## U.G. 1st Semester Examination - 2020 FOOD & NUTRITION [HONOURS] Course Code : F&N-H-CC-T-1

Full Marks : 40 Time :  $2\frac{1}{2}$  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.

- 1. Answer any **five** questions:  $2 \times 5 = 10$ 
  - a) State the functions of smooth endoplasmic reticulum.
  - b) Define homeostasis.
  - c) What is sarcomere?
  - d) What is peristalsis?
  - e) Define tidal volume. State its normal value in adult healthy male.
  - f) State the Frank Starling Law of Heart.
  - g) State the cause of Erythroblastosis Foetalis.

2. Answer any **two** questions of the following:

5×2=10

- a) Explain isotonic and isometric muscle contraction with suitable examples. 3+2
- b) What is negative feedback system? Explain with an example. 3+2
- c) Describe the mechanism of oxygen transport through blood. 1+4
- d) Describe briefly the functions of liver. 5
- 3. Answer any **two** questions of the following:  $10 \times 2=20$ 
  - a) Describe fluid mosaic model of plasma membrane with a suitable diagram. Enumerate the functions of Plasma membrane. 5+3+2
  - b) Describe briefly the events occur in cardiac cycle with suitable diagram. 10
  - c) Describe the process of carbohydrate digestion and absorption in the gastro-intestinal system. Write a note on SGLUT. 5+3+2
  - d) What is hemostasis? Describe the mechanism of blood coagulation. 3+7

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