

ANATOMY

PAPER-I

Time : 3 hours

ANT/D/11/02/I

Max. Marks : 100

**Attempt all questions in order.
Each question carries 10 marks.**

1. Describe the development of palate along with its congenital anomalies. What are the factors that help normal development of palate? 5+3+2
2. Describe embryological basis of spina bifida. 10
3. Describe the process of Gastrulation along with its molecular regulation. What factors can hamper the development of fetus at this stage. 5+3+2
4. Give the homologues of the derivatives of the mesonephric and paramesonephric ducts in both sexes. 5+5
5. Give brief account of circulatory changes at birth. 10
6. Draw histomicrographic picture of spleen. Describe circulation theories of spleen with functional correlations. 10
7. Draw histological picture of mammary gland in different stages of development and correlate it with their functions. 10
8. Describe the general plan of microscopic structure of gastrointestinal tract. Correlate the regional modifications with its functions. 10
9. Draw microscopic picture of hairy skin. Add a note on pilosebaceous unit. 10
10. Describe microscopic structure of different types of cerebral cortex and correlate it with its functions 5+5

ANATOMY

PAPER- II

Time : 3 hours

ANT/D/11/02/II

Max. Marks : 100

Attempt all questions in order.

Each question carries 10 marks.

1. Enumerate the speech areas of brain with their exact location. Add a note on their blood supply and effect of lesions of these regions. 5+5
2. Write the connections of medial longitudinal fasciculus. 10
3. Discuss the basis of Parkinsonism along with the advances in its therapy. 3+5
4. Describe the auditory pathways. State the tonotopic organization in the pathway. 5+5
5. Describe the facial nerve under the following headings: 5+5
 - a. Nuclei with their functional columns
 - b. Intra-cranial course
 - c. Applied anatomy
6. Name the neuronal components of cerebellar cortex with their afferents and efferents. Add a note on the developmental subdivision and function. 4+3+3
7. Enumerate the nuclei of hypothalamus with their location and connections. Correlate the same with their function. 3+3+4
8. Describe the ventricular system of the brain with special emphasis on the sites of blood brain barrier. Add a note on the choroid plexus of each ventricle. 5+2+3
9. Describe the components, connections and blood supply of internal capsule with its clinical significance. 3+3+4
10. Draw and describe transverse section of mid brain at the level of superior colliculus. Add a note on its blood supply. 4+4+2

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PAPER- III

Time : 3 hours
Max. Marks : 100

ANT/D/11/02/III

Attempt all questions in order.
Each question carries 10 marks.

1. Describe the shoulder joint under the following headings: 5+5
 - a. Movement of abduction and scapulohumeral mechanism
 - b. Factors responsible for its stability

2. Describe left lung under the following headings: 3+3+4
 - a. Bronchopulmonary segments with their surgical importance
 - b. Structures at its roots
 - c. Blood air barrier and its applied importance

3. Describe the club foot. Discuss the anatomy of different types of abnormalities associated with it. Give the anatomical basis of correction of the same. 3+3+4

4. Describe the paranasal sinuses. Add a note on the surgical and radiological anatomy of the same. 5+3+2

5. Give anatomical basis of mandibular and maxillary nerve block in trigeminal neuralgia and dental anaesthesia. 6+4

6. Write briefly on cerebral arteriography. What are the pathological conditions in which it is indicated? 5+5

7. Describe the vascular segments of kidney with its clinical significance. Add a note on the pattern of blood vessels through it. 5+5

8. Describe the nerve supply of urinary bladder in brief. Add a note on neurogenic bladder following spinal cord injuries. 5+5

9. Write the special investigations used to visualize the gastrointestinal tract. 10

10. Write the sequence of appearance of centres of ossification around the knee and its medicolegal importance. 5+5

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PAPER- IV

Time : 3 hours
Max. Marks : 100

ANT/D/11/02/IV

Attempt all questions in order.
Each question carries 10 marks.

1. Describe the lymphatic drainage of uterus with its clinical significance. 10
2. Describe different types of neuroglial cells with their functions. 10
3. Describe the celiac ganglion under the following headings: 1+3+3+3
 - a. Location
 - b. Components
 - c. Branches
 - d. Extent of distribution
4. Give brief account of superficial perineal pouch under the following headings : 3+3+4
 - a. Boundaries
 - b. Contents; and
 - c. Clinical relevance
5. Describe the types of muscles according to their action with examples of each. 10
6. Describe lacrimal apparatus and give its nerve supply. 10
7. Write characteristics of pulp space and give its clinical significance. 10
8. Describe intrinsic and extrinsic muscles of eye ball with their nerve supply and add a note on strabismus. 10
9. Write briefly on the cardiac plexus with its communication. 10
10. Describe the venous drainage of lower limb with its clinical significance. 10
