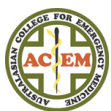


Primary Examination Syllabus

The following syllabus is a guide to the study of the basic sciences for the primary examination. Candidates should note that the syllabus provided is intended only as a guide to major topics. Any area of basic medical science relevant to the clinical practice of emergency medicine can be examined.

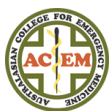
TOPIC	Level
1. <u>ANATOMY</u>	
1. APPROACHES TO STUDYING ANATOMY	
1.1 Regional anatomy	3
1.2 Systemic anatomy	3
1.3 Clinical anatomy	3
2. ANATOMICOMEDICAL TERMINOLOGY	
2.1 Anatomical position	1
2.2 Anatomical planes	1
2.3 Terms of relationship and comparison	1
2.4 Terms of laterality	1
2.5 Terms of movement	1
3. ANATOMICAL VARIATIONS	3
4. INTEGUMENTARY SYSTEM	3
5. FASCIAL COMPARTMENTS, BURSAE AND POTENTIAL SPACES	1
6. FASCIAS	3
7. SKELETAL SYSTEM	
7.1 Cartilage and bones	1
7.2 Bone markings and formations	1
7.3 Joints	1
8. MUSCLE TISSUE AND THE MUSCULAR SYSTEM	
8.1 Types of muscle (muscle tissue)	2
8.2 Skeletal muscles	2
8.3 Cardiac striated muscle	2
8.4 Smooth muscle	2
9. CARDIOVASCULAR SYSTEM	
9.1 Vascular circuits	2
9.2 Blood vessels	2
10. LYMPHOID SYSTEM	2
11. NERVOUS SYSTEM	
11.1 Central nervous system	1



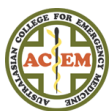
11.2	Peripheral nervous system	1
11.3	Somatic nervous system	1
11.4	Autonomic nervous system	1
12.	MEDICAL IMAGING TECHNIQUES	2
13.	OVERVIEW OF THORAX	3
14.	THORACIC WALL	
14.1	Skeleton of thoracic wall	1
14.2	Thoracic apertures	3
14.3	Joints of thoracic wall	3
14.4	Movements of thoracic wall	3
14.5	Muscles of thoracic wall	2
14.6	Fascia of thoracic wall	3
14.7	Nerves of thoracic wall	2
14.8	Vasculature of thoracic wall	2
14.9	Breasts	3
14.10	Surface anatomy of thoracic wall	1
15.	VISCERA OF THORACIC CAVITY	
15.1	Pleurae, lungs and tracheobronchial tree	1
15.2	Overview of mediastinum	1
15.3	Pericardium	2
15.4	Heart	1
15.5	Superior mediastinum and great vessels	1
15.6	Posterior mediastinum	2
15.7	Anterior mediastinum	3
15.8	Surface anatomy of heart and mediastinal viscera	1
16.	ABDOMEN OVERVIEW: WALLS, CAVITIES, REGIONS AND PLANES	2
17.	ANTEROLATERAL ABDOMINAL WALL	
17.1	Fascia of the anterolateral abdominal wall	3
17.2	Muscles of anterolateral abdominal wall	2
17.3	Neurovasculature of anterolateral abdominal wall	2
17.4	Internal surface of anterolateral abdominal wall	3
17.5	Inguinal region	1
17.6	Spermatic cord, scrotum, and testis	1
17.7	Surface anatomy of anterolateral abdominal wall	1
18.	PERITONEUM AND PERITONEAL CAVITY	
18.1	Subdivisions of peritoneal cavity	3
19.	ABDOMINAL VISCERA	
19.1	Overview of abdominal viscera and digestive tract	2
19.2	Oesophagus	2
19.3	Stomach	2
19.4	Small intestine	2
19.5	Large intestine	2



