

2019

PHYSIOLOGY

Paper — I

Full Marks : 50

Time : 3 hours

Answer **all** questions

The figures in the right-hand margin indicate marks

Draw diagrams wherever necessary

1. Describe Bilirubin metabolism - Formation and Fate. What is Van den Bergh test? What is physiological jaundice? Describe role of phototherapy in physiological jaundice. 8 + 2 + 3 + 2
2. Describe the nervous regulation of respiration. Explain effect of carbon dioxide on respiration. 8 + 7

(Turn Over)

(2)

Or
Describe the molecular basis of muscle contraction. Define the motor unit and give its significance. 15

3. Write short notes on the following : 2 x 5

- (i) Erythroblastosis foetalis
- (ii) Myasthenia gravis
- (iii) Role of CCK-PZ
- (iv) Sino-atrial node
- (v) Factors affecting peripheral resistance.

4. Give physiological basis/explain the following : 2 x 5

- (a) Why does blood not clot in circulation ?
- (b) Pulmonary oedema occurs during rapid ascent.
- (c) Increase in heart rate during exercise.

(3)

(d) Stored blood not suitable of transfer of WBCs, platelets to a recipient

(e) Occurrence of achalasia cardia.

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- (ii) Myasthenia gravis
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- (iv) Sino-atrial node
- (v) Factors affecting peripheral resistance.

Give physiological basis/explain the following : 2 x 5

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