Table of Specifications (ToS)
FOR ALL M.D. PROGRAMMES (5-Years Only)
EXCEPT Developmental Paediatrics
Part-II
"Paper-I"
(Fundamental Concepts in Internal Medicine)

Sr.#	Topics /Sub-Topics	No. of MCQs	No. of SEQs
1.	**Pulmonary Medicine**		02
	Common and / or Important Respiratory Problems:		
➢	COPD	01	
➢	Asthma		
➢	Pneumonia	01	
➢	Pleural disease: Pneumothorax, pleural effusion, mesothelioma	01	
➢	Lung Cancer	01	
➢	Respiratory failure and methods of respiratory support	01	
➢	Pulmonary embolism and DVT		
➢	Tuberculosis	01	
➢	Interstitial lung disease	01	
➢	Bronchiectasis		
➢	Respiratory failure and cor-pulmonale	01	
➢	Pulmonary hypertension	01	
	Clinical Science:		
➢	Principles of lung function measurement	01	
➢	Pharmacology of major drug classes: bronchodilators, inhaled corticosteroids, leukotriene receptor antagonists, immunosuppressants		
2.	**Cardiovascular Illness**		01
	Common and / or important Cardiac Problems:		
➢	Arrhythmias	01	
➢	Ischaemic Heart Disease: acute coronary syndromes, stable angina, atherosclerosis	01	
➢	Heart Failure		
➢	Hypertension – including investigation and management of accelerated hypertension	01	
➢	Valvular Heart Disease	01	
➢	Endocarditis	01	
➢	Aortic dissection	01	
➢	Syncope	01	
➢	Dyslipidaemia	01	
	Clinical Science:		
➢	Physiological principles of cardiac cycle and cardiac conduction	01	
➢	Pharmacology of major drug classes: beta blockers, alpha blockers, ACE inhibitors, Angiotensin receptor blockers (ARBs), anti-platelet agents, thrombolysis, inotropes, calcium channel antagonists, potassium channel activators, diuretics, anti-arrhythmics, anticoagulants, lipid modifying drugs, nitrates, centrally acting anti-hypertensives	01	

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3.	**Endocrinology and Metabolism**		01
	Common and / or Important Diabetes Problems:		
➢	Diabetic ketoacidosis	01	
➢	Non-acidotic hyperosmolar coma / severe hyperglycaemia		
➢	Hypoglycaemia	01	
➢	Care of the acutely ill diabetic	01	
➢	Peri-operative diabetes care		
	Common or Important Endocrine Problems:		
➢	Hyper/Hypocalcaemia	01	
➢	Adrenocortical insufficiency	01	
➢	Hyper/Hyponatraemia		
➢	Thyroid dysfunction	01	
➢	Dyslipidaemia	01	
➢	Endocrine emergencies: myxoedemic coma, thyrotoxic crisis, Addisonian crisis, hypopituitary coma, phaeochromocytoma crisis	01	
	Clinical Science:		
➢	Outline the function, receptors, action, secondary messengers and feedback of hormones	01	
➢	Pharmacology of major drug classes: insulin, oral anti-diabetics, thyroxine, anti-thyroid drugs, corticosteroids, sex hormones, drugs affecting bone metabolism	01	
4.	**Clinical Pharmacology**		01
	Common and / or Important problems:	01	
➢	Corticosteroid treatment: short and long-term complications, bone protection, safe withdrawal of corticosteroids, patient counselling regarding avoid adrenal crises		
➢	Specific treatment of poisoning with:	01	
•	Aspirin,		
•	Paracetamol		
•	Tricyclic anti-depressants		
•	Beta-blockers		
•	Carbon monoxide		
•	Opiates		
➢	✓ Digoxin		
➢	✓ Benzodiazepines		
	Clinical Science:	01	
➢	Drug actions at receptor and intracellular level		
➢	Principles of absorption, distribution, metabolism and excretion of chemotherapeutic and palliative drugs		
➢	Effects of genetics on drug metabolism		
➢	Pharmacological principles of drug interaction		
➢	Outline the effects on drug metabolism of: pregnancy, age, renal and liver impairment		

