


<b>Name:</b>	 <b>UPES</b> UNIVERSITY WITH A PURPOSE
<b>Enrolment No:</b>	
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>End Semester Theory Examination, July 2020</b>	
<b>Course: Pathophysiology</b>	<b>Semester: II</b>
<b>Program: B.Pharma</b>	<b>Time 03 hrs.</b>
<b>Course Code: BP204T</b>	<b>Max. Marks: 75</b>
<b>Instructions: Read the Question Paper Carefully. All Sections are Compulsory</b>	

S. No.	CO	Multiple Choice Questions/Fill in the Blanks/ True or False (one marks each)	Marks
Q1	CO1	Hyperplasia is a. increase in the size of cells b. increase in the number of cells c. increase in the number of cellular organelles d. increase in the size of the organ e. always pathological	1
	CO2	In Alzheimer's disease, structural changes in the brain are due to: a. Degeneration of basal ganglia b. Deposition of amyloid plaques and neurofibrillary tangles c. Hypertrophy of frontal lobe neurons d. Degeneration of dopamine receptors	1
	CO3	Loss of appetite is known as a. Insomnia b. Nausea c. Anorexia d. Alopecia	1
	CO4	Normal hemoglobin value during pregnancy a. 12 ( $\pm$ 2) g/dl    b. 11.5 ( $\pm$ 0.5) g/dl    c. 17 ( $\pm$ 1) g/dl    d. 16 ( $\pm$ 2) g/dl	1
	CO5	Technique is used for the pathological diagnosis of tumours a. Histologic methods b. Frozen Section Technique c. Exfoliative Cytology d. All of the above	1
	CO1	Which of the following immune cell is unable to phagocytose during inflammation? a. neutrophils b. macrophages c. T-cells d. monocytes	1
	CO2	Conversion of Angiotensin I to Angiotensin II causes a. Vasoconstriction b. Vasodilation c. decrease in blood pressure d. None	1

CO3	Symptoms of Diabetes Mellitus do not include a. Pruritis a. Polyphagia b. Vulvitis c. Polydipsia	1
CO4	Sudden cardiac arrest means that the heart ... a. Stops beating b. Beats dangerously slow c. Has a cycle of beating and stopping d. Skip beats	1
CO5	.....is a chronic brain disorder caused by some inherent dysfunction of the brain, symptoms can include delusions, hallucinations, trouble with thinking and concentration, and lack of motivation. a. Parkinson's Disease b. Autism c. Schizophrenia d. Depression	1
CO1	Which of the following is a cell mediated mediator of inflammation? a. Adrenaline b. Histamine c. Pyridoxamine d. None	1
CO2	Which of the following type of cell in GIT is majorly responsible for secretion of mucus? a. Chief cell b. Parietal cell c. Goblet cell d. Peptic cells	1
CO3	Which of the following is a symptom of asthma? a. Fever b. Body pain c. Wheezing d. Headache	1
CO4	The branch of science dealing with the study of neoplasms or tumours is called..... a. Chemotherapy b. Oncology c. Pharmacology d. None	1
CO5	Normal blood pressure is regulated by which of the following mechanism a. Activities of renal system b. Activities of sympathetic nervous system c. Activities of endocrine system d. All of the above	1
CO1	Which of the following is not associated with atrophy? a. decreased smooth endoplasmic reticulum b. decreased rough endoplasmic reticulum	1

		c. decreased mitochondrial number d. decreased autophagic vacuoles	
	CO2	Quantitative abnormalities of polypeptide globin chain synthesis leads to a. Thalassaemia b. Haemophilia c. Haematuria d. Polycythaemia	1
	CO3	Alteration in urine volume to < 50 ml/day is known as ..... a. Oliguria b. Non oliguria c. Anuria d. Hyperuria	1
	CO4	Which test is used for the diagnosis of typhoid? a. VDRL Test b. Widal Test c. Schick Test d. None of the above	1
	CO5	Which of the following statements about angiotensin II is false? a. It causes vasoconstriction of the efferent arteriole b. It increases aldosterone production c. It is reduced in people with diabetes d. It is increased in renal acidosis	1
			<b>20</b>

