ANATOMY

PAPER – I

ANT/D/16/02/I

Time : 3 hours
Max. Marks : 100

Important instructions:

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write short notes on:

1. a) Histological structure of pulmonary alveolus. 6+4
   b) Histological basis of respiratory distress syndrome.

2. a) Write the general plan of microstructure of gastro-intestinal tract. 5+5
   b) Correlate the regional modifications with functions.

3. a) Development of thoraco-abdominal diaphragm. 5+(3+2)
   b) What are its developmental defects and their effects on surrounding structures?

4. Development and microanatomy of urinary bladder. 5+5

5. a) Define neurulation. 2+(4+4)
   b) Molecular regulation involved in formation of neural tube. Add a note on neural tube defects.

6. Microscopic structure of hepatic lobule, portal lobule and portal acinus. 4+3+3

7. Microstructure of filteration apparatus of the kidney. 10

8. a) What is magnetic resonance imaging? 3+(4+3)
   b) Enumerate its advantages and disadvantages.

9. a) Draw a labeled diagram to illustrate cross sectional anatomy at the level of 3rd thoracic vertebra. 6+4
   b) Embryological basis of epispadius.

10. a) Turner's syndrome 5+5
    b) Lyon's hypothesis

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