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5.	**Allergy and Immunology**		
	Common or Important Allergy Problems	01	
➢	Anaphylaxis		
➢	Recognition of common allergies; introducing occupation associated allergies		
➢	Food, drug, latex, insect venom allergies		
➢	Urticaria and angioedema		
	Clinical Science	01	01
➢	Mechanisms of allergic sensitization: primary and secondary prophylaxis		
➢	Natural history of allergic diseases		
➢	Mechanisms of action of anti-allergic drugs and immunotherapy		
➢	Principles and limitations of allergen avoidance		
	Common or Important Immunology related Problems:	01	
➢	Anaphylaxis (see also 'Allergy')		
	Clinical Science:	01	
➢	Innate and adaptive immune responses		
➢	Principles of Hypersensitivity and transplantation		
6.	**Infectious Diseases**		01
	Common and / or Important Problems:	04	
➢	Fever of Unknown origin		
➢	Complications of sepsis: shock, DIC, ARDS		
➢	Common community acquired infection: LRTI, UTI, skin and soft tissue infections, viral exanthema, gastroenteritis		
➢	CNS infection: meningitis, encephalitis, brain abscess		
➢	HIV and AIDS including ethical considerations of testing		
➢	Infections in immuno-compromised host		
➢	Tuberculosis		
➢	Anti-microbial drug monitoring		
➢	Endocarditis		
➢	Common genito-urinary conditions: non-gonococcal urethritis, gonorrhoea, syphilis		
	Clinical Science:	01	
➢	Principles of vaccination		
➢	Pharmacology of major drug classes: penicillins, cephalosporins, tetracyclines, aminoglycosides, macrolides, sulphonamides, quinolones, metronidazole, anti-tuberculous drugs, anti-fungals, anti-malarials, anti-helminthics, anti-virals		

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7.	**Clinical Genetics**		01
	Common and / or Important problems:	01	
➢	Down's syndrome		
➢	Turner's syndrome		
➢	Huntington's disease		
➢	Haemochromatosis		
➢	Marfan's syndrome		
➢	Klinefelter's syndrome		
➢	Familial cancer syndromes		
➢	Familial cardiovascular disorders		
	Clinical Science:	01	
➢	Structure and function of human cells, chromosomes, DNA, RNA and cellular proteins		
➢	Principles of inheritance: Mendelian, sex-linked, mitochondrial		
➢	Principles of pharmacogenetics		
➢	Principles of mutation, polymorphism, trinucleotide repeat disorders		
➢	Principles of genetic testing including metabolite assays, clinical examination and analysis of nucleic acid (e.g. PCR)		
8.	**Cancer and Palliative Care**		01
	Common or Important Gastroenterology Problems:	01	
➢	Hypercalcaemia		
➢	SVC obstruction		
➢	Spinal cord compression		
➢	Neutropenic sepsis		
➢	Common cancers (presentation, diagnosis, staging, treatment principles): lung, bowel, breast, prostate, stomach, oesophagus, bladder)		
	Common or Important Palliative Care Problems:	02	
➢	Pain: appropriate use, analgesic ladder, side effects, role of radiotherapy		
➢	Constipation		
➢	Breathlessness		
➢	Nausea and vomiting		
➢	Anxiety and depressed mood		
➢	Clinical Science:		
➢	Principles of oncogenesis and metastatic spread		
➢	Apoptosis		
➢	Principles of staging		
➢	Principles of screening		
➢	Pharmacology of major drug classes in palliative care: anti-emetics, opioids, NSAIDS, agents for neuropathic pain, bisphosphonates, laxatives, anxiolytics		

9.	**Geriatrics and Rehabilitation**		
	Common or Important Problems:	02	01
➢	Deterioration in mobility		
➢	Acute confusion		
➢	Stroke and transient ischaemic attack		
➢	Falls		
➢	Age related pharmacology		
➢	Hypothermia		
➢	Continence problems		
➢	Dementia		
➢	Movement disorders including Parkinson's disease		
➢	Depression in the elderly		
➢	Osteoporosis		
➢	Malnutrition		
➢	Osteoarthritis		
	Clinical Science:	01	
➢	Effects of ageing on the major organ systems		
➢	Normal laboratory values in older people		
	Total	**50 MCQs**	**10 SEQs**