WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 1st Semester Examination, 2020, held in 2021

FNTACOR02T-FOOD AND NUTRITION (CC2)

PHYSIOLOGY IN NUTRITION

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.

Answer any *four* questions from the following

10×4 = 40

1. Mention the events in the cardiac cycle. What do you understand by blood grouping? Explain. What are the hazards of blood transfusion?
5+3+2

2. What is cardiac output? Mention the factors affecting it. What are the functions of neutrophils and lymphocytes?
2+4+4

3. Explain the factors affecting Oxygen-hemoglobin dissociation curve. How is carbon dioxide transported in blood? What is chloride shift?
4+4+2

4. What is blood coagulation? Explain its mechanism. Mention the importance of vitamin K in blood coagulation. What do you mean by the term anticoagulant?
2+4+2+2

5. What do you understand by the term heart sounds? Explain their significance. Compare between adult and fetal hemoglobin.
2+4+4

6. Define the following (any *five*):
2×5 = 10
   (a) Blood pressure
   (b) Lymph
   (c) Tidal volume
   (d) Pulse pressure
   (e) Formed elements
   (f) Radial pulse.

7. (a) Describe the features of coronary circulation.
4
   (b) Write a note on:
3+3
   (i) Functions of platelets
   (ii) Non-excretory functions of lung.

8. What are the specialized conducting systems of the heart? What is pacemaker potential? Write a note on mechanics of breathing.   4+2+4

9. What is erythropoiesis? Explain the factors affecting it with special reference to nutrients.   4+6

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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