19.6	Spleen	2
19.7	Pancreas	2
19.8	Liver	2
19.9	Biliary ducts and gallbladder	2
19.10	Kidneys, ureters, and suprarenal glands	2
19.11	Summary of innervation of abdominal viscera	2
20.	DIAPHRAGM	
20.1	Vessels and nerves of diaphragm	1
20.2	Diaphragmatic apertures	3
20.3	Actions of diaphragm	3
21.	POSTERIOR ABDOMINAL WALL	
21.1	Fascia of posterior abdominal wall	3
21.2	Muscles of posterior abdominal wall	3
21.3	Nerves of posterior abdominal wall	2
21.4	Vessels of posterior abdominal wall	2
22.	INTRODUCTION TO PELVIS AND PERINEUM	2
23.	PELVIC GIRDLE	
23.1	Bones and features of pelvic girdle	1
23.2	Orientation of pelvic girdle	2
23.3	Joints and ligaments of pelvic girdle	2
24.	PELVIC CAVITY	
24.1	Walls and floor of pelvic cavity	2
24.2	Peritoneum and peritoneal cavity of pelvis	2
24.3	Pelvic fascia	3
25.	NEUROVASCULAR STRUCTURES OF PELVIS	
25.1	Pelvic arteries	2
25.2	Pelvic veins	2
25.3	Lymph nodes of pelvis	3
25.4	Pelvic nerves	2
26.	PELVIC VISCERA	
26.1	Urinary organs	2
26.2	Rectum	2
26.3	Male internal genital organs	3
26.4	Female internal genital organs	2
26.5	Lymphatic drainage of pelvic viscera	3
27.	PERINEUM	
27.1	Fasciae and pouches of urogenital triangle	3
27.2	Features of anal triangle	3
27.3	Male urogenital triangle	3
27.4	Female urogenital triangle	3



28.	OVERVIEW OF BACK AND VERTEBRAL COLUMN	1
29.	VERTEBRAE	
29.1	Structure and function of vertebrae	1
29.2	Regional characteristics of vertebrae	1
30.	VERTEBRAL COLUMN	
30.1	Joints of vertebral column	2
30.2	Movements of vertebral column	2
30.3	Curvatures of vertebral column	2
30.4	Vasculature of vertebral column	2
30.5	Nerves of vertebral column	1
31.	MUSCLES OF BACK	
31.1	Extrinsic back muscles	3
31.2	Intrinsic back muscles	3
31.3	Surface anatomy of back muscles	3
31.4	Suboccipital and deep neck muscles	3
32.	CONTENTS OF VERTEBRAL CANAL	
32.1	Spinal cord	1
32.2	Spinal nerve roots	1
32.3	Spinal meninges and cerebrospinal fluid (CSF)	1
32.4	Vasculature of spinal cord and spinal nerve roots	2
33.	OVERVIEW OF LOWER LIMB	1
34.	DEVELOPMENT OF LOWER LIMB	1
35.	BONES OF LOWER LIMB	
35.1	Arrangement of lower limb bones	1
35.2	Hip bone	1
35.3	Femur	1
35.4	Tibia and fibula	1
35.5	Bones of foot	1
35.6	Surface anatomy of bones of foot	1
36.	FASCIA, VEINS, LYMPHATICS, EFFERENT VESSELS AND CUTANEOUS NERVES OF LOWER LIMB	
36.1	Subcutaneous tissue and fascia	1
36.2	Venous drainage of lower limb	1
36.3	Lymphatic drainage of lower limb	2
36.4	Cutaneous innervation of lower limb	1
36.5	Motor innervation of lower limb	1
37.	POSTURE AND GAIT	
37.1	Standing at ease	2
37.2	Walking: the gait cycle	2
38.	ANTERIOR AND MEDIAL REGIONS OF THIGH	
38.1	Organization of proximal lower limb	1
38.2	Anterior thigh muscles	1



