# DKM COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1 DEPARTMENT OF FOODS AND NUTRITION HUMAN PHYSIOLOGY

Sub Code: 15CNFIA Class: I BSC

## **UNIT-1 CELLS**

- 1. Define Cell.
- 2. What is Ectoplasm?
- 3. What is Glycocalyx?
- 4. What are the Functions of Cell Membrane?
- 5. What are the Cytoplasmic Inclusions?
- 6. What are Cytoplasmic Organelles?
- 7. What are Cristae Mitochondirales?
- 8. What are the Functions of Mitochondrias?
- 9. What are Power Houses of Cell?
- 10. What are the Functions of Golgi Apparatus?
- 11. What are the Types of Endoplasmic Reticulum?
- 12. What are Ribosomes?
- 13. What are Centrosomes?
- 14. What are Centrioles?
- 15. What are Suicidal Bags?
- 16. What is known as Chromatin Reticulum?
- 17. What is known as Nucleoplasm?
- 18. What are Chromosomes?
- 19. What are Autosomes?
- 20. What is Centromere?
- 21. What are the Functions of Nucleus?
- 22. What is Mitosis?
- 23. What is Meiosis?
- 24. What are the Stages of Mitosis?
- 25. What is Cytokinesis?

- 26. Define tissue.
- 27. What are Epithelial Tissues?
- 28. What are the Functions Of Epithelial Tissues?
- 29. What are the Types of Epithelial Tissues?
- 30. What are the Types of Simple Epithelial Tissue?
- 31. What are the Types of Compound Epithelial Tissue?
- 32. What are the Functions of Squamous Epithelium?
- 33. What are the Functions of Cuboidal Epithelium?
- 34. What are the Functions of Columnar Epithelium?
- 35. What are the Functions of Ciliated Epithelium?
- 36. What are the Functions of Glandular Epithelium?
- 37. What are the Functions of Transitional Epithelium?
- 38. What are the Functions of Stratified Squamous Cornified Epithelium?
- 39. What are the Functions of Stratified Squamous Non-Cornified Epithelium?
- 40. What are Connective Tissues?
- 41. What are the types of Connective Tissues?
- 42. What are the Functions of Areolar Connective Tissue?
- 43. What are the Functions of White Fibrous Connective Tissue?
- 44. What are the Functions of Adipose Connective Tissue?
- 45. What are the Functions of Yellow Elastic Connective Tissue?
- 46. What are the Types of Adipose Tissue?
- 47. What are the Types of Cartilage Tissue?
- 48. What are the Types of Bone Tissue?
- 49. What are Harvesian Canals?
- 50. What are Osteoclasts?
- 51. What are Osteoblasts?
- 52. What are the Functions of Muscle Tissue?
- 53. What are the Types of Muscle Tissue?
- 54. What is Syncytium?
- 55. What is Neuron?
- 56. What are the Types of Nervous Fibre?
- 57. What is Myelin Sheath?
- 58. What is known as Brush Border Epithelium?

#### **5 Mark Questions**

- 1. Sketch the Structure of Human Cell
- 2. Write a note on Nucleus.
- 3. Explain about Cytoplasmic Organelles.
- 4. Explain Mitosis.
- 5. Explain simple Epithelium
- 6. Explain Connective Tissue
- 7. Explain Bone Tissue
- 8. Explain Muscle Tissue
- 9. Explain Nervous Tissue
- 10. Explain Compound Epithelium

# 10 Mark Questions

- 1. Explain the Structure Of Human Cell.
- 2. Explain Mitotic Cell Division.
- 3. Explain Meiotic Cell Division.
- 4. Explain Epithelium.
- 5. Explain The Types Of Tissues In Detail.

## **Unit-II Transport And Maintenance**

- 1. What is Plasma?
- 2. What are the Corpuscles of Blood?
- 3. What are Plasma Proteins?
- 4. What is Heamatocrit Value?
- 5. What is Phagocytosis?
- 6. What is Rouleaux Formation?
- 7. What are Trephones?
- 8. What are Erytrocytes?
- 9. What is Polycythemia?
- 10. What is Anaemia?
- 11. What is Erythropoiesis?
- 12. What is Myeloid Tissue?
- 13. What is Lymphoid Tissue?

