

MBBS FIRST PROFESSIONAL (Part-II)

Physiology (SEQs and MCQs)

Table of Specifications

Topic / Chapter wise Distribution of MCQs and SEQs

Topic / Chapter	No. of MCQs	No. of SEQs
Kidney and body fluids	09	02
Nervous system	14	03
Special senses	07	01
Endocrines	09	02
Reproduction	06	01
Total	45	09

Kidney and Blood fluids

1. Fluid compartments, Interstitial fluid and lymph. 01
2. GFR and its regulation. 01
3. Tubular reabsorption, secretion. 01
4. Plasma clearance, mechanism of concentration and dilution of urine, Hormonal functions of the kidney. 02
5. Water and electrolyte balance, dehydration, acidification of urine. 01
6. Acid base balance-normal. 01
7. Abnormalities of the acid-base balance. 01
8. Micturition and its control. 01

Nervous System

1. Classification of nerve fibers, synaptic transmission and its properties, neurotransmitters, neuropeptides. 01
2. Classification and properties of sensory receptors, Reflex action, types of reflexes. 01
3. Muscle spindle and its functions, muscle tone. 01
4. Ascending tracts, touch, temperature and pain sensations. 02
5. Cerebral cortex, motor and sensory areas. 01
6. Pyramidal and extra-pyramidal tracts. 01
7. Basal ganglia-functions and lesions. 01
8. Cerebellum- functions and lesions. 01
9. Vestibular apparatus- functions, control of posture and equilibrium. 01
10. Speech, mechanism, memory, CSF. 01
11. Thalamus, hypothalamus, limbic system,

temperature regulation.	01
12.Sleep mechanism, disorders, EEG.	01
13.Autonomic nervous system.	01

Special Senses

1. Optics of the eye, mechanism of accommodation, errors of refraction.	02
2. Visual acuity, depth perception, aqueous humor, Neural function of the retina.	01
3. Photochemistry of vision, color vision, Visual cortex, visual pathway.	01
4. Functions of the middle ear, organ of Corti-structure and function.	01
5. Determination of the sound frequency, loudness, direction of sound, auditory cortex, types of deafness.	01
6. Taste and smell.	01

Endocrines

1. Types of hormones, hormone receptors, mechanism of action of hormones, feed back control.	02
2. Anterior pituitary hormones.	01
3. Posterior pituitary hormones.	01
4. Thyroid hormones.	01
5. Hormones involved in blood calcium regulation (parathyroid).	01
6. Hormones of adrenal cortex.	01
7. Abnormalities of hormones of adrenal cortex. Hormones of adrenal medulla, thymus, pineal body.	01
8. Hormones of pancreas. Control of blood glucose.	01

Reproduction

1. Spermatogenesis, male puberty, functions of testosterone.	01
2. Erection, ejaculation, semen, male infertility.	01
3. Menstrual cycle, puberty, menopause. Estrogens and progesterone.	02
4. Physiological changes during pregnancy, parturition, functions of placenta.	01
5. Lactation, neonatal physiology, female infertility.	01