450/Phy. 22-23/32512

B.Sc. Semester-III Examination, 2022-23 PHYSIOLOGY [Honours]

Course ID: 32512 Course Code: SH/PHY/302/C-6(T)
Course Title: Circulation

Time: 1 Hour 15 Minutes Full Marks: 25

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** of the following questions:

 $1 \times 5 = 5$

- a) What is angioplasty?
- b) Define cardiac index.
- c) Name any two methods for measuring cardiac output.
- d) What is 'Circle of Willis'?
- e) Write Bezold-Jarisch reflex.
- f) What is athletic bradycardia?
- g) Define echocardiography.
- h) What is 'black-out'?

2. Answer any two questions of the following:

 $5 \times 2 = 10$

- a) What is shock? Discuss the cardiovascular compensatory changes that occur during shock.
- b) What is pacemaker potential? Briefly discuss the origin and spread of cardiac impulse.

1+(1+3)

- c) Briefly discuss the different factors responsible for hypertension.
- d) Briefly describe the venticular events of cardiac cycle.5
- 3. Answer any **one** question of the following:

 $10 \times 1 = 10$

- a) Discuss the regulation of coronary blood flow. What is angina pectoris? 8+2
- b) What is cardiac vector? Determine the mean electrical axis of the heart. State the role of 'Bundle of His' on ECG.
