2020

FOOD AND NUTRITION (Honours)

Paper: FNTH - DC - 1 (Human Physiology - I) (CBCS)

Full Marks: 25 Time: Two Hours

The figures in the margin indicate full marks.

Instruction to students for Page Limitation

For all one (01) mark questions, students should answer within 1 page of an A4 paper; for each five marks (05) question: Max. 1 page of an A4 paper (including figure / diagram, if any) and for 10 marks (10) question: Max. 2½ page of an A4 paper (including figure / diagram, if any), should be used.

Answer any five of the following :

 $1 \times 5 = 5$

- (a) Differentiate between plasma and serum.
- (b) Name the layers of an artery.
- (c) How cardiac output is dependent on stroke volume?
- (d) Which cell is responsible for the acidic environment in stomach?
- (e) Mention the location of gallbladder in human body?
- (f) Write down the end product of aerobic respiration.
- (g) What do you mean by crown of tooth?
- (h) What is the main composition of human cell plasma membrane?
- 2. Answer any two of the following:

 $5 \times 2 = 10$

(a) What do you mean by auscultation? State the difference between Type 1 and Type 2 pneumocytes.
2+3

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- (b) Explain the role of different types of tooth in the chewing process. Bone density decreases gradually with increasing age — Justify. 3+2
- (c) What do you mean by hemostasis? Explain the process with a suitable diagram. 1+4
- 3. Answer any one of the following:

10×1=10

- (a) Mention the changes occur in breathing during exercise. What do you mean by tidal volume? Describe the role of rennin-angiotensin system in blood pressure regulation. 4+2+4
- (b) With a suitable diagram explain the fluid mosaic model of plasma membrane. Briefly discuss the function of ribosome and endoplasmic reticulum in cell metabolism. 5+(2½+2½)

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