38.3	Medial thigh muscles	1
38.4	Neurovascular structures and relationships in anteromedial thigh	1
38.5	Surface anatomy of anterior and medial regions of thigh	1
39.	GLUTEAL AND POSTERIOR THIGH REGIONS	
39.1	Gluteal region: buttocks and hip region	2
39.2	Muscles of gluteal region	2
39.3	Posterior thigh region	2
39.4	Neurovascular structures of gluteal and posterior thigh regions	2
39.5	Surface anatomy of gluteal and posterior thigh regions	1
40.	POPLITEAL FOSSA AND LEG	
40.1	Popliteal region	1
40.2	Anterior compartment of leg	1
40.3	Lateral compartment of leg	1
40.4	Posterior compartment of leg	1
40.5	Surface anatomy of leg	1
41.	FOOT	
41.1	Skin and fascia of foot	1
41.2	Muscles of foot	2
41.3	Neurovascular structures and relationships in foot	1
41.4	Surface anatomy of ankle region and foot	1
42.	JOINTS OF LOWER LIMB	
42.1	Hip joint	1
42.2	Knee joint	1
42.3	Tibiofibular joints	1
42.4	Ankle joint	1
42.5	Foot joints	1
42.6	Surface anatomy of joints of knee, ankle, and foot	1
43.	OVERVIEW OF UPPER LIMB	1
44.	BONES OF UPPER LIMB	
44.1	Clavicle	1
44.2	Scapula	1
44.3	Humerus	1
44.4	Bones of forearm	1
44.5	Bones of hand	1
44.6	Surface anatomy of upper limb bones	1
45.	FASCIA, EFFERENT VESSELS, CUTANEOUS INNERVATION AND MYOTOMES OF UPPER LIMB	
45.1	Fascia of upper limb	1
45.2	Venous drainage of upper limb	1
45.3	Lymphatic drainage of upper limb	2
45.4	Cutaneous innervation of upper limb	1
45.5	Motor innervation (myotomes) of upper limb	1

46.	PECTORAL AND SCAPULAR REGIONS	
46.1	Anterior axioappendicular muscles	1
46.2	Posterior axioappendicular and scapulohumeral muscles	1
46.3	Scapulohumeral (intrinsic shoulder) muscles	1
46.4	Surface anatomy of pectoral, scapular, and deltoid regions	1
47.	AXILLA	
47.1	Axillary artery	1
47.2	Axillary vein	1
47.3	Axillary lymph nodes	1
47.4	Brachial plexus	1
48.	ARM	
48.1	Muscles of arm	1
48.2	Brachial artery	1
48.3	Veins of arm	1
48.4	Nerves of arm	1
48.5	Cubital fossa	1
48.6	Surface anatomy of arm and cubital fossa	1
49.	FOREARM	
49.1	Compartments of forearm	1
49.2	Muscles of forearm	1
49.3	Arteries of forearm	1
49.4	Veins of forearm	1
49.5	Nerves of forearm	1
49.6	Surface anatomy of forearm	1
50.	HAND	
50.1	Fascia and compartments of palm	1
50.3	Muscles of hand	1
50.3	Long flexor tendons and tendon sheaths in hand	1
50.4	Arteries of hand	1
50.5	Veins of hand	1
50.6	Nerves of hand	1
50.7	Surface anatomy of hand	1
51.	JOINTS OF UPPER LIMB	
51.1	Sternoclavicular joint	2
51.2	Acromioclavicular joint	2
51.3	Glenohumeral joint	1
51.4	Elbow joint	1
51.5	Proximal radio-ulnar joint	1
51.6	Distal radio-ulnar joint	1
51.7	Wrist joint	1
51.8	Intercarpal joints	2
51.9	Carpometacarpal and intermetacarpal joints	1
51.10	Metacarpophalangeal and interphalangeal joints	1



52.	OVERVIEW – HEAD	2
53.	CRANIUM	
53.1	Facial aspect of cranium	2
53.2	Lateral aspect of cranium	2
53.3	Occipital aspect of cranium	2
53.4	Superior aspect of cranium	2
53.5	External surface of cranial base	2
53.6	Internal surface of cranial base	2
53.7	Walls of cranial cavity	2
53.8	Regions of head	2
54.	FACE AND SCALP	
54.1	Face	1
54.2	Scalp	1
54.3	Muscles of face and scalp	2
54.4	Nerves of face and scalp	1
54.5	Superficial vasculature of face and scalp	2
54.6	Surface anatomy of face	1
55.	CRANIAL MENINGES	
55.1	Dura mater	3
55.2	Arachnoid mater and pia mater	3
55.3	Meningeal spaces	2
56.	BRAIN	
56.1	Parts of brain	1
56.2	Ventricular system of brain	1
56.3	Arterial blood supply of brain	1
56.4	Venous drainage of brain	2
57.	EYE, ORBIT, ORBITAL REGION AND EYEBALL	
57.1	Orbits	1
57.2	Eyelids and lacrimal apparatus	2
57.3	Eyeball	2
57.4	Extraocular muscles of orbit	1
57.5	Nerves of orbit	1
57.6	Vasculature of orbit	2
57.7	Surface anatomy of eye and lacrimal apparatus	1
58.	PAROTID AND TEMPORAL REGIONS, INFRATEMPORAL FOSSA AND TEMPOROMANDIBULAR JOINT	
58.1	Parotid region	2
58.2	Temporal region	3
58.3	Infratemporal fossa	3
59.	ORAL REGION	
59.1	Oral cavity	2
59.2	Lips, cheeks, and gingivae	2
59.3	Teeth	2



