Name: **Enrolment No:**	

UPES
End Semester Examination, May 2025

Program Name: B Pharm — **Semester : 2nd**
Course Name: Pathophysiology — **Time : 03 hrs**
Course Code: BP204T — **Max. Marks : 75**
Instructions: Read all questions carefully.

S. No.	Section A Short answer questions/ MCQ/T&F (20Qx1M= 20 Marks)	Marks	COs
Q 1	Which of the following is an example of cellular adaptation to increased workload? A) Atrophy B) Hypertrophy C) Dysplasia D) Necrosis	1	CO1
Q 2	Atherosclerosis is primarily characterized by: A) Hypertension B) Inflammation of arteries C) Lipid deposition in arterial walls D) Thickening of venous walls	1	CO2
Q 3	Which mediator is mainly responsible for pain in inflammation? A) Histamine B) Bradykinin C) Interleukin-1 D) Prostaglandin	1	CO1
Q 4	Which hormone is deficient in diabetes mellitus? A) Glucagon B) Insulin C) Cortisol D) Thyroxine	1	CO3
Q 5	Cell swelling is a reversible type of cell injury. (True/False)	1	CO2
Q 6	Inflammation always indicates infection. (True/False)	1	CO2
Q 7	Hemophilia is more common in females than males. (True/False)	1	CO1
Q 8	Tuberculosis is caused by a virus. (True/False)	1	CO1
Q 9	_____ is the clinical term for high blood pressure.	1	CO1
Q 10	_____ refers to abnormal growth with loss of cell uniformity and architecture.	1	CO2
Q 11	A characteristic symptom of Parkinson's disease is _____.	1	CO1
Q 12	In gout, _____ crystals accumulate in joints.	1	CO3
Q 13	Which diagnostic test is commonly used for detecting tuberculosis? A) ELISA B) Mantoux tuberculin skin test	1	CO1

	C) Western blot **D) Widal test**		
Q 14	**Syphilis is caused by:** **A) Treponema pallidum** **B) Chlamydia trachomatis** **C) Neisseria gonorrhoeae** **D) Mycobacterium tuberculosis**	**1**	**CO2**
Q 15	**Which test is commonly used to diagnose typhoid fever?** **A) Widal test** **B) PCR test** **C) Gram stain** **D) TB skin test**	**1**	**CO1**
Q 16	**The most common symptom of osteoporosis is:** **A) Weight gain** **B) Bone fractures** **C) Muscle weakness** **D) Skin lesions**	**1**	**CO1**
Q 17	**Which of the following is an autoimmune disease of the joints?** **A) Osteoporosis** **B) Rheumatoid arthritis** **C) Gout** **D) Osteomalacia**	**1**	**CO2**
Q 18	**Megaloblastic anemia is primarily caused by a deficiency of:** **a) Vitamin D** **b) Vitamin C** **c) Vitamin B12 and folic acid** **d) Vitamin K**	**1**	**CO3**
Q 19	**Alzheimer's disease is associated with the accumulation of:** **A) Lewy bodies** **B) Neurofibrillary tangles and beta-amyloid plaques** **C) Prions** **D) Viral inclusion bodies**	**1**	**CO1**
Q 20	**Hemophilia is a genetic disorder involving deficiency of:** **A) Platelets** **B) Hemoglobin** **C) Clotting factor VIII or IX** **D) Vitamin B12**	**1**	**CO2**
Section B **Long Answers (Answer any 2 out of 3)** **(2Q x 10M=20 Marks)**			
Q 1	**Describe in detail the pathogenesis and morphology of cell injury.**	**5+5**	**CO2**
Q 2	**Explain the mechanism, mediators, and types of inflammation.**	**2+2+6**	**CO3**
Q 3	**Explain the pathophysiology, clinical features, and complications of chronic obstructive pulmonary disease (COPD).**	**6+2+2**	**CO5**
Section C **Short Answers (Answer any 7 out of 9) 7X5** **(7Qx5M=35 Marks)**			
Q 1	**Define and explain any three types of cellular adaptation.**	**5**	**CO5**
Q 2	**Explain the basic principles of cancer development.**	**5**	**CO3**
Q 3	**Write briefly on the stages of wound healing.**	**5**	**CO2**

Q 4	**Discuss iron deficiency anemia: causes, symptoms, and treatment.**	**5**	**CO3**
Q 5	**Describe the pathophysiology of asthma.**	**5**	**CO2**
Q 6	**Differentiate between atrophy and hypertrophy with examples.**	**5**	**CO3**
Q 7	**Discuss the pathophysiology of congestive heart failure**	**5**	**CO4**
Q 8	**Explain the pathophysiology and complications of Parkinson's disease.**	**5**	**CO1**
Q 9	**Write a detailed note on sexually transmitted diseases: AIDS, syphilis, and gonorrhea.**	**5**	**CO5**