

Name:
Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Theory Examination, May 2022

Course: Human Anatomy and Physiology-II

Program: B.Pharm

Course Code: BP 201T

Instructions: Read the Question Paper Carefully.

Semester: II

Time 03 hrs.

Max. Marks: 75

SECTION A

S. No.	CO	Multiple Choice Questions /Objective type Questions/One line answer/ True or False (one marks each)	Marks
Q1			20
1	CO1	If there is an injury in the hypothalamus region of the brain, it is most likely to affect a. regulation of body temperature b. decision making c. co-ordination during locomotion d. short-term memory	1
2	CO2	The basic functional unit of a human kidney is known as a. Neuron b. Nephron c. Pyramid d. Cortex	1
3	CO3	Define “Vital Capacity” in respiration process.	1
4	CO4 is the function of mucus secreted by the stomach. a. Digest fats b. Protection of the stomach lining c. Kills germs in the food d. Digest proteins	1
5	CO5	The hormones secreted from adrenal glands are (tick all that apply) a. Aldosterone b. Cortisone c. Nor-epinephrine d. thyroxine	1
6	CO1	Protein synthesis corresponds to the process of..... a. duplicating required DNA for synthesis of proteins b. formation of amino acids from mRNA c. formation of mRNA from DNA template d. formation of amino acids from DNA template directly	1
7	CO2	What is the function of creatine phosphate? (one line answer)	1
8	CO3enzyme helps in digestion of fats a. Salivary amylase b. Pepsin	1

		<ul style="list-style-type: none"> c. Lipase d. none of the above 	
9	CO4	<p>The windpipe is also known as _____.</p> <ul style="list-style-type: none"> a. Trachea b. Larynx c. Lungs d. Oesophagus 	1
10	CO5	<p>A full-term pregnancy lasts approximately from conception to birth.</p> <ul style="list-style-type: none"> a. 270 days b. 150 days c. 320 days d. 20 weeks 	1
11	CO1	<p>A neuron that carries information from the peripheral nervous system to the central nervous system is.....</p> <ul style="list-style-type: none"> a. afferent neuron b. efferent neuron c. both d. none 	1
12	CO2	<p>Which is the longest organ of digestive system in the human body?</p> <ul style="list-style-type: none"> a. Large intestine b. Small intestine c. Pancreatic duct d. Oesophagus 	1
13	CO3	<p>What is Transcription? (one line answer)</p>	1
14	CO4	<p>.....is the effect of GnRH secreted by the hypothalamus</p> <ul style="list-style-type: none"> (a) triggers the synthesis of carbohydrates from non-carbohydrates in liver (b) triggers foetal ejection reflex (c) triggers secretion of milk in the mammary glands (d) triggers the synthesis and secretion of androgens 	1
15	CO5	<p>This happens if the proximal convoluted tubule is removed from nephron.....</p> <ul style="list-style-type: none"> a. urine is not formed b. quality and quantity of urine is unaffected c. urine is more concentrated d. urine is more diluted 	1
16	CO1	<p>Which of these functions will be affected if the medulla oblongata is damaged?</p> <ul style="list-style-type: none"> (a) Vision (b) Thermoregulation (c) Memory (d) Tactile sensation – response when pricked with a needle 	1
17	CO2	<p>Which of the following types of cells are present in human gastric glands?</p> <ul style="list-style-type: none"> a. Mucus neck cells, peptic or chief cells and parietal or oxyntic cells. b. Only mucus neck cells and peptic or chief cells c. Only peptic or chief cell and parietal or oxyntic cells d. Only mucus neck cells 	1

18	CO3	Glottis opens on the floor of a. Pharyngeal cavity b. Diaphragm c. Trachea d. None of the above	1
19	CO4	This is considered to be the stop codons (tick all that apply) (a) UGA (b) UAG (c) UAA (d) AUG	1
20	CO5	Which of the following is the activity of Atrial Natriuretic peptide (ANP)? (tick all that apply) (a) inhibits aldosterone and ADH secretion (b) decreases reabsorption of water (c) decreases reabsorption of sodium (d) increases the reabsorption of water	1

SECTION B

Long Answers (Answer two out of 3) 2X10

Q2			20
1	CO5	Discuss about the structure of neurons with the help of labelled diagram. Describe in detail about action potential generation in neurons. (5+5)	10
2	CO4	Draw a neat-labelled diagram of human digestive system. Explain in detail about digestion of carbohydrates and proteins. (4+3+3)	10
3	CO5	Describe in detail about male sex hormones releasing glands and their secretions. Explain the process of Spermatogenesis. (5+5)	10

SECTION C

Short Answers (Answer 7 out of 9) 7X5

Q3			35
1	CO1	Discuss about the events, which occur during menstrual cycle phase in females.	5 marks
2	CO2	Differentiate myelinated and unmyelinated nerve fibres.	5 marks
3	CO3	Discuss the anatomy of kidney with labelled diagram.	2+3
4	CO1	Discuss the function of large intestine in the process of digestion.	3+2
5	CO2	Explain the function of alveoli in respiratory process.	5
6	CO3	How kidney helps in regulating acid base balance?	5
7	CO4	Describe the functions of parathyroid gland and its secretions.	5
8	CO1	What is BMI? How will you calculate BMI in adults?	2+3
9	CO2	Enlist five major function of liver.	5
		Total	75