

DEPARTMENT OF PHARMACEUTICAL SCIENCES & TECHNOLOGY
BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(Internal Assessment I)

CLASS: BPHARM
BRANCH: PHARMACY

SEMESTER: II
SESSION: SP 2025

SUBJECT: BP204T PATHOPHYSIOLOGY

TIME: 2.00 Hour

FULL MARK: 30

PART I

A. Objective-type questions (Answer all questions) (5 x02=10 marks)

1. Define physiology. Describe the physiological function of a living organism.
2. (i) Which belongs to cell adaptation? a) Necrosis b) Apoptosis c) cell membrane damage d) Atrophy
(ii) Hypoxia/ischemia causes one of the following in cells a) Increase ATP production b) Decrease ATP production c) Increase blood flow d) Increase oxygen supply
(1+1)
3. Define cardiac output and its relation to physiology and pathophysiology.
4. Define fibrillation and defibrillation, and their role in cardiac pathophysiology.
5. Define apoptosis and necrosis.

PART II

B. Long Answers (Answer any one out of two) (01x10=10 marks)

1. Elaborate on ischemic heart disease's causes, factors, types, and consequences in human pathophysiology.
2. Define cell and cell injuries. Elaborate on the structure and function of the cell and organelles with appropriate diagrams in physiological and pathophysiological conditions.

PART III

C. Short Answers (Answer any two out of three) (02x05=10 marks)

1. Describe cardiac conduction systems and their role in pathophysiology.
2. Elaborate on different types of cell adaptations with appropriate diagrams.
3. Describe homeostasis and feedback systems with appropriate diagrams.

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