- 14. What is Intravascular Erythropoiesis?
- 15. What is Extramedullary Erythropoiesis?
- 16. What is Erythropoietin?
- 17. What are the Types of Leucocytes?
- 18. What are Granulocytes?
- 19. What are Agranulocytes?
- 20. What is Leucopoiesis?
- 21. What are Thrombocytes?
- 22. What is Agglutinin?
- 23. What is Agglutinogen?
- 24. What are Kuppfer Cells?
- 25. What is Pericardium?
- 26. What are the Layers of Heart?
- 27. What are the Chambers of Heart?
- 28. What is Auriculo Ventricular Orifice?
- 29. What are the Layers of Arteries?
- 30. What are Arterioles?
- 31. What is Ecg? Isometric Relaxation Period
- 32. Define Cardiac Cycle
- 33. What is Isometric Contraction Period?
- 34. What is Maximum Ejection Period?
- 35. What is Reduced Ejection Period?
- 36. What is Rapid Filling Phase?
- 37. What is Isometric Relaxation Period?
- 38. What is Blood Pressure?
- 39. What is Systolic Pressure?
- 40. What is Diastolic Pressure?
- 41. What is known as Pulse Pressure?

- 1. What is the Composition of Blood?
- 2. What are the Physical Charecteristics Of Blood?
- 3. What are the Functions Of Blood?
- 4. Explain Plasma Proteins

- 5. What are the Functions of Plasma Proteins?
- 6. What are the Stages of Erythropoiesis?
- 7. What are the Factors Essential for Erythropoiesis?
- 8. What are the Types of Leucocytes?
- 9. What are the Functions Of WBC's?
- 10. Explain Blood Grouping?
- 11. Explain About Lymph And Lymphatic System.
- 12. Explain About Spleen
- 13. Explain About Reticulo Endothelial System.
- 14. Explain the Layers of Heart.
- 15. Explain about the Chambers of Heart.
- 16. What are the Blood Vessels Connected To Heart?
- 17. What are the Properties Of Heart?
- 18. Explain ECG.
- 19. What is Bp and the Factors Affecting It?

#### 10 Mark Question

- 1. Explain Erythropoiesis.
- 2. Explain the Composition and Functions of Blood.
- 3. Explain Leucocytes And Their Functions.
- 4. Explain the Structure Of Heart.
- 5. Explain the Origin And Conduction Of Heart Beat.
- 6. Explain Cardiac Cycle.

#### UNIT-III DIGESTIVE SYSTEM

- 1. Define Digestive System
- 2. Define Deglutition
- 3. What is Ingestion?
- 4. What is Propulsion?
- 5. What is Absorption?
- 6. What is Elimination?
- 7. What is Digestion?
- 8. What are the Organs of Digestive System?
- 9. What are the Accessory Organs of Digestive System?

- 10. What are Taste Buds?
- 11. What is Mastication?
- 12. What is Dentine?
- 13. What are Parotid Glands?
- 14. What are Submandibular Glands?
- 15. What are Sublingual Glands?
- 16. What is Peristalsis?
- 17. How is Pharynx Divided?
- 18. What is a Bolus?
- 19. What is Rugae?
- 20. What are the Lobes of Liver?
- 21. What are the Functions of Gall Bladder?
- 22. How is Small Intestine Divided?
- 23. What is Villi?
- 24. What are Lacteals?
- 25. What is Succus Entericus?
- 26. How is Colon Divided?
- 27. What are the two Spincters of Anal Canal?
- 28. What are the Nutrients Synthesized By The Microbes In Large Intestine?
- 29. Name some Monosaccharides.
- 30. Name some Disaccharides.
- 31. Name some Polysaccharides.
- 32. What is Ptyalin?
- 33. What is sodium Co Transport Mechanism?
- 34. What is Facilitated Diffusion?
- 35. What is Passive Transport?
- 36. What are Endopeptidases?
- 37. What are the Proteolytic Enzymes In Succus Entericus?
- 38. What are the Lipolytic Enzymes?
- 39. What is Defeacation?

- 1. What are the functions of Digestive System?
- 2. What are the Organs of Digestive System?

- 3. Sketch the structure of Stomach
- 4. What are Salivary Glands?
- 5. How is Salivary Secretion Controlled?
- 6. Explain Stomach With Its Sketch.
- 7. Explain the Composition of Gastric Juice And Its Functions.
- 8. What are the Functions of Stomach?
- 9. Explain the Structure of Liver And Its Functions
- 10. Explain the Exocrine and Endocrine Functions Of Pancreas
- 11. Explain the Structure of Small Intestine
- 12. What are the Functions of Small Intestine?
- 13. Explain the Structure of Large Intestine
- 14. What are the functions of Large Intestine?
- 15. How is defaecation Controlled?
- 16. Sketch the Digestive System
- 17. How is fat Digested and Absorbed?

