

PG 3rd Semester Examination, 2010

HUMAN PHYSIOLOGY

PAPER—XV

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

**Write the answers to questions of each Unit
in separate books**

UNIT—29

Answer any two questions

1. (a) Elaborate the endothelium and non-endothelium mediated vasodilation.

(b) Describe the flow and diffusion-limited transport from the capillaries.

5 + 5

(Turn Over)

2. (a) State the location and histological innervation and of baroreceptors.
- (b) How does baroreceptor play important function during haemorrhage? 2 + 3 + 5
3. (a) What are chronic obstructive pulmonary disease (COPD)?
- (b) Discuss the reasons for pulmonary obstruction in bronchial asthma and mode of treatments. 2 + 8
4. Write notes on: 5 + 5
- (i) Origin and maintenance of basic respiratory rhythm.
- (ii) Regulation of blood volume by atrial volume receptors.

UNIT-30

Answer any *two* questions

1. (a) How renal endocrine activity acts so modify sympathetic action in controlling blood pressure?

- (b) Mention the role of nitric oxide (NO) in adrenergic action. 7 + 3
2. (a) State the water permeability characteristics of different segments of renal tubule.
- (b) Where and how in the renal tubule, free water is formed? What is transtubular potential? 3 + (5 + 2)
3. (a) Blood flow and platelet play a key role on anticoagulation – explain it. Name some commercial anticoagulants.
- (b) Discuss the types of Cholinergic receptors and their functions. (5 + 1) + (1 + 3)
4. Write on the intrinsic and extrinsic neural control of gastrointestinal tract. 5 + 5
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