

[40/A10]

Seat No. _____

No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY

B.Sc. Vth Semester Examination 2019

Wednesday, 20th November

10:00 AM. to 1:00 P.M..

Subject Code: US05CBCH05

(Human physiology and Clinical Endocrinology)

Total Marks: 70

Q1. Choose the correct option and write it in the answer sheet: [10]

1. Carbon has the unique feature of forming covalent bond.
a) Five b) Four c) Three d) Two
2. What is the purpose of the little hairs inside the nose?
a) To fight disease b) To serve no purpose c) To keep out dust out of lungs
d) To tickle the nose and cause sneezes
3. The normal oxygen consumption is..... ml each min.
a) 02 b) 20 c) 250 d) 22.
4. CO₂ transported in the form of Carbhemoalbumin is.....ml.
a) 10 b) 20 c) 30 d) 11
5. Type I Diabetes Mellitus is also called..... Diabetes
a) NIDDM b) Adult onset c) Juvenile onset d) Diabetes Insipidus
6. Insulin consists of..... Amino acids.
a) 33 b) 71 c) 61 d) 51
7. Synapse is also known asjunction.
a) Tendons b) Cartilage c) Ligament d) Neuronal
8. Following is functional unit of kidney....
a) Lobule b) Ureter c) Alveolus d) None
9. Insulin bind with..... receptor
a) Cytoplasmic b) Extracellular c) Intracellular d) None
10. MSH release from.....
a) Pituitary gland b) Lung c) Liver d) Heart

(1)

(P.T.O)

Q2. Answer the followings in short (any ten) [20]

1. What are different types of Physiology?
2. What is the respiratory system made up of?
3. What are three key functions of nervous system?
4. Write primary importance of circulatory system.
5. What is Bohr effect?
6. What are components of nervous system?
7. Draw the structure of Renal apparatus.
8. Define neurotransmitter with example.
9. Define Tubular load and Plasma clearance.
10. Why Aldosterone is known as mineral corticosteroid hormone?
11. What is importance of TSH receptors?
12. Explain Up regulation and Down regulation of hormone receptors.

Q3. A) What are 11 systems in the human body? Write their primary functions. [05]
B) Write notes on functions of Magnesium and sulphur. [05]

OR

Q3. A) Write notes on Integumentary and Immune system. [05]
B) Discuss importance of C.S.F and Adipose tissues. [05]

Q4. A) Draw a labelled structure of human heart. [04]
B) Explain internal and external respiration and write about functions of respiratory system. [06]

OR

Q4. CO₂ is waste product created during ATP synthesis; explain how it is transported from tissue to the lungs. [10]

Q5. A) Write notes on G.F.R. and T_{max} value. [05]
B) Discuss about nerve impulse transmission. [05]

OR

Q5. Describe Biochemical composition and functions of skeletal muscle. [10]

Q6. A) What are common signs and symptoms of NIDDM [06]
B) Diabetics are at increased risk of heart disease why? [04]

OR

Q6. Write notes on ... [10]
A) What are secondary causes of diabetes mellitus?
B) Discuss effect of insulin on carbohydrate and protein metabolism.