#### 10 Mark Question

- 1. How is Carbohydrate Digested and Absorbed?
- 2. How is Protein Digested and Absorbed?
- 3. Explain Stomach and Gastric Juice
- 4. Explain the Structure and functions of Intestines

# UNIT-IV RESPIRATORY SYSTEM

- 1. Define respiration
- 2. Define inhalation
- 3. Define exhalation
- 4. What is Larynx
- 5. What are Bronchi?
- 6. What are Bronchioles?
- 7. What are Alveoli?
- 8. What are the Muscles involved in Breathing?
- 9. What are the Organs of Upper Respiratory System?
- 10. What are the Organs of Lower Respiratory System?

- 11. What is Otorhinolaryngology?
- 12. Who is a Pulmonologist?
- 13. How are the Bronchioles Divided?
- 14. What is Pleura and its Types?
- 15. How is Pharynx Divided?
- 16. What is Cellular Respiration?
- 17. What is A Diaphragm?
- 18. What are Primary Bronchioles?
- 19. What are Secondary Bronchioles?
- 20. What are the Muscles Involved in Respiration?
- 21. What is Bronchial Tree?
- 22. What is External Respiration?
- 23. Define Oxyheamoglobin.
- 24. What are the Types of Chemoreceptors?
- 25. Define Herring-Breuer Reflex.

#### 5 Mark Questions:

- 1. Explain the Structure of Upper Respiratory Tract
- 2. Explain the Structure of Lower Respiratory Tract
- 3. Explain about Exchange of Gases in Lungs
- 4. Explain the Functions of Nostrils
- 5. Explain the Structure and Functions Of Pharynx
- 6. Explain the Chemoreceptors involved in Control of respiration.

#### 10 Mark Questions

- 1. Explain the structure of Respiratory System.
- 2. Explain the Mechanism of Respiration.
- 3. How is Respiration Controlled?

#### UNIT-V NERVOUS SYSTEM AND ENDOCRINE SYSTEM

- 1. Define Neuron
- 2. What are Nerve Impulses?
- 3. How is Nervous System Divided?
- 4. What is Central Nervous System?

- 5. What is Peripheral Nervous System?
- 6. What are the types of Ans?
- 7. What is Autonomic Nervous System?
- 7. What is Grey Matter?
- 8. What is White Matter?
- 9. What are the types Of Neurons?
- 10. What is Myelin Sheath?
- 11. What are Axons?
- 12. What are Dendrites?
- 13. What are Schwann Cells?
- 14. What are the Nodes of Ranvier>
- 15. What are the Meninges?
- 16. What are the Ventricles Of Brain?
- 17. What is CSF?
- 18. What are the Hemispheres of Brain?
- 19. What are the Lobes of Brain?
- 20. What is Gyri?
- 21. What are the Functions Of Cerebral Cortex?
- 22. How is Brain Stem Divided?
- 23. What are Spinal Reflexes?
- 24. What is a Synapse?
- 25. What is Acetylcholine?
- 26. What is a Gland?
- 27. What is a Duct?
- 28. Name the Hormones of Anterior Pituitary.
- 29. Name the Hormones of Posterior Pituitary.
- 30. What is Adenohypophysis?
- 31. What is Neurohypophysis?
- 32. What is Vasopressin?
- 33. What are the Zones of Adrenal Cortex?
- 34. What are the Gonadal Hormones?
- 35. What are the Hormones of Pancreatic Islets?
- 36. What are the Hormones Secreted by Adrenal Gland?

- 37. Define Endocrinology.
- 38. Define Homeostasis

# 5 Mark Questions:

- 1. Explain the Structure of Nerve Cell
- 2. What is CSF and Its Functions?
- 3. Explain Brain Stem
- 4. Explain Spinal Cord and its Functions
- 5. Explain the Functions of Autonomic Nervous System.
- 6. Sketch the Structure of Brain
- 7. What are the Functions of Cerebrum?
- 8. Explain the Pituitary Gland its Functions.
- 8. Explain about Thyroid Gland its Functions.
- 9. Explain about Parathyroid Gland its Functions.
- 10. Explain about Adrenal Gland its Functions.
- 11. Explain the Hormones of Anterior Pituitary and its Functions.
- 12. Explain about Pancreas its Functions.

- 1. Explain the Structure of Brain With a Neat Sketch
- 2. Explain Autonomic Nervous System And its Functions
- 3. Explain the Structure of Spinal Cord with a Neat Sketch
- 4. Explain the Structure of Brain stem with a Neat Sketch.
- 5. Explain the Endocrine System and Hormones Secreted.