

[A-12]

SEAT No. \_\_\_\_\_

No. of Printed Pages : 02

**SARDAR PATEL UNIVERSITY**  
**N.C. Examination.(six unit course)**

2010 batch. Last trial.

US04CBCH02-BIOCHEMISTRY APRIL-2019

B-5C - IV SEMESTER

DATE:11/4/19, Thursday

TIME: 10-0<sub>am</sub> - 1-0<sub>pm</sub>

MARKS:70

- Q-1 Multiple Choice Questions: (1 mark each) 10
- 1) Phosphate buffer system operates ----- systems  
a) Kidney                      b) internal                      c) tissue                      d) external
  - 2) The pH of the body kept constant by  
a) urine                              b) water  
c) blood                              d) buffer
  - 3) ----- is a unit for measurement of radio activity  
a) neutron                      b) half-life                      c) proton                      d) curie
  - 4) For Thin Layer Chromatography, preparation of plates requires -----  
a) silicon                              b) silica sulphadex  
c) silica G                              d) sulphadex G
  - 5) To visualize amino acid separated on paper chromatography ----- is used.  
a) ninhydrin                      b) acetone                      c) n-Butanol                      d) acetic acid
  - 6) Cellulose strips can be made transparent by-----  
a) HCl                              b) buffer                              c) paraffin wax                      d) liquid paraffin
  - 7) Thickness of SDS gel is depend upon-----  
a) amount of gel powder                      b) thickness of comb  
c) thickness of spacer                      d) time for gelatinization
  - 8) Radioisotope I<sub>131</sub> is used to investigate function of  
a) Kidney                      b) blood                      c) heart                      d) brain
  - 9) ----- is a toxic metal  
a) pb                              b) CO<sub>2</sub>                              c) CN                              d) O<sub>2</sub>
  - 10) In biostatistics, frequency distribution represents -----  
a) voltage                              b) graph                              c) numerical figure                      d) symbol

(1)

(P.T-0)

Q.2	Answer any five (2 mark each)	10
	1 Classify - buffer system	
	2 Explain-metabolic acidosis.	
	3 Write principle for paper electrophoresis.	
	4 What are natural toxicants	
	5 Write on types of carcinogens	
	6 Define- half life time of isotopes	
	7 Explain principle for autoradiography	
	8 Enlist characteristic of good solvent for TLC.	
Q.3	A] Draw a diagram for glass electrode and explain its working	4
	B] Explain - properties of water	4
	Or	
	A] Write an account on bicarbonate buffer system	4
	B] Discuss working of pH meter	4
Q.4	A] Classify and explain various carcinogens.	4
	B] Enlist toxicants and sources for each	4
	Or	
	A] Write note on effect of toxicants on human	4
	B] Write an account on abnormal human cell growth	4
Q.5	A] Write on radio decay	4
	B] Explain clinical importance of radioisotopes	4
	Or	
	A] Write note on process of autoradiography	4
	B] Discuss - health hazards of isotopic radiation.	4
Q.6	A] Write on - principle and application of ion exchange chromatography	4
	B] Explain - method for a paper chromatography.	4
	Or	
	A] Explain- principle and application for column chromatography	4
	B] Differentiate between paper chromatography and thin layer chromatography	4
Q.7	A] Give principle and application for SDS-PAGE.	4
	B] write an account on types of gel used for electrophoresis	4
	Or	
	A] Draw a diagram for horizontal electrophoresis unit.	4
	B] Write on factors affecting on electrophoretic process.	4
Q.8	A] Give note on lead toxicity	5
	B] write formula to calculate mean, median and mode	5
	Or	
	Calculate S.D if blood cholesterol (mg%) of the patients admitted to the hospital is ,	10
	200,195,210,160,220,215,190	