


<b>Name:</b>	
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2021**

**Course: Human Anatomy and Physiology**  
**Program: B.Sc. Clinical Research**  
**Course Code: HSCC1002**

**Semester: 1**  
**Time 03 hrs.**  
**Max. Marks: 100**

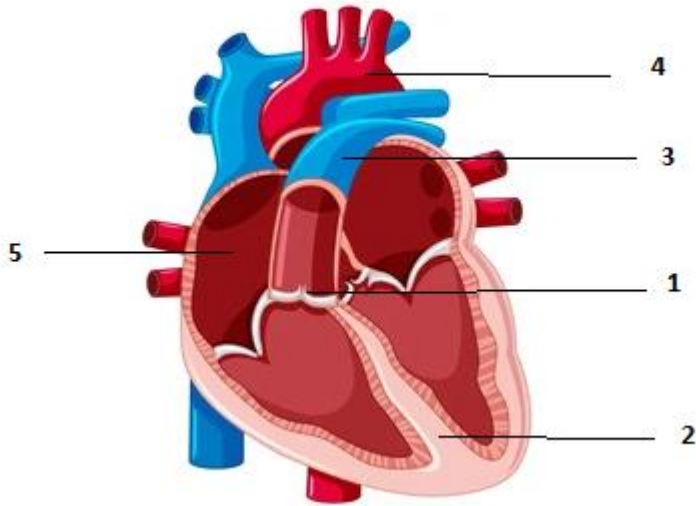
**SECTION A**

**Each Question will carry 1.5 Marks**

S. No.	Question	CO
Q 1	What do you mean by coagulation?	CO4
Q 2	Define “anemia”?	CO5
Q 3	Which layer of epidermis contains “Melanocytes”?	CO2
Q 4	Neuromuscular junction is present between _____ and _____ .	CO1
Q 5	Which is the largest lymphoid organ of the body?	CO3
Q 6	Lifespan of RBCs is of _____ days	CO5
Q 7	Elastic fibers, present in the walls of arteries are formed by a) Fibro blasts b) Smooth muscle cells c) Fibrocytes d) Mesenchymal cells	CO5
Q 8	Lymphatic vessels are absent in a) Uterus b) Lungs c) Liver d) Brain	CO3
Q 9	Define “synapse”	CO1
Q 10	What are the subdivisions of autonomic nervous system ?	CO3
Q 11	Myocardium of heart is made up of which type of muscle fiber?	CO3
Q 12	Give an example of ball and socket joint.	CO2
Q 13	Name different types of tests for coagulation.	CO3
Q 14	What is “neuroglia”?	CO4

Q 15	Humerus is a example of _____ bone	CO2
Q 16	Left atrium receives oxygenated blood from lungs through _____	CO5
Q 17	What is “apoptosis”?	CO1
Q18	Name the 10 <sup>th</sup> cranial nerve.	CO4
Q 19	Name the four valves present in heart.	CO5
Q 20	What do you mean by abduction ?	CO1
<b>SECTION B</b>		
<b>1. Each question will carry 5 marks (not more than 150 words)</b> <b>2. Instruction: Write short / brief notes</b>		
Q 1	Write about function of skin.	CO2
Q 2	How reticuloendothelial system defends the body?	CO3
Q 3	Define homeostasis. Give an example of positive feedback mechanism. ( 1 + 4)	CO1
Q 4	Define cell junction .What are the functions of tight junction. (1 + 4)	CO1
<b>Section C</b>		
<b>1. Each Question carries 15 Marks.</b> <b>2. Instruction: Write long answer.</b>		
Q 1	<p>Analyze the following passage and answer the following questions</p> <p>Case study: A girl of age 12 years is suffering from dyspnoea and vertigo. On clinical examination she was found to be palor with brittle nails and pain in legs.  In laboratory investigation she was found to be severely anemic :</p> <p>HGB – 7gms/dl  RBC – 2.90 x 10<sup>12</sup>/L</p> <p>Questions</p> <p>a. How was the patient diagnosed with anemia, discuss with normal range of hemoglobin. (3 Marks)  b. What are the different types of Anemia (4 marks)  c. What is the normal range of erythrocytes in the healthy human body (2 marks)  d. Define erythropoiesis and write down the stages of erythropoieses (6 marks)</p>	CO3

Q 2



- a) Label the diagram (5 marks)
- b) \_\_\_\_\_ is known as pacemaker of heart ( 2marks)
- c) Which is the thinnest chamber of heart? (3 mark)
- d) A patient records 140/90mmHg blood pressure. The patient is suffering from which type of hypertension (2 marks)
- e) Define Systole (2 marks)
- f) “Pericardium is the outer covering of the heart”. True/False (1 mark)

CO5

**Section D**

**3. Each Question carries 10 Marks**

**4. Instruction: Write long answer.**

Q 1 Explain the mechanism of coagulation. Write all the clotting factors.

CO3

Q 2 Describe

- a) Structure and function of eye. (5 Marks)
- b) How many cranial nerves are present in human body? Name them. (5marks)

CO4