

QUESTION BANK – I YEAR BSc NURSING

PHYSIOLOGY

UNIT I CELL PHYSIOLOGY

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UNIT II & III SKELETAL SYSTEM & MUSCULAR SYSTEM

SHORT ANSWERS

1. What is osteoblast?
2. What are the function of osteoclasts?
3. List any four functions of a bone.
4. Mention the functions of vertebral column.
5. What is a Callus?
6. Enlist the factors that delay bone healing.
7. List out any four types of synovial joint movements.
8. What is osteoporosis?
9. What is Rickets?
10. What is Osteomalacia?
11. What is osteomyelitis?
12. What is Lordosis?
13. What is a Sarcomere?
14. Define sliding filament theory.
15. What is meant by All or None Law.
16. Define Osteoarthritis.
17. What is a muscle cramp?
18. What is muscle atrophy?
19. Define Tetany.
20. What are the types of muscle contractions?
21. What is Kyphosis?
22. What is a fracture?

UNIT IV NERVOUS SYSTEM

SHORT ESSAYS

1. Describe the mechanism of impulse transmission through the nerve fibers.
2. Explain the transmission of nerve impulses through a synapse.
3. Describe the properties of nerve fibers.
4. Discuss the properties of a synapse.
5. Explain the function of synapse with a neat labeled diagram.
6. Discuss the structure of Neurons with its functions
7. Describe neuron and add a note on salutatory conduction of nerve impulses.
8. Describe Neuroglia and its functions.

9. Explain the functional areas of Cerebrum
10. Describe the functions of cerebellum
11. Explain the functions of Hypothalamus.
12. Explain the functions of Medulla Oblongata.
13. Enumerate the cranial nerves and its functions.
14. Discuss the functions of Spinal nerves
15. Explain the functions of Sympathetic Nervous System.
16. Explain the functions of Para Sympathetic Nervous System
17. Illustrate the mechanism of reflex action through a Reflex Arch.
18. Describe neuromuscular junction with a neat labeled diagram.
19. Enumerate the composition and functions of CSF
20. Describe the circulation of CSF in detail.
21. Explain Reflex and its types in detail.
22. Explain the types of pain with examples.
23. Describe automatic learning and its application.
24. Explain Biofeedback and its applications.

UNIT V & XII CIRCULATORY SYSTEM & LYMPHATIC & IMMUNOLOGICAL SYSTEM.

LONG ESSAYS:

1. Describe the composition of blood in detail. Add a note on Plasma Proteins.
2. Classify Leukocytes. Describe the structure and functions of leukocytes.
3. Explain the functions of Leukocytes. Write in detail on classification of Immunity.
4. Describe the stages of Erythropoiesis. Name the factors influencing it.
5. Enumerate the extrinsic pathway of coagulation. Enumerate clotting factors.
6. Explain the intrinsic pathway of coagulation. Add a note on anti coagulants.
7. Discuss the ABO system of blood grouping in man. Explain erythroblastosis foetalis.
8. State Landsteiner's Law. Describe the Rh blood group system and explain the consequences of Rh incompatibility.
9. What is an antigen? Explain the blood grouping and typing. Add a note on ABO incompatibility.
10. Define BP. Explain the renal mechanism of regulation of BP in detail.
11. Explain the systemic and pulmonary circulation. Add a note on cardiac output.
12. Describe the structure, synthesis, functions and breakdown of Hemoglobin. Add a note on Hemoglobin estimation.
13. Describe the various phases of Cardiac cycle. Add a note on Shock.
14. Explain the conducting System of the heart with a neat labeled diagram. Add a note on heart sounds.
15. Define Cardiac Output. Describe the regulation of Cardiac Output. Draw and explain a normal ECG curve.
16. Describe systemic circulation. Explain the factors affecting venous return.
17. Classify the blood groups. Explain the complications of ABO incompatibility and Rh incompatibility.

UNIT VI THE RESPIRATORY SYSTEM.

SHORT ESSAYS

1. Describe the functions of the respiratory organs.
2. Explain the physiology of respiration and the factors influencing it.
3. Differentiate between internal and external respiration.
4. Describe pulmonary volumes and capacities.
5. Explain the exchange of gases between alveoli and blood.
6. Discuss in detail about the physiology of cellular respiration.
7. Explain the mechanism of oxygen transport in blood.
8. Describe the mechanism of carbon dioxide transport in blood.
9. Explain the neural regulation of respiration.
10. Describe the chemical regulation of respiration.
11. Explain Hypoxia and its types.
12. Explain the different methods of artificial respiration.
13. Describe Lung Compliance and the role of Surfactant in respiration.