59.4	Palate	3
59.5	Tongue	2
59.6	Salivary glands	2
60.	PTERYGOPALATINE FOSSA	
60.1	Pterygopalatine part of maxillary artery	3
60.2	Maxillary nerve	2
61.	NOSE	
61.1	External nose	2
61.2	Nasal cavities	2
61.3	Vasculature and innervation of nose	2
61.4	Paranasal sinuses	3
62.	EAR	
62.1	External ear	2
62.2	Middle ear	2
62.3	Internal ear	3
63.	OVERVIEW – NECK	3
64.	BONES OF NECK	
64.1	Cervical vertebrae	1
64.2	Hyoid bone	3
65.	FASCIA OF NECK	
65.1	Cervical subcutaneous tissue and platysma	3
65.2	Deep cervical fascia	2
66.	SUPERFICIAL STRUCTURES OF NECK: CERVICAL REGIONS	
66.1	Sternocleidomastoid region	1
66.2	Posterior cervical region	1
66.3	Lateral cervical region	1
66.4	Anterior cervical region	1
66.5	Surface anatomy of cervical regions and triangles of neck	1
67.	DEEP STRUCTURES OF NECK	
67.1	Prevertebral muscles	2
67.2	Root of neck	2
68.	VISCERA OF NECK	
68.1	Endocrine layer of cervical viscera	2
68.2	Respiratory layer of cervical viscera	1
68.3	Alimentary layer of cervical viscera	2
68.4	Surface anatomy of endocrine and respiratory layers of cervical viscera	2



69.	LYMPHATICS OF NECK	2
70.	SUMMARY OF CRANIAL NERVES	
71.	OVERVIEW SUMMARY OF CRANIAL NERVES	1
72.	OLFACTORY NERVE (CN I)	3
73.	OPTIC NERVE (CN II)	1
74.	OCULOMOTOR NERVE (CN III)	1
75.	TROCHLEAR NERVE (CN IV)	1
76.	TRIGEMINAL NERVE (CN V)	1
76.1	Ophthalmic nerve (CN V1)	1
76.2	Maxillary nerve (CN V2)	1
76.3	Mandibular nerve (CN V3)	1
77.	ABDUCENT NERVE (CN VI)	1
78.	FACIAL NERVE (CN VII)	1
79.	VESTIBULOCOCHLEAR NERVE (CN VIII)	3
80.	GLOSSOPHARYNGEAL NERVE (CN IX)	3
81.	VAGUS NERVE (CN X)	2
82.	SPINAL ACCESSORY NERVE (CN XI)	2
83.	HYPOGLOSSAL NERVE (CN XII)	3

2. PATHOLOGY

* = additional material in Ganong (see recommended texts)

1.	CELLULAR INJURY AND ADAPTATION	2
1.1	Cellular adaptation	1
1.2	Mechanism of cell injury	1
2.	ACUTE AND CHRONIC INFLAMMATION	1
3.	TISSUE RENEWAL AND REPAIR	2
3.1	Control of normal tissues	2
3.2	Repair by healing, scar formation, and fibrosis	2
3.3	Cutaneous wound healing	1
3.4	Fibrosis	2
4.	FLUID AND HAEMODYNAMIC DERANGEMENTS	1
4.1	*Oedema	1
4.2	Hyperaemia and congestion	1
4.3	Haemorrhage	1

