



Before Licensing Examination > Useful Resources

Topics

The following is a list of topics for reference; the list is neither exclusive nor exhaustive. Candidates are expected to have a good understanding of the biomedical basis and clinical management, where appropriate, of these conditions. Please note that the same topic can appear in more than one discipline if deemed appropriate.

Medicine

Cardiology

- Ischaemic heart disease
- Heart failure
- Arrhythmia and heart block
- Cardiac emergencies (e.g. acute pulmonary oedema, cardiac arrest, cardiogenic shock, cardiac tamponade)
- Essential hypertension
- Secondary hypertension
- Systemic disorders affecting the heart
- Cardiomyopathies and myocarditis
- Valvular heart diseases
- Infective endocarditis
- Diseases of the pericardium (e.g. pericarditis)
- Diseases of the aorta (e.g. aortic dissection)
- Adult congenital heart diseases (e.g. atrial septal defect, ventricular septal defect)
- Diseases of the arteries (e.g. arterial thrombosis, atherosclerosis)
- Diseases of the veins (e.g. deep vein thrombosis, superior vena cava obstruction)
- Molecular and cellular cardiology

Endocrinology & Metabolism

- Metabolic syndrome
- Diabetes mellitus
- Lipid disorders
- Graves' disease and thyroid storm
- Hypothyroidism and myxoedema coma
- Acute and subacute thyroiditis
- Hypopituitarism



- Pituitary tumours
- Acromegaly
- Growth hormone deficiency
- Hyperprolactinaemia
- Diabetes insipidus
- Syndrome of inappropriate ADH secretion (SIADH)
- Hypogonadism
- Cushing's syndrome
- Adrenal gland disorders (e.g. adrenal insufficiency, primary hyperaldosteronism)
- Gynaecomastia
- Hirsutism
- Disorders of calcium and phosphate metabolism
- Osteomalacia and metabolic bone diseases
- Osteoporosis

Gastroenterology & Hepatology

- Malignancy of the gastrointestinal tract
- Infections of the gastrointestinal tract
- Gastro-oesophageal reflux disease
- *Helicobacter pylori* infection
- Gastric and duodenal ulcers
- NSAID gastropathy
- Functional dyspepsia
- Irritable bowel syndrome
- Food poisoning
- Malabsorption
- Inflammatory bowel diseases (ulcerative colitis and Crohn's disease)
- Intestinal obstruction
- Acute pancreatitis
- Cholangitis and gallstones
- Pancreatic cancer
- Systemic disorders affecting the liver
- Drug-induced liver injury
- Viral hepatitis (hepatitis A to E)
- Toxic, drug-induced and autoimmune hepatitis



- Alcoholic liver disease
- Non-alcoholic fatty liver disease
- Hepatocellular carcinoma
- Cirrhosis and portal hypertension
- Primary biliary cirrhosis
- Wilson's disease
- Variceal bleeding
- Ascites and spontaneous bacterial peritonitis
- Hepatic encephalopathy
- Acute liver failure and liver transplantation

Haematology & Oncology

- Anaemia and other related disorders (e.g. anaemia associated with systemic diseases, G6PD deficiency)
- Bleeding tendency (e.g. immune thrombocytopenic purpura, disseminated intravascular coagulation, thrombotic thrombocytopenia purpura, Vitamin K deficiency, haemophilia, Von Willebrand disease)
- Thrombotic tendency (e.g. deep vein thrombosis, pulmonary embolism, inherited and acquired thrombophilias)
- Haematological malignancies (e.g. acute leukaemia, myeloproliferative disorders, lymphoproliferative disorders, multiple myeloma)
- Bone marrow failure (e.g. aplastic anaemia, pure red cell aplasia, myelodysplastic syndrome, drug-induced agranulocytosis)
- Blood transfusion
- Haematopoietic cell transplantation
- General oncology (including target and immunomodulatory therapies)
- Paraneoplastic syndromes
- Palliative Care

Nephrology

- Systemic disorders affecting the kidney
- Acute kidney injury (acute renal failure)
- Chronic renal failure
- Preventing progression of chronic kidney disease
- Glomerular diseases (e.g. primary and secondary renal parenchymal diseases)
- Tubulointerstitial diseases (e.g. polycystic kidney disease)
- Urinary tract infection



- Fluids, electrolytes and acid-base disorders
- Renal stones and urinary obstruction
- Dialysis
- Renal transplantation

