BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END-SEMESTER EXAMINATION)

CLASS: BPHARM **SEMESTER: II**
BRANCH: PHARMACY **SESSION: SP/2019**

SUBJECT: BP204T PATHOPHYSIOLOGY

TIME: 3.00 Hours **FULL MARK: 75**

INSTRUCTIONS:

1. **The missing data, if any, may be assumed suitably.**
2. **Before attempting the question paper, be sure that you have got the correct question paper.**
3. **Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.**
4. **This question paper consists of (03) three parts. Read the part wise instructions before attempting the questions.**

PART-I
Objective types questions (Instruction: Answer all questions)

Q1. (10 x 2 = 20 Marks)

A. Define Etiology, Pathogenesis & Pathophysiology?

B. Define cell adaptation? Write the different types of cellular adaptation?

C. Define Heart Failure? What are the different types of heart failure?

D. Define Neoplasia, Neoplasm & cancer?

E. Define Homeostasis?

F. What are the cardinal signs of inflammation?

G. Illustrate the pathophysiology of Bronchial asthma?

H. What are the symptoms of Parkinson's disease?

I. How a cancer cell is different from normal cell?

J. Define the coagulation cascade?

PART-II
Short Answers
(Instruction: Answer seven out of nine questions)

(7 x 5 = 35 Marks)

Q2. Illustrate diagrammatically the ultrastructural changes during cell injury due to hypoxia-ischemia?
Q3. Explain in detail about the different types of cell adaptation with examples?
Q4. Classify Diabetes Mellitus? Schematically represent the mechanisms involved in pathogenesis of different types of Diabetes Mellitus?
Q5. Distinguish between different types of Tumor? Analyze the nomenclature of different cancer with suitable examples?
Q6. Classify the different types of inflammation? Write a detail note on Acute inflammation (AI) with a key focus on pathogenesis of increased vascular permeability?
Q7. Explain Alzheimer's disease & Parkinson's disease?
Q8. Describe the evolution of right heart failure & left heart failure?
Q9. Explain Cell injury & its etiology in detail?
Q10. Outline the mechanisms of generation of free radicals by reduction of oxygen?

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PART-III
Long Answers
(Instruction: Answer two out of three questions)

(2 x 10 = 20 marks)

Q11. Define Apoptosis & Necrosis? Illustrate the changes during apoptosis & necrosis (preferentially with the help of diagram)?

Q12. Summarize the mediators of inflammation? Illustrate the Arachidonic acid metabolites via cyclooxygenase pathway?

Q13. Summarize the classification of cancer with the tissue of origin and what are the common types of cancer? Illustrate cell-cycle diagrammatically and write the pathogenesis of cancer focusing on common traits of cancer cells?

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