, Mantoux, sputum culture and sensitivity, pleural fluid examination and culture, HIV testing	K	K	Y
CT1.10	Perform and interpret an AFB stain	S	P	Y
CT1.11	Assist in the performance, outline the correct tests that require to be performed and interpret the results of a pleural fluid aspiration	S	SH	Y
CT1.12	Enumerate the indications for tests including: serology, special cultures and polymerase chain reaction and sensitivity testing	K	KH	Y
CT1.13	Describe and discuss the origin, indications, technique of administration, efficacy and complications of the BCG vaccine	K	KH	Y
CT1.14	Describe and discuss the pharmacology of various anti-tuberculous agents, their indications, contraindications, interactions and adverse reactions	K	KH	Y

CT1.15	Prescribe an appropriate antituberculosis regimen based on the location of disease, smear positivity and negativity and co- morbidities based on current national guidelines including directly observed tuberculosis therapy (DOTS)	K	SH	Y
CT1.16	Describe the appropriate precautions, screening, testing and indications for chemoprophylaxis for contacts and exposed health care workers	K	KH	Y
CT1.17	Define criteria for the cure of Tuberculosis; describe and recognise the features of drug resistant tuberculosis, prevention and therapeutic regimens	S	P	Y
CT1.18	Educate health care workers on National Program of Tuberculosis and administering and monitoring the DOTS program	C	SH	Y
CT1.19	Communicate with patients and family in an empathetic manner about the diagnosis, therapy	S	P	Y
CT2.1	Define and classify obstructive airway disease	K	KH	Y
CT2.2	Describe and discuss the epidemiology, risk factors and evolution of obstructive airway disease	K	KH	Y
CT2.3	Enumerate and describe the causes of acute episodes in patients with obstructive airway disease	K	KH	Y
CT2.4	Describe and discuss the physiology and pathophysiology of hypoxia and hypercapnea	K	KH	Y
CT2.5	Describe and discuss the genetics of alpha 1 antitrypsin deficiency in emphysema	K	KH	N
CT2.6	Describe the role of the environment in the cause and exacerbation of obstructive airway disease	K	KH	Y
CT2.7	Describe and discuss allergic and non-allergic precipitants of obstructive airway disease	K	KH	Y
CT2.8	Elicit document and present a medical history that will differentiate the aetiologies of obstructive airway disease, severity and precipitants	S	SH	Y
CT2.9	Perform a systematic examination that establishes the diagnosis and severity that includes measurement of respiratory rate, level of respiratory distress, effort tolerance, breath sounds, added sounds, identification of signs of consolidation pleural effusion and pneumothorax	S	SH	Y
CT2.10	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	S	SH	Y
CT2.11	Describe, discuss and interpret pulmonary function tests	S	SH	Y

CT2.12	Perform and interpret peak expiratory flow rate	S	P	Y
CT2.13	Describe the appropriate diagnostic work up based on the presumed aetiology	S	SH	Y
CT2.14	Enumerate the indications for and interpret the results of : pulse oximetry, ABG, Chest Radiograph	K	SH	Y
CT2.15	Generate a differential diagnosis and prioritise based on clinical features that suggest a specific aetiology	K	SH	Y
CT2.16	Discuss and describe therapies for OAD including bronchodilators, leukotriene inhibitors, mast cell stabilisers, theophylline, inhaled and systemic steroids, oxygen and immunotherapy	K	KH	Y
CT2.17	Describe and discuss the indications for vaccinations in OAD	K	KH	Y
CT2.18	Develop a therapeutic plan including use of bronchodilators and inhaled corticosteroids	K	SH	Y
CT2.19	Develop a management plan for acute exacerbations including bronchodilators, systemic steroids, antimicrobial therapy	K	SH	Y
CT2.20	Describe and discuss the principles and use of oxygen therapy in the hospital and at home	K	KH	Y
CT2.21	Describe discuss and counsel patients appropriately on smoking cessation	K/C	SH	Y
CT2.22	Demonstrate and counsel patient on the correct use of inhalers	S/C	SH	Y
CT2.23	Communicate diagnosis treatment plan and subsequent follow up plan to patients	K/C	SH	Y
CT2.24	Recognise the impact of OAD on patient's quality of life, well being, work and family	A	KH	Y
CT2.25	Discuss and describe the impact of OAD on the society and workplace	K	KH	Y
CT2.26	Discuss and describe preventive measures to reduce OAD in workplaces	K	KH	Y
CT2.27	Demonstrate an understanding of patient's inability to change working, living and environmental factors that influence progression of airway disease	A	KH	Y

