

**VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM  
(Deemed to be University)**

**B.OPTOMETRY DEGREE EXAMINATION – September 2021  
First Year**

**GENERAL PHYSIOLOGY AND OCULAR PHYSIOLOGY**

Time: Three hours

Maximum: 80 marks

I Choose the best answer

(10 x 1 = 10)

1. The ion necessary for the Coagulation process
  - a) Ca
  - b) Mg
  - c) FE
  - d) PO<sub>4</sub>
2. The power house of cell
  - a) Lysozomes
  - b) Mitochondria.
  - c) Nucleus
  - d) Ribosomes
3. Which one is not a granulocyte?
  - a)Lymphocyte
  - b) Neutrophil
  - c)Eosinophil
  - d) Basophil
4. Hormones for milk ejection
  - a)Vasopressin
  - b) FSH
  - c) Oxytosin
  - d) LH
5. Which one is not a protein digestive enzyme.
  - a) Trypsin
  - b) Chymotrypsin
  - c) Carboxy peptidase
  - d) Pancreatic amylase.
6. Night blindness is caused by
  - a) Myopia
  - b) Hypermeteropia
  - c) Deficiency of Vitamin A
  - d) Diplopia.
7. The nuero transmitter of neuromuscular junction is
  - a) GABA
  - b) Acetylcholine
  - c) Adrenaline
  - d) Nor adrenaline
8. Photosensitive pigment of rod cells is
  - a) Rhodopsin
  - b) Iodosin
  - c) Cynapsin
  - d) Porphyropsin
9. Bluish discoloration of skin and mucous membrane
  - a) Cyanosis
  - b) Hypoxia
  - c) Dyspnea
  - d) Asphyxia
10. Gland with both endocrine and exocrine function
  - a) Thyroid gland
  - b) Pancreas
  - c) Anterior pituitary
  - d) Adrenal cortex

II State whether the following statements are **TRUE** or **FALSE** (10 x 1 = 10)

1. Erythropoietin is produced by kidneys.
2. Myasthenia gravis is a endocrine disorder.
3. Peristalsis is a type of gastro intestinal movement.
4. Anterior pituitary secretes hormone oxytosin.
5. Visual acuity for near vision is tested using Snellen's chart.
6. Glucagon elevates blood glucose level.
7. Haemophilia is a bleeding disorder.
8. In myopia near vision is normal but for point is not infinite.
9. Second heart sound is due to closure of semilunar valve.
10. Perception of two images of single object is called binocular vision.

III Fill in the blanks: (10 x 1 = 10)

1. \_\_\_\_\_ is a natural anticoagulant.
2. Endoplasmic reticulum in muscle is called as \_\_\_\_\_
3. The process of swallowing food is called \_\_\_\_\_
4. \_\_\_\_\_ is the structural and functional unit of kidney.
5. Adrenal medullary hormones are \_\_\_\_\_ and \_\_\_\_\_
6. Electrical activity of retina is recorded by \_\_\_\_\_
7. \_\_\_\_\_ is permanent contraception in male.
8. \_\_\_\_\_ is the phase make of heart.
9. The photosensitive pigment of rod cells is \_\_\_\_\_
10. Vision using two eye with over lapping fields of view is called \_\_\_\_\_

IV Write any **FIVE** answers of the following: (5 x 6 = 30)

1. Glaucoma.
2. Effect of lesion in optic pathway.
3. Hypoxia.
4. Presbyopia.
5. Movements of GIT
6. Electrocardiogram
7. Thyroid gland

V Write any **TWO** essays of the following: (2 x 10 = 20)

1. Draw and write about the structure and functions of Rods and cones.
2. Binocular single vision – grades, tents and abnormalities.
3. Give and account of accommodation and add a note on presbyopia.

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(Sl.No. M21106)