4.4	*Thrombosis	1
4.5	*Haemostasis	1
4.6	Embolism	1
4.7	Infarction	1
4.8	* Shock	1
5.	DISEASES OF IMMUNITY	2
5.1	*General features of the immune system	2
5.2	*Hypersensitivity reactions	1
5.3	Immunologic tolerance and causative mechanisms of auto immune disease	3
5.4	Acquired immunodeficiency syndrome (AIDS)	3
6.	NEOPLASIA	3
6.1	Biology of tumour growth	2
6.2	Epidemiology	3
6.3	Molecular basis of cancer	3
6.4	Carcinogenic agents	3
6.5	Tumour immunity	3
6.6	Clinical features of tumours	2
7.	INFECTIOUS DISEASE	2
7.1	General principles of microbial activity including transmission	1
7.2	Viral infections	2
7.3.	Bacterial infections including chlamydia, rickettsia, mycoplasma	1
7.4	General features of other infectious diseases - fungi, protozoa, helminths except malaria	3
7.5	Malaria	2
7.6	Principles of sterilisation and disinfection	2
8.	ENVIRONMENTAL PATHOLOGY	3
8.1	Personal exposure	3
8.2	Therapeutic drugs	1
8.3	Air pollution	3
8.4	Industrial exposure	3
8.5	Radiation	3
8.6	Physical injuries	1
8.7	Nutritional pathology	3
9.	BLOOD VESSELS	2
9.1	Vascular response to injury	3
9.2	Atherosclerosis	1
9.3	Hypertensive vascular disease	2
9.4	Aneurisms and dissections	1
9.5	Vasculitides	3
9.6	Veins and lymphatics	3
10.	THE HEART	1
10.1	*Congestive heart failure	1
10.2	*Ischaemic heart disease	1
10.3	Valvular heart disease	2
10.4	Cardiomyopathies	2

10.5	Pericardial disease	2
10.6	Transplantation	3
10.7	Congenital heart disease	3
11.	BLOOD CELL DISORDERS	3
11.1	Normal development	3
11.2	*Anaemias	2
11.3	Polycythaemia	3
11.4	Bleeding disorders	2
11.5	*Blood groups; transfusions	2
11.6	Leukopenia	2
11.7	Inflammatory white cell proliferation	2
11.8	Neoplastic white cell proliferation	3
11.9	Splenomegaly	3
12.	THE LUNG	2
12.1	*Atelectasia	3
12.2	*Pulmonary congestion and oedema	1
12.3	*Obstructive airways disease	1
12.4	Diffuse interstitial disease	3
12.5	Disease of vascular origin	3
12.6	Pulmonary infections	1
12.7	Tumours	2
12.8	Pleural pathology	3
12.9	*Hyperbaric oxygen	3
13.	THE GASTROINTESTINAL TRACT	2
13.1	Intestinal inflammatory disorders	2
13.2	Malabsorption syndromes	3
13.3	Ischaemic bowel disease	1
14.	LIVER AND BILIARY TRACT	2
14.1	General features of hepatic disease	1
14.2	Infectious disorders	1
14.3	Alcoholic liver disease	1
14.4	Cholelithiasis	1
14.5	Cholecystitis	1
15.	PANCREAS	2
15.1	Acute pancreatitis	1
15.2	Chronic pancreatitis	2
16.	RENAL SYSTEM	2
16.1	*Glomerular disease	3
16.2	Tubular and interstitial disease	2
16.3	*Hypertensive renal disease	3
16.4	Urinary tract obstruction	1
16.5	Urolithiasis	1
16.6	*Abnormalities in acid-base balance	2



17.	GENITOURINARY	3
17.1	Testes	3
17.2	Prostate	3
17.3	The female genital tract	3
17.4	Gestational disorders – miscarriage, ectopic pregnancy	1
17.5	Gestational disorders – other	2
18.	ENDOCRINE	3
18.1	Pituitary	2
18.2	Thyroid	3
18.3	Parathyroid	3
18.4	Endocrine pancreas	2
18.5	Adrenal cortex and medulla	2
19.	MUSCULOSKELETAL SYSTEM	
19.1	Bone remodelling, growth and development	3
19.2	Osteoporosis	3
19.3	Paget’s disease	3
19.4	Fractures	1
19.5	Osteonecrosis	3
19.6	Osteomyelitis	1
19.7	Arthritis	2
20.	NERVOUS SYSTEM	2
20.1	Peripheral neuropathies	3
20.2	Cerebral oedema and raised intracranial pressure	1
20.3	Trauma	1
20.4	Cerebrovascular disease	1
20.5	Infections	1
20.6	Demyelinating diseases	3
20.7	Degenerative diseases	3
20.8	Toxic and acquired metabolic diseases	3
21.	THE EYE	3
22.	GENETIC DISORDERS	3
23.	HEAD AND NECK	
23.1	Teeth and supporting structures	3
24.	DISEASES OF CHILDHOOD	
24.1	Cystic fibrosis	3
24.2	Sudden infant death syndrome	2
25.	THE SKIN	3

