

**B.Sc. 1st Semester (Honours) Examination, 2018 (CBCS)**

**Subject : Nutrition**

**(Nutritional Physiology-I)**

**Paper : CC-I**

**Time: 2 Hours**

**Full Marks: 40**

*The figures in the margin indicate full marks.*

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

1. Answer *any five* questions: 2×5=10
  - (a) What is peristalsis?
  - (b) Mention the location and function of Kupffer cell.
  - (c) What do you mean by arterial hypoxia?
  - (d) Delineate 'cholecystitis'.
  - (e) Name any two blood clotting factors.
  - (f) What is tidal volume?
  - (g) Specify two important functions of bile in our body.
  - (h) Mention two important functions of mitochondria.
  
2. Answer *any two* questions: 5×2=10
  - (a) Elucidate the fluid mosaic model of plasma membrane with a diagram. What do you mean by membrane asymmetry? 3+2=5
  - (b) Enlist enzymes present in gastric juice and state their role in digestion. What is Brunner's gland? 3+2=5
  - (c) Write short notes on sino-aortic mechanism of blood pressure regulation. 5
  - (d) Write composition and function of pancreatic juice. 3+2=5
  
3. Answer *any two* questions: 10×2=20
  - (a) Briefly discuss the structure and function of endoplasmic reticulum. 5+5=10
  - (b) Define coagulation. Why is calcium ion necessary for blood clotting? Illustrate the intrinsic and extrinsic pathways of blood coagulation schematically. 2+2+6=10
  - (c) Describe briefly the structure of skeletal muscle. Discuss the mechanism of muscle contraction. What is Rigor mortis? 3+5+2=10
  - (d) What is cardiac cycle? Write the sequential event of cardiac cycle in details. 2+8=10