

Subject: General Human Physiology & Biochemistry

Part II

Section A & Section B should be answered in separate answer books

QP Code: 11202

**Section A
General Human Physiology**

(30 Marks)

- I LONG ESSAY** **1x10=10 Marks**
1. Describe the chemical regulation of respiration.
- II SHORT ESSAYS** **2x5=10 Marks**
2. Juxtaglomerular apparatus.
3. Factors affecting heart rate.
- III SHORT ANSWERS** **5x2=10 Marks**
4. Define erythrocyte sedimentation rate (ESR). What is its normal value?
5. Mention any four functions of saliva.
6. Where does facultative re-absorption of water occur in kidneys? Which hormone is responsible for it?
7. Name the hormones of posterior pituitary gland? Where are they synthesized?
8. Name any four properties of synapse.

QP Code: 11203

**Section B
Biochemistry**

(30 Marks)

- I LONG ESSAY** **1x10=10 Marks**
9. Describe the sources, recommended daily allowance (RDA), functions and deficiency manifestations of vitamin A. **2+2+2+4=10**
- II SHORT ESSAYS** **2x5=10 Marks**
10. Draw electron transport chain and mark the sites of ATP formation.
11. Factors regulating blood calcium level.
- III SHORT ANSWERS** **5x2=10 Marks**
12. Name the key gluconeogenic enzymes.
13. Km value and its significance.
14. Define epimerism with an example.
15. Role of carnitine in β oxidation.
16. Name the enzyme deficient in a) Phenylketonuria b) Niemann-Pick disease.

Subject: General Human Anatomy Including Embryology, Osteology, Histology & Medical Genetics

Part II

I LONG ESSAY

2x10=20 Marks

1. Describe the thyroid gland under the following headings:
 - a) Coverings
 - b) Parts
 - c) Relations
 - d) Blood supply.
2. Describe the maxillary sinus under the following headings:
 - a) Boundaries
 - b) Bones reducing maxillary hiatus in size
 - c) Opening
 - d) Applied anatomy.

(1+1+4+4)

(4+1+3+2)

II SHORT ESSAY

4x5= 20 Marks

3. Oropharynx.
4. Microscopy of circumvallate papillae of tongue.
5. Nerve supply of scalp.
6. Lateral pterygoid.

III SHORT ANSWERS

10X2=20 Marks

7. Opening and two structures pierced by Stensen's duct.
8. Classify dural venous sinus.
9. Name the fontanelles of skull.
10. Mention four congenital anomalies of face.
11. Draw the structure of a synovial joint.
12. Origin and termination of internal jugular vein.
13. Name the muscles of soft palate.
14. Mention four relations of cervical part of trachea.
15. What are the parts of occipitofrontalis? Give their nerve supply.
16. Name the four cutaneous nerves seen in posterior triangle.
