



WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 1st Semester Examination, 2019

FNTACOR02T-FOOD AND NUTRITION (CC2)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

GROUP-A

1. Answer any *ten* questions from the following: 1×10 = 10
- (a) Name two major proteins which mediate tight junction.
 - (b) What is meant by compliance of the lungs?
 - (c) What is the function of Endoplasmic Reticulum?
 - (d) Mention two non Respiratory functions of lungs.
 - (e) Define mean electrical axis of the heart.
 - (f) What is purpura?
 - (g) Name two anticoagulants used in the laboratory.
 - (h) What is Cardiac Index?
 - (i) What is the importance of vitamin K in blood coagulation?
 - (j) What is obligatory urine volume?
 - (k) State the pH of blood and urine.
 - (l) Name two hormones secreted by Kidney.
 - (m) What is the importance of AV nodal delay?
 - (n) State the cause of first sound of heart in cardiac cycle.

GROUP-B

2. Answer any *four* questions from the following: 5×4 = 20
- (a) What is juxtaglomerular apparatus? Discuss its functions. 2+3
 - (b) Explain the oxygen dissociation curve with special reference to its shape. 5
 - (c) State the difference between peripheral and integral membrane protein. How cholesterol affects membrane fluidity? 2+3
 - (d) State Fick's Principle. How cardiac output is determined by using this principle? 2+3
 - (e) What is the Normal core body temperature? Mention the ways in which body can gain heat. 1+4
 - (f) Write a note on regulation of coronary blood flow. 5

GROUP-C

3. Answer any *one* question from the following: 10×1 = 10
- (a) Describe the different events of cardiac cycle. Distinguish between systemic and pulmonary circulation. 6+4
 - (b) Explain in detail the structure of skeletal muscle and cardiac muscle. 5+5

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