UNIT VII THE DIGESTIVE SYSTEM

SHORT ESSAYS

1. Explain the composition and functions of Saliva.
2. Describe the stages of Deglutition.
3. Explain the functions of Stomach
4. Explain the phases of secretion of Gastric juice
5. Explain the composition and functions of Gastric juice
6. Describe the digestion in mouth.
7. Enumerate the functions of pancreatic juice.
8. Name the enzymes in pancreatic juice and explain each ones function.
9. Explain the functions of liver.
10. Describe the composition of bile and its functions
11. Explain the functions of Gall bladder.
12. Explain the functions of pancreas.
13. Describe the movements of the gastro intestinal tract.
14. Describe briefly the digestion of carbohydrates.
15. Enumerate the digestion in Stomach.
16. Explain the functions of large intestine.
17. Explain the functions of small intestine.
18. Describe the digestion of proteins
19. Enumerate the digestion of fat.
20. Discuss the digestion of nutrients in Small intestine.
21. Enlist the major hormones that controls digestion and explain their functions
22. Explain the metabolism of carbohydrates

23. Discuss the metabolism of proteins
24. Describe the metabolism of fat.
25. Briefly explain the absorption of food from the gastro intestinal tract.

UNIT VIII THE EXCRETORY SYSTEM

SHORT ESSAYS

1. Describe the functions of Kidney.
2. Describe the structure and functions of nephrons.
3. Explain the mechanism of formation of Urine.
4. Describe the mechanism that controls Glomerulo Filtration Rate.
5. Describe the renal regulation of fluid and electrolyte balance.
6. Explain the factors that maintain water balance of the body.
7. Describe the reabsorption and secretion in renal tubules.
8. Describe the process of filtration in renal corpuscle.
9. Describe the micturition reflex.
10. List the composition of urine and explain about urinary incontinence.
11. Explain the innervations of urinary bladder and describe the micturition reflex.
12. Explain the regulation of temperature in human body.
13. Explain the functions of Skin.

UNIT IX THE SENSORY ORGANS

SHORT ANSWERS

1. Define convergence of eye
2. Define the accommodation of the eyes
3. Define the adaptation of the eyes.
4. Name any two refractive errors of the eyes and their corrective measures.
5. What is hypermetropia?
6. What is myopia?
7. Define astigmatism.
8. What is conjunctivitis?
9. What is cataract?
10. What is colour blindness?
11. What is night blindness?
12. Name the cranial nerves for taste sensation.
13. List out the functions of the middle ear.
14. What is deafness?
15. What is presbycusis?
16. What is presbyopia?
17. What is the function of Organ Of Corti.

UNIT X THE ENDOCRINE GLANDS

SHORT ANSWERS

1. Name any four endocrine glands and its secretions
2. List any four hormones of the anterior pituitary gland.
3. List the hormones of the posterior pituitary gland and its functions
4. List down any four functions of growth hormone
5. Mention the function of Anti Diuretic Hormone
6. List any four functions of thyroid hormone
7. What are the functions of calcitonin?
8. What are the functions of thymus gland?
9. List any four functions of insulin.
10. Name the cells of pancreatic islets and its hormones.
11. Enlist any four functions of Cortisol
12. What is fight or flight response?
13. Define Gigantism.
14. Define Acromegaly.
15. What is Diabetes insipidus?
16. What is Diabetes mellitus?
17. What is Grave's disease?
18. What is Cretinism?
19. What is Myxedema?
20. Define Goiter.
21. What is Cushing's syndrome?
22. What is Addison's disease?

UNIT XI THE REPRODUCTIVE SYSTEM

SHORT ANSWERS

1. What are the functions of uterus?
2. What are the functions of Ovaries?
3. Define Oogenesis.
4. Write down the functions of Follicular Stimulating Hormone.
5. Mention the functions of Luteinizing Hormone.
6. Define Menstrual Cycle.
7. What is the function of Progesterone?
8. What is the function of Estrogen?
9. Define Embryology.
10. What is the function of Seminal Vesicle in reproduction?
11. What is the function of Prostate gland in males?
12. What are the functions of the Uterus?
13. What is Spermatogenesis?

14. What is ectopic pregnancy?
15. What is Hydrocele?
16. What is gynecomastia?
17. What is fibroid uterus?
18. Define Infertility?
19. List any four female family planning methods.
20. What is Dysmenorrhoea?
21. Define tubectomy?
22. What is Vasectomy?