### SECTION B

**Attempt all questions**

<b>Q2</b>		<b>All COs should be covered</b>	<b>20</b>
		Fill in the blanks	
	CO1	Increased permeability of vessels due to widened intercellular junctions and contraction of endothelial cells, is known as .....	1
	CO2	.....is the causative agent for Syphilis.	1
	CO3	.....is a disorder of purine metabolism manifested by the increased serum uric acid concentration (hyperuricemia).	1
	CO4	.....is used for the measurement of blood pressure	1
	CO5	.....is overproduction of Growth Hormone in adults following cessation of bone growth and is more common than gigantism.	1
	CO1	.....is the type of cell death that occurs after such abnormal stresses like ischemia and chemical injury and always pathologic.	1
	CO2	Biochemical theory of depression postulates a deficiency of.....	1
	CO3	In schizophrenic patients, symptoms including loss or a decrease in the ability to initiate plans, speak, express emotion or find pleasure is known as .....	1

	CO4	.....is a painless non-invasive and safe procedure whereby the electrical activity of the brain is registered, amplified and recorded by a number of electrodes placed in a specific manner on the head.	1
	CO5	In asthma, Sputum usually contains numerous eosinophils and diamond shaped crystals derived from eosinophils called.....	1
		<b>True or False</b>	
	CO1	Cells respond to increased demand and external stimulation by hyperplasia and hypertrophy and they respond to reduced supply of nutrients and growth factors by atrophy.	1
	CO2	A tophus meaning a porous stone is a mass of urates measuring few millimeters to few centimeters in diameter. It is located in the periarticular tissues as well as subcutaneously like hands and feet	1
	CO3	Aura is the beginning of the seizure and signals the focal onset of the seizure. The symptoms depend on the location of this focus. The feelings of the aura are often vague and indescribable, leading to extreme fear. Strange epigastric sensations, dreamlike experiences, unpleasant smells, etc. may occur.	1
	CO4	Enteric fever is caused by mycobacterium leprae.	1
	CO5	Molecular hallmark of cancer is defined as acquired characteristics which transform phenotypically normal cells into malignant cells and promote progression of malignant cells while damaging the host tissue.	1
	CO1	Exudate is excess, extravascular fluid with low protein content (specific gravity of 1.012 or less); it is essentially an ultra-filtrate of blood plasma resulting from elevated fluid pressures or diminished plasma osmotic forces.	1
	CO2	End Stage Renal Disease is a progressive, reversible deterioration in renal function in which the body's ability to maintain metabolic, fluid and electrolyte balance fails resulting in uremia or azotemia	1
	CO3	Acute renal failure Syndrome characterized by rapid onset of renal dysfunction, chiefly oliguria (urine output less than 1 ml/kg in infants; 0.5 ml/kg in children and less than 400 ml or 500 ml in 24 h in adults) or anuria and sudden increase in metabolic waste products like urea and creatinine in the blood with the consequent development of uremia.	1
	CO4	Patients of duodenal ulcer have rapid emptying of the stomach so that the food which normally buffers and neutralizes the gastric acid passes down into the small intestine, leaving the duodenal mucosa exposed to the aggressive action of gastric acid	1
	CO5	Dopaminergic pathways are involved in many functions of the brain such as executive function, learning, reward, motivation, and neuroendocrine control.	1
			<b>20</b>

**SECTION C**

**Attempt all questions (Choices are there)**

<b>Q3</b>		<b>All COs should be covered each question carry five marks</b>	<b>35</b>
1	CO1	Define Inflammation. Give three causes of cell injury. <b>Or</b>	2+3

		Define hypertrophy? Give one example of each (i) pathological hypertrophy (ii) physiologic hyperplasia (iii) pathologic atrophy.	
2	CO2	Define 'Hypertension'. Give the etiological factors responsible in causing hypertension. <b>Or</b> Define Rheumatoid arthritis. Give the pathologic events in points occur in rheumatoid arthritis.	2+3
3	CO3	Name the causative agent, mode of transmission, signs and symptoms for Leprosy. <b>Or</b> Name the causative agent, mode of transmission, signs and symptoms for Typhoid.	2+3
4	CO4	Classify the different types of Epilepsy. Give symptoms of Epilepsy disorders. <b>Or</b> Define Emphysema. Give the clinical manifestations of COPD.	3+2
5	CO5	Write the role of neurotransmitters in diseases (i) Parkinson's Disease (ii) Depression <b>Or</b> Define Alzheimer. What are the causative factors responsible in causing Alzheimer?	5
6	CO3	What is Megaloblastic Anemia? How will you diagnose megaloblastic anemia.	2+3
7	CO4	What is AIDs? Give the complications of AIDs.	2+3
			<b>35</b>
		<b>Total</b>	<b>75</b>