CT2.28	Demonstrate an understanding for the difficulties faced by patients during smoking cessation	A	KH	Y
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**Column C: K- Knowledge, S – Skill, A - Attitude / professionalism, C- Communication. Column F: DOAP session – Demonstrate, independently, Column F: DOAP session – Demonstrate, Column H: If entry is P: indicate how many procedures must be done in**

<b>Suggested Teaching Learning method</b>	<b>Suggested Assessment method</b>	<b>Vertical Integration</b>	<b>Horizontal Integration</b>
Lecture, Small group discussion	Written/ Viva voce	Community Medicine	
Lecture, Small group discussion	written	Microbiology	
Lecture, Small group discussion	written	Microbiology	
Lecture, Small group discussion	Written/ Viva voce	Community Medicine, Microbiology, Pharmacology	
Bed side clinic, DOAP session	Skill assessment		
Bed side clinic, DOAP session	Skill assessment		
DOAP session	Maintenance of log book	Microbiology	
Bedside clinic, Small group discussion	Bedside clinic/ Viva voce		
Bedside clinic, DOAP session	Skill assessment		
DOAP session	Skill assessment	Microbiology	
Skill assessment	Skill assessment		
Small group discussion, Lecture	Short note/ Viva voce	Microbiology	
Lecture, Small group discussion	Short note/ Viva voce	Microbiology	
Lecture, Small group discussion	Short note/ Viva voce	Pharmacology, Microbiology	

Bedside clinic, Small group discussion, Lecture	Skill assessment	Pharmacology, Community Medicine	
Bedside clinic, Small group discussion	Written	Community Medicine	
Lecture, Small group discussion	Written		
DOAP session	Skill assessment	Community Medicine	
DOAP session	Skill assessment	AETCOM	
Lecture, Small group discussion	Written/ Viva voce	Physiology, Pathology	
Lecture, Small group discussion	Written/ Viva voce	Physiology , Pathology	
Lecture, Small group discussion	Written/ Viva voce		
Lecture, Small group discussion	Written/ Viva voce	Physiology, Pathology	
Lecture, Small group discussion	Written/ Viva voce	Physiology, Pathology	
Lecture, Small group discussion	Written/ Viva voce	Pathology	
Lecture, Small group discussion	Written/ Viva voce	Pathology	
Bed side clinic, DOAP session	Skill assessment		
Bed side clinic, DOAP session	Skill assessment		
Bed side clinic, DOAP session	Skill assessment/ Written		
Bed side clinic, DOAP session	Skill assessment	Physiology, Pathology	

Bedside clinic, DOAP session	documentation in log book/ Skill assessment		
Bedside clinic, Small group discussion	Written/ Skill assessment		
Bedside clinics, Small group discussion, DOAP session	Written/ Skill assessment		
Bedside clinics, Small group discussion, DOAP session	Written/ Skill assessment		
Lecture, Small group discussion	Written/ Viva voce	Pharmacology	
Lecture, Small group discussion	Written/ Viva voce		
Bedside clinics, Small group discussion, DOAP session	Written/ Skill assessment		
Bedside clinics, Small group discussion, DOAP session	Written/ Skill assessment		
Lecture, Small group discussion	Written/ Viva voce		
DOAP session	Skill assessment	AETCOM	
DOAP session	Skill assessment		
DOAP session	Skill assessment		
Small group discussion, Bedside clinics	Observation by faculty	Community Medicine	
Lecture, Small group discussion	Written/ Viva voce	Community Medicine	
Lecture, Small group discussion	Written/ Viva voce	Community Medicine	
Small group discussion, Bedside clinics	Observation by faculty	Community Medicine	

Small group discussion, Bedside clinics	Observation by faculty		
<b>D: K – Knows, KH - Knows How, SH - Shows how, P- performs Observe, Assess, Perform. dependently for certification/ graduation</b>			