

**2010** **Paper - I** **Full Marks - 50**

Use separate answer script for each group  
Attempt all questions. Draw suitable diagrams wherever necessary.  
The figures in the margin indicate full marks;

**Group - A**

1. Answer any one of the following :—

a) An old man suffering from carcinoma of Prostate presents with metastasis (secondary deposit) in vertebra. From your knowledge of anatomy explain this complication. Discuss briefly the 'capsules, lobes and relations of prostate gland. Add a note on. interior of the organ. 2+6+4

b) Per vaginal examination of an elderly lady suffering from Pelvic Inflammatory Disease reveals collection of fluid in Pouch of Douglas. Write a note on this pouch with peritoneal as well as visceral relations of Uterus. Give a brief account of supports of the organ. 3+4+5

**Group - B**

2. Answer any two of the following :

a) A man presents with neuro-muscular disability following fracture of surgical neck of Humerus. Give a brief account of the nerve affected because of its most close relation to that part of the bone. From your knowledge of anatomy add a note on the motor and sensory defects that may arise. 5+2

b) A factory worker presents with swollen painful Inguinal lymph nodes following an uncared wound at medial side of ankle. Explain this complication from your knowledge of anatomy. Write a brief note on Inguinal Lymph Nodes; (2+5)

c) A teen aged girl suffering from Acute appendicitis got initial attack of pain around umbilicus which was finally localised at right iliac fossa. State anatomical reason of pain in both the areas. Give an account of positions of Vermiform appendix. 3+4

**Group - C**

3. Write short-notes on any four of the following : 4x3

a) Klinefelter Syndrome b) Inter vertebral Disc.  
c) Popliteus muscle. d) Clavipectoral Fascia.  
e) Physiological umbilical hernia.

**Group - D**

4. Write brief explanatory notes on the following statements using your knowledge of Anatomy / Embryology : 4x3

a) Upper end of Humerus is an example of compound epiphysis.  
b) A patient is detected to have Horse-shoe shaped kidney.  
c) A patient of Cirrhosis of liver presents with 'Caput Medusa'.  
d) Peroneus longus muscle has effect on both longitudinal as well as transverse arches of foot.

Anatomy



2010 Paper - II Full Marks - 50

Use separate answer script for each group  
Attempt all questions. Draw suitable diagrams wherever necessary.  
The figures in the margin indicate full marks;

**Group - A**

1. Answer any one of the following :—

- AND a) Following surgical operation of right sided parotid gland, a patient develops weakness of facial muscles of that side. State the relation of the affected cranial nerve with parotid gland. Give a brief account of functional components and intracranial course and distribution of the nerve. **Facial nerve**
- AND b) A patient is brought to physician presenting right sided ocular signs of ptosis, lateral strabismus, diplopia and loss of accommodation as well as light reflex with contralateral hemiplegia. From your knowledge of anatomy explain the lesion. Give a brief account of the cranial nerve affected. **Eye & nerve**

**Group - B**

2. Answer any two of the following :—

- Ⓣ a) A patient with history of cough, fever and breathlessness is diagnosed to be a case of Pleural effusion. Give a brief account on parts of pleura with its recesses and nerve supply. 7
- AND b) CT scan of brain of a patient suffering from cerebrovascular accident shows lesion in Internal capsule of brain. State why this part of brain is called 'internal capsule', Mention the different fibres passing through the Internal capsule. Add a note on its blood supply. **Ext. laryngeal** 1+3+3
- AND c) During surgical operation on thyroid gland a surgeon must be careful to avoid injury to some nerves. Mention the components, distribution and effect of lesion of these nerves. **Larynx** 2+3+2

**Group-C**

3. Write short notes on any four of the following :—

- Ⓣ a) Left coronary artery. **Tongue & dermofront**
- b) Thyroglossal duct. **Nasal cavity**
- c) Middle meatus of nose. **Middle**
- d) Boundaries and communications of Third Ventricle of Brain. **AND**
- e) Circulation of aqueous humour.

**Group-D**

4. Write brief explanatory notes on the following statements using your knowledge of-Anatomy / Embryology :

- Ⓣ a) Inter costal nerves other than 3rd to 6th are atypical.
- AND b) A patient of Pituitary tumor suffers from Bi temporal Hemianopia.
- AND c) Layer of loose connective tissue is known as 'Dangerous layer of scalp'.



## Physiology

2010

Paper - I

Full Marks - 50

*Use separate answer script for each group**Attempt all questions. Draw suitable diagrams wherever necessary.**The figures in the margin indicate full marks.***Group-A**

- (a) Describe the transport of oxygen from atmosphere to tissue.  
What is  $P_{50}$  and its significance? 10+2

or

Describe neuromuscular function with proper diagram and labeling. Describe how action potential in motor nerve produces action potential in the muscle. What is Myasthenia gravis and Lambert-Eaton syndrome? 4+5+3

**Group - B**

2. Answer any two of the following :—

- (a) Define jaundice. Compare obstructive and haemolytic jaundice. 2+5

- (b) What is baroreceptor? Describe the role of baroreceptor in the maintenance of blood pressures with proper diagram and labeling. 2+5

- (c) What do you mean by immunity? What are the different types of immunity? Give an account of humoral immunity. 1+2+4

**Group - C**

Write short notes on any four of the following :— 4 x 3

- a) B.E.R. b) Secondary active transport. c) Erythropoietin, d) Augmented limb leads in ECG. e) A pncustic centre.

**Group- D**

4. Give the physiological explanation of the following : 4X3

- a) Brief period of straining causes tachycardia and rise in peripheral resistance.  
b) Low plasma protein level in blood causes oedema.  
c) Increase in pulmonary ventilation continues even after exercise is over.  
d) RBC in venous blood is larger than in arterial blood.