

2022

Physiology

[HONOURS]

(CBCS)

(B.Sc. Third Semester End Examination-2022)

PAPER-C5T

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

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

Illustrate the answers wherever necessary

Group - A

1. Answer any five questions of the following: 5x2=10

- a) Define cardiac index.
- b) What do you mean by myocardial infarction?
- c) What is Starling's law of heart?
- d) Why S.A. Node is called pacemaker of heart?
- e) What is nodal delay in heart?
- f) Write location of vasomotor center.
- g) Name the internodal fibres of human heart.
- h) What is heart block?

(2)

Group - B

2. Answer any four questions of the following: **4x5 = 20**
- a) Write the characteristics and importance of different waves of ECG. 5
- b) Discuss role of baroreceptor and chemoreceptor in blood pressure regulation. $2\frac{1}{2} + 2\frac{1}{2}$
- c) How atherosclerotic plaque is formed? What do you mean by ischemia?
- d) Describe the process of determination of cardiac output by Fick's method. 5
- e) Explain the following properties of cardiac muscle
- i) refractory period
- ii) all or none response 3+2
- f) Discuss the pressure-volume changes of ventricles during cardiac cycle. 5

Group - C

3. Answer any one question: **1x10 = 10**
- a) i) Define blood pressure
- ii) Write about different factors effecting blood pressure.
- iii) Describe the mechanism of transmission of cardiac impulse through special junctional tissues of heart. 2+3+5
- b) i) Mention the importance of coronary circulation.
- ii) Write about different leads of ECG.

(3)

- iii) Discuss the process of different events of cardiac cycle. 2+3+5
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