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| Name: |  UPES UNIVERSITY WITH A PURPOSE |
| Enrolment No: | |

**UNIVERSITY OF PETROLEUM AND ENERGY
STUDIES**

End Semester Theory Examination, May 2023

Course: Pathophysiology

Program: B.Pharmacy

Course Code: BP204T

Instructions: All the sections are compulsory.

Semester: II

Time 03 hrs.

Max. Marks: 75

SECTION A

1. Each Question will carry 1 Marks.
2. Instruction: Select the correct answer(s)/ Objective type questions.
Answers all the 20 questions.

| S. No. | CO | Questions | Marks |
|--------|-----|--|-------|
| Q1 | CO2 | Which of the following are characteristics of intrinsic asthma? a) Exercise is a trigger. b) Cold air is a trigger. c) Allergy mediated. d) Hormonal changes are triggers. | 1 |
| Q2 | CO1 | Parkinson disease is marked by a lack of which chemical in the brain? a) Serotonin b) GABA c) Dopamine d) Norepinephrine e) None of the above | 1 |
| Q3 | CO2 | Define Jaundice. | 1 |
| Q4 | CO2 | The causative of Tuberculosis produces Tuberculin, it is a/an a) enzyme b) hormone c) endotoxin d) exotoxin | 1 |
| Q5 | CO1 | Define osteoporosis? | 1 |
| Q6 | CO2 | Which combination of systolic and diastolic pressure tells a person has stage 1 hypertension? a) Less than 120 mm Hg Systolic and less than 80 mm Hg diastolic b) 120-139 mm Hg Systolic and 80-89 mm Hg diastolic c) 140-159 mm Hg Systolic and 90-99 mm Hg diastolic d) More than 160 mm Hg Systolic and more than 100 mm Hg diastolic | 1 |

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| Q7 | CO1 | Localized area of ischaemic necrosis is mostly associated with: a) Hematoma b) Petechiae c) Infarction d) Emboli formation. | 1 |
| Q8 | CO2 | Mary Mallon was an asymptomatic carrier of.....disease. | 1 |
| Q9 | CO1 | Oliguria is.....? | 1 |
| Q10 | CO2 | Which statement is false regarding airway remodeling? a) There is an increase in goblet cells and mucus production. b) Thickened smooth muscle cells with hyperplasia and hypertrophy. c) Decreased collagen deposition in airways. d) Increased vascularity in the airway wall. | 1 |
| Q11 | CO2 | Basedow's disease is due to a) Hyperactivity of adrenal cortex b) Hypoactivity of the thyroid gland c) Hyperactivity of thyroid gland d) Hypoactivity of islets of Langerhans | 1 |
| Q12 | CO1 |is the causative agent of Syphilis. | 1 |
| Q13 | CO2 | HIV parasitizes ____ a) Y-helper cells b) T-helper cells c) K-helper cells d) None of the above | 1 |
| Q14 | CO2 | The most common cause of UTI is ? a) Escherichia coli (E.coli) b) Staphylococcus aureus (S.aureus) c) Chlamydia d) Mycoplasma | 1 |
| Q15 | CO2 | In a state of shock there is: a) A decreased hydrostatic pressure and increased osmotic pressure. b) Cardiovascular collapse. c) Active process leading to increased volume of blood. d) Decreased pulse rate. | 1 |
| Q16 | CO2 | What is hypoxaemia and hypercapnia? | 1 |
| Q17 | CO1 | is the main virulence factor of peptic ulcer causing pathogen. | 1 |
| Q18 | CO2 | Define hemophilia. | |

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| Q19 | CO2 | Diabetes mellitus is a disorder characterized by hyperglycemia. Which of the following are not the common characteristic features of type 2 diabetes mellitus? a) Impaired insulin secretion. b) Increased Insulin resistance. c) Diabetic ketoacidosis. d) Excessive hepatic glucose production. | 1 |
| Q20 | CO1 | What is Electrolyte imbalance? | 1 |

SECTION B

1. Each question will carry 10 marks.
2. Instruction: Long Answer type questions (Answer any two questions out of three questions)

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| Q1 | CO3 | Discuss the various types of Hypertension and role of RAAS in regulating blood pressure. | (5+5) |
| Q2 | CO1, CO2 | Define Epilepsy. Classify the various types of Epilepsy, with their signs and symptoms. | (1+7+2) |
| Q3 | CO1, CO3 | What is carcinogenesis? Explain the various types and pathogenesis of Cancer. | (1+4+5) |

SECTION C

1. Each question will carry 5 marks.
2. Instruction: Short Answer type questions. (Answer any seven questions out of nine questions.)

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| Q1 | CO3 | What is End Stage Renal Disease? Discuss the pathophysiology of Chronic Renal Failure. | (5) |
| Q2 | CO1, CO3 | What are metabolic disorders? Explain the pathogenesis and complications of Diabetes mellitus. | (5) |
| Q3 | CO3 | Discuss in detail the various vascular events involved in the process of Inflammation. | (5) |
| Q4 | CO1, CO3 | Define Megaloblastic Anemia? Discuss the pathophysiology and diagnosis of Megaloblastic Anemia. | (5) |
| Q5 | CO1, CO3 | Define "COPD". Enlist the etiology factors and pathophysiology of the COPD. | (5) |
| Q6 | CO3 | Differentiate between Rheumatoid arthritis and Gout | (5) |
| Q7 | CO2 | A 52-yr-old woman comes to his primary care clinic with the chief complaint of squeezing, pressure and pain in the chest. She has no pain currently. She describes the pain as a burning sensation in the middle of the upper stomach that radiates to her mid upper back & left hand. It seems to come only with exertion and not at rest. She noticed it more last week while vacuuming the house; she has had no pain since then. She says the pain usually lasts 10 to 15 min and goes away if she takes a break. a) Identify the disease. b) Explain its pathogenesis | (1+4) |

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| Q8 | CO3 | Explain various types of cellular adaptations? Give examples. | (5) |
| Q9 | CO3 | Write a note on Inflammatory Bowel disease. | (5) |
| | | Total | 75 |