Neurology

- Cerebrovascular disease
- Seizures and epilepsy
- Parkinson's disease and other movement disorders
- Infections of the central nervous system
- Cognitive disorders (e.g. Alzheimer's disease, vascular dementia, other treatable entities such as nutritional deficiencies)
- Peripheral nerve disorders (e.g. systemic causes, chronic inflammatory demyelinating polyneuropathy, hereditary motor and sensory neuropathy, Guillain-Barré syndrome)
- Myasthenia gravis
- Motor neuron disease
- Multiple sclerosis
- Muscular disorders (e.g. systemic causes, muscular dystrophy, polymyositis, rhabdomyolysis)
- Spinal cord disorders (e.g. cord compression, cord tumours, cervical myelopathy, prolapsed disc)
- Primary headache disorders (e.g. migraine, tension headache, cluster headache, neuralgia)
- Coma and brain death
- Benign intracranial hypertension
- Normal pressure hydrocephalus
- Confusion and delirium
- Metabolic encephalopathy
- Cerebellar disorders
- Brain tumours
- Neurorehabilitation
- Head, spinal cord and nerve injuries

Respiratory Medicine

- Respiratory infections in immunocompetent and immunocompromised hosts (e.g. influenza, common respiratory viruses, bacterial pneumonia, tuberculosis)
- Severe acute respiratory syndrome (SARS)
- Allergic rhinitis



- Asthma
- Bronchiectasis
- Chronic obstructive pulmonary disease (COPD)
- Interstitial/inflammatory lung diseases
- Restrictive lung diseases from chest wall and neuromuscular diseases
- Obstructive sleep apnoea
- Cor pulmonale
- Respiratory failure
- Acute respiratory distress syndrome (ARDS)
- Lung cancer
- Pulmonary vascular diseases
- Non-invasive ventilation
- Diseases of the pleura and mediastinum
- Occupational and environmental lung diseases
- Lung transplantation

Rheumatology & Immunology

- Rheumatoid arthritis
- Seronegative spondyloarthritis
- Infective arthritis
- Crystal arthritis
- Osteoarthritis
- Systemic lupus erythematosus (SLE)
- Other collagen vascular diseases (e.g. systemic sclerosis, undifferentiated connective tissue disorder, dermatomyositis, polymyalgia rheumatica, Sjogren's syndrome)
- Vasculitides
- Drug-induced immunodeficiency
- Allergies and allergic conditions (e.g. drug allergy, food allergy, anaphylaxis)

Geriatrics

- Ageing and frailty
- Age-related biological changes and vulnerability to diseases
- Evaluation of geriatric patients
- Principles and organisation of care for geriatric patients



- Geriatric syndromes (e.g. falls and impaired mobility, neurological problems, sleep disorders, dementia, delirium, psycho-geriatric problems, pressure sores, constipation, incontinence, nutritional deficiencies)
- Common causes of hospital admissions
- Geriatric rehabilitation
- Prevention and health promotion for successful ageing
- Community geriatrics and long-term care
- End-of-life care (e.g. advanced directives and care planning, resuscitation decisions, difficult ethical dilemmas)

Infectious Diseases

- Community acquired infections
- Health care associated infections
- Infections in transplant recipients
- Common viral infections including respiratory infections as stated above, *Herpesviridae* infections, measles, mumps and rubella
- Common bacterial, fungal and parasitic infections
- Pyrexia of unknown origin
- Septicaemia
- Malaria
- Dengue fever
- HIV infection and acquired immune deficiency syndrome (AIDS)
- Highly active antiretroviral therapy (HAART) for patients with human immunodeficiency virus (HIV)

Sexually Transmitted Diseases

- Urethral discharge
- Genital ulcer
- Vaginal discharge
- Gonorrhoea
- Chlamydial infections
- Chancroid
- Syphilis
- Herpes
- HIV infection



Dermatology

- Eczema and dermatitis
- Psoriasis
- Acne
- Skin infections
- Life-threatening dermatoses (e.g. autoimmune blistering diseases, erythroderma, Stevens-Johnson syndrome, toxic epidermal necrolysis, pustular psoriasis, toxic shock syndrome)
- Cutaneous manifestations of systemic diseases
- Malignancy of the skin

Clinical Pharmacology

- Good prescribing practice
- Principles of clinical pharmacology
- Adverse drug reactions and drug interactions
- Drugs and the liver
- Drugs and the kidneys
- Prescribing in the elderly
- Prescribing in pregnancy
- Cardiovascular drug therapy
- Drug treatment of thromboembolism and bleeding
- Drug therapy for respiratory diseases
- Gastrointestinal drug therapy and drugs for inflammatory bowel diseases
- Clinical neuropharmacology
- Non-steroidal anti-inflammatory drugs (NSAIDs) and corticosteroids
- Antimicrobial drug therapy and prophylaxis
- Antiviral therapy
- Clinical toxicology (including common traditional Chinese medicine toxicity)
- Clinical drug trials
- Pharmacogenetics and pharmacogenomics
- Drug utilisation studies and audits