3. PHYSIOLOGY

PRINCIPLES OF CELLULAR FUNCTION

The General and Cellular Basis of Medical Physiology

General principles	1
Cellular physiology	1

PHYSIOLOGY OF NERVE AND MUSCLE CELLS

Nerve

General morphology and anatomy	3
Nerve function including excitation and conduction, fibre types, neurotransmitters, synapses and neuromuscular transmission	1

Muscle

General morphology and anatomy	2
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Skeletal Muscle

Function, electrical and mechanical and properties	1
Metabolism	1

Cardiac Muscle

Function, electrical (including pacemaker tissue) and mechanical, and properties	1
Metabolism	1

Smooth Muscle

2

NERVOUS SYSTEM

Neurotransmitters	1
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Reflexes	2
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Cutaneous, Deep, and Visceral Sensation	1
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Vision

Anatomy, pathways and image forming mechanisms	2
Eye movements	2

Hearing and Equilibrium

Anatomy, mechanisms of hearing and vestibular functions	2
Hair cells	3

Alert Behaviour, Sleep/Wake, and the Electrical Activity of the Brain	3
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Control of Posture and Movement	1
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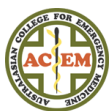
General principles, corticospinal and corticobulbar system, cerebellum	1
Midbrain and basal ganglia	3

The Autonomic Nervous System

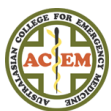
Pharmacology

Central Regulation of Visceral Function

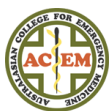
Hypothalamic function including vasopressin, temperature regulation	1
Anatomic, cyclic and autonomic considerations	3
Thirst	2
Control of anterior pituitary secretion	2
Oxytocin	3



Language	3
ENDOCRINOLOGY	
Thyroid Gland	
Thyroid hormones	2
Endocrine Functions of the Pancreas	
Islet cell structure	3
Insulin	1
Regulation of insulin secretion	1
Glucagon	1
Other islet cell hormones	3
The Adrenal Medulla and Adrenal Cortex	
Adrenal morphology	2
Adrenal medulla and medullary hormones	1
Adrenal cortex and cortical hormone synthesis/metabolism	3
Glucocorticoids	1
Regulation of glucocorticoid secretion	2
Mineralocorticoids	1
Calcium and Renal	
Calcium and phosphorus metabolism	1
Bone physiology	2
Vitamin D and the hydroxycholecalciferols	3
The parathyroid glands	2
Calcitonin	3
The renin-angiotensin system	1
Other renal hormones	2
Pituitary Gland	
Introduction	1
Morphology	2
Intermediate-lobe hormones	3
Growth hormone	2
Physiology of growth	3
Pituitary insufficiency	1
Pituitary hyperfunction	2
Reproductive Physiology	
Sex differentiation and development	3
Pituitary gonadotropins and prolactin	3
The male reproductive system	2
The female reproductive system	2
Pregnancy	1
Lactation	2
GASTROINTESTINAL SYSTEM AND METABOLISM	
Gastrointestinal Physiology	
General considerations	1
Mouth and oesophagus	2



Stomach	1
Exocrine portion of the pancreas	2
Liver and biliary system	1
Small intestine	2
Colon	2
Gastrointestinal hormones	2
Digestion and Absorption	
Carbohydrates	3
Proteins and nucleic acids	3
Lipids	2
Absorption of water and electrolytes	1
Absorption of vitamins and minerals	2
Metabolism and Nutrition	
Nutrition and energy metabolism	2
Carbohydrate, protein, fat and intermediary metabolism	2
CIRCULATING BODY FLUIDS	
Bone marrow	1
Blood cell types	1
Haemoglobin	1
Platelets	1
Blood types	1
Plasma	1
Haemostasis	1
Lymph	3
THE HEART	
Electrical Activity of the Heart	
Cardiac excitation	1
The electrocardiogram	1
Cardiac arrhythmias	1
Electrocardiographic findings in other diseases	1
Pump Function	
Mechanical events of the cardiac cycle	1
Cardiac output	1
Cardiac function in health and disease	1
THE CIRCULATION	
Blood and Lymph Flow	
Biophysics	1
Blood circulation- vessels	1
Lymphatic circulation	1
Interstitial fluid	1
Cardiovascular Regulatory Mechanisms	
Local regulation	1
Hormonal regulation	1
Regulation by the nervous system	1

