



'সমানো মন্ত্র: সমিতি: সমানী'

**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 3rd Semester Examination, 2023

**CC6-PHYSIOLOGY**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.*

**GROUP-A**

1. Answer any **five** questions from the following: 1×5 = 5
- (a) Define extrasystole.
  - (b) What is hypertension?
  - (c) What do you mean by sino-aortic nerves?
  - (d) What is tachycardia?
  - (e) Why cardiac muscle does not fatigue?
  - (f) How all-or-none law is applicable to cardiac muscle fiber?
  - (g) What do you understand by heart failure?
  - (h) What is purpura?

**GROUP-B**

**Answer any three questions from the following** 5×3 = 15

2. Describe the phasic changes in coronary blood flow. 5
3. (a) What is cardiac failure? What are its causes? 1+2  
(b) What is phonocardiogram? 2
4. Describe the role of chemoreceptors in control of blood pressure. 5
5. (a) What is blood pressure? 2  
(b) Name the methods used for measuring blood pressure. 2  
(c) How much is normal blood pressure? 1
6. (a) What do you mean by angina pectoris? 2

- (b) What is the surgical treatment for coronary disease? 3

**GROUP-C**

**Answer any two questions from the following** 10×2 = 20

7. Describe the different methods for measuring cardiac output. 10
8. (a) Define Frank Starling's law of heart. What is vasomotor reflex? 3+2  
(b) Enumerate the factors affecting coronary blood flow. 5
9. (a) Write down the principles of echocardiogram. 4  
(b) Mention the location and functions of cardiac valves. 4  
(c) What is portal circulation? 2
10. Describe various events in the cardiac cycle. 10

—x—