

{ } SARDAR PATEL UNIVERSITY
M.Sc. (Integrated) Biotechnology (IGMBT), Seventh Semester Examination
Saturday, 22nd October 2016
2:00 pm to 5:00 pm
PS07CIGMB3: Clinical Biochemistry

Total Marks: 70

- Note: (1) Figures to the right indicate marks.
(2) Draw a neat and labeled diagram, wherever necessary.

Q. 1 Choose the most appropriate answer from the four alternatives given: [8]

- (1) Lubricin is known as
(a) *apa* PRG4 (b) *akk* PRG4 (c) *aka* PRC 4 (d) *aka* PRG4
- (2) A.C.D is a mixture of
(a) Sodium fluoride, citric acid and dextrose (b) Sodium citrate, citric acid and dextrose (c) sodium oxalate citric acid and dextrose (d) none of the above
- (3) Which of the following hormone shows antidiuretic effect and provides facultative reabsorption of water from distal convoluted tubule, Henle's loop and collecting duct.
(a) Renin (b) ADH (c) Aldosterone (d) all of the above
- (4) Which group of Hb play important role for its buffering capacity
(a) "Indole" group of histidine, (b) "Imidazole" group of B chain, (c) "indol" group of proline (d) "Imidazole" group of histidine,
- (5) Troponin T is also known as (a) Tropomyosin binding element (b) Actomyosin ATPase inhibitory element (c) Calcium binding (d) none of the above
- (6) Activity of serum aldolase is measured in (a) muscular diseases (b) kidney disease (c) heart disease (d) none of the above
- (7) Obstruction of bile duct causes:
(a) Pre hepatic jaundice (b) Post hepatic jaundice (c) hepatic jaundice (d) all of them
- (8) Radio-iodine "uptake" studies and 'turnover' (RAI and RIU) studies comes under:
(a) Tests measuring blood levels of thyroid hormones (b) Tests based on metabolic effects of thyroid hormones (c) Scanning of thyroid gland (d) Tests based on primary function of thyroid

Q.2 Answer any SEVEN from the following: [14]

- (1) Where is Ascetic fluid present and how is it collected?
- (2) What is respiratory acidosis?
- (3) In which condition vasopressin is released?
- (4) What is Wolman's disease?
- (5) Write brief account on Fatty liver.
- (6) Define Thalassemia.
- (7) Enlist immunological tests to detect autoimmune diseases of thyroid gland.
- (8) Differentiate between prehepatic and hepatic jaundice.
- (9) Classify cardiac profile test.

(PTO)

Q.3 (a) Discuss collection transportation and preservation of amniotic fluid and synovial fluid. [6]

(b) Write a note on pleural fluid. [6]

OR

(b) Discuss the types of urine collection in brief. [6]

Q.4 (a) Write brief account on phosphate and ammonia mechanism for the regulation of acid base balance in the body [6]

(b) Write detail note on metabolic acidosis [6]

OR

(b) What is Hyper lipoproteinemias? Write detail account on it. [6]

Q.5 (a) Write a brief account on enzymes used to diagnose heart diseases. [6]

(b) Write note on serum enzymes in bone diseases. [6]

OR

(b) What is hemoglobinopathies? Write detail note on it. [6]

Q.6 (a) Classify liver function tests in detail. [6]

(b) Write detail account on pancreatic function test. [6]

OR

(b) Write a brief note on *In vitro* resin-uptake of T3 test and Serum PBI and BEI test. [6]

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