**Circulation through Special Regions**

Cerebral circulation	1
Coronary circulation	1
Pulmonary circulation	1
Renal circulation	1
Splanchnic circulation	2
Cutaneous circulation	2
Placental and foetal circulation	2

RESPIRATORY PHYSIOLOGY*Respiratory Physiology – The Essentials****Anatomy, Structure and Functional interface** 1**Ventilation** 1

Anatomy	1
Regulation and control	1
Mechanics of breathing	

Pulmonary Blood Flow 1

Water and fluid balance in the lung	1
Pulmonary metabolic function	1

Ventilation – Perfusion Relationships 1**Gas Diffusion** 1**Gas Transport by the Blood and to tissues** 1

Respiratory aspects of acid base balance	1
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Respiratory System under Stress 2**Tests of Pulmonary Function** 3

Forced expiration	2
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RENAL PHYSIOLOGY**Renal Function and Micturition**

Anatomy	1
Renal circulation	1
Glomerular filtration	1
Tubular function and regulation	1
Renal function disorder and diuretics	1
The bladder	2

Regulation of Extracellular Fluid Composition, Volume and Acid-Base balance

Tonicity	1
Volume	1
Specific ionic composition	1

The Renin-Angiotensin System 1

Natriuretic factors	2
H ⁺ and bicarbonate regulation	1
Acidosis and alkalosis	1

4. PHARMACOLOGY

1. GENERAL PHARMACOLOGY

1.1	Pharmacokinetics	
1.1.1	Absorption	1
1.1.2	Distribution	1
1.1.3	Biotransformation	1
1.1.4	Elimination kinetics	1
1.2	Pharmacodynamics	
1.2.1	Mechanisms of action	1
1.2.2	Receptors and their regulation	1
1.2.3	Second messengers / G protein	1
1.2.4	Dose response	1
1.2.5	Dosing issues	1
1.3	Principles of prescribing	
1.3.1	Drugs and the elderly	2
1.3.2	Drugs and children	2
1.3.3	Drugs and pregnancy	2

2. RESPIRATORY SYSTEM

2.1	Methylxanthines	2
2.2	Sympathomimetic	1
2.3	Disodium cromoglycolate and others	3
2.4	Muscarinic antagonists	1
2.5	Antitussives	3
2.6	Steroids in respiratory disease	1

3. CARDIOVASCULAR SYSTEM

3.1	Emergency drugs (cardiac)	1
3.1.1	Drugs used in cardiac arrest	1
3.1.2	Inotropes	1
3.2	Antianginal drugs	1
3.2.1	Nitrates	1
3.2.2	Calcium channel blockers	1
3.2.3	Beta blockers	1
3.3	Antiarrhythmic agents	
3.3.1	Sodium channel blockers	
3.3.1.1	Class 1a	2
3.3.1.2	Class 1b	1
3.3.1.3	Class 1c	2
3.3.2	Beta blockers – class 2	1
3.3.3	Potassium channel blockers – class 3	1
3.3.4	Calcium channel blockers – class 4	1
3.3.5	Adenosine	1
3.3.6	Magnesium	1
3.4	Cardiac glycosides	1
3.5	Antihypertensives	
3.5.1	Beta blockers	1

3.5.2	ACE inhibitors	2
3.5.3	Vasodilators	2
3.5.4	Sympatholytics	2
3.6	Diuretics	
3.6.1	Loop diuretics	1
3.6.2	Thiazide diuretics	2
3.6.3	Potassium sparing diuretics	2
3.6.4	Osmotic	2
3.7	Drugs affecting haemostasis, thrombosis and the haemopoietic system	
3.7.1	Anti-platelet agents	1
3.7.2	Anticoagulants	1
3.7.3	Thrombolytics	1
3.7.4	Haemopoietic agents	3
3.8	Drugs used in control of lipids	3
4.	NERVOUS SYSTEM	
4.1	Neurotransmitters	2
4.2	Drugs acting on autonomic nervous system	
4.2.1	Sympathetic	1
4.2.2	Parasympathetic	1
4.3	Local anaesthetics	1
4.4	General anaesthesia	
4.4.1	Induction agents	1
4.4.2	Muscle relaxants	1
4.4.3	Volatile anaesthetics	3
4.4.4	Nitrous oxide	1
4.5	Antipsychotic agents	2
4.6	Antidepressives	
4.6.1	Tricyclics	1
4.6.2	Serotonin re-uptake inhibitors	2
4.6.3	Newer agents	2
4.6.4	Lithium	1
4.7	Anticonvulsants	
4.7.1	Phenytoin	1
4.7.2	Carbamazepine	1
4.7.3	Sodium valproate	1
4.7.4	Newer agents	3
4.8	Hypnotics / sedatives	
4.8.1	Benzodiazepines	1
4.8.2	Barbiturates	1
4.8.3	Newer agents	3
4.9	Ethanol	1
4.10	Anti-parkinsonian agents	3
4.11	Anti-migraine agents	2
5.	ANTIMICROBIAL AGENTS	
5.1	Principles of action	1
5.2	Beta lactam agents	1

5.3	Aminoglycosides	1
5.4	Sulphonamides	2
5.5	Quinolones	2
5.6	Antimycobacterial agents	3
5.7	Metronidazole	2
5.8	Antifungal	3
5.9	Antiviral, including HIV prophylaxis	2
5.10	Disinfectants	2
5.11	Mechanism of resistance	2
5.12	Anti-protazoal, anti-parasitic, anti-helminthic	3
5.13	Macrolide agents	2
5.14	Tetracyclines	2
5.15	Vancomycin	2
5.16	Lincosamides	2
5.17	Other	3
6.	IMMUNE SYSTEM	
6.1	Histamine antagonists	2
6.2	Eicosanoids	3
6.3	Vaccines	3
6.4	Immunoglobulins	3
7.	ENDOCRINE SYSTEM	
7.1	Drugs used in treatment of diabetics	1
7.2	Steroids	1
7.3	Sex hormones	3
7.4	Drugs used in treatment of thyroid disease	3
7.5	Hypothalamic/pituitary hormone agents	3
7.6	Drugs affecting bone metabolism	3
7.7	Octreotide	2
8.	GASTRO-INTESTINAL TRACT	
8.1	Antiemetics	1
8.2	Antidiarrhoeal	3
8.3	Laxatives	3
8.4	Anti-ulcer medication	2
8.5	Antispasmodics	2
8.6	Topical rectal agents	3
9.	ANALGESICS AND ANTI-INFLAMMATORY AGENTS	
9.1	Anti-inflammatory drugs	
9.1.1	Aspirin	1
9.1.2	Non-steroidal anti-inflammatory drugs	2
9.2	Paracetamol	1
9.3	Anti-gout agents	3
9.4	Steroids	1
9.5	Opiates	1



10.	TOXICOLOGY	
10.1	Activated charcoal	1
10.2	Antidotes	
10.2.1	N-Acetyl cysteine	2
10.2.2	Naloxone	2
10.2.3	Flumazenil	2
10.2.4	Sodium bicarbonate	2
10.2.5	Antivenoms	2
10.2.6	Chelating agents	3
10.2.7	Digoxin antibody fragments	2
10.2.8	Oximes	3
10.3	Toxidromes	1
10.4	Drugs of abuse	2
11.	FLUIDS AND ELECTROLYTES	
11.1	Intravenous fluid solutions	1
11.2	Potassium	1
11.3	Calcium	1
11.4	Sodium	1
11.5	Magnesium	1
12.	MISCELLANEOUS	
12.1	Vitamins	
12.1.1	Vitamin K	2
12.1.2	Vitamin B1	2
12.1.3	Vitamin B6	3
12.2	Ophthalmic preparations	2
12.3	Genito-urinary agents	3