Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Summer Examination-2017

Subject Name : Clinical Biochemistry

Subject Code : 2SC01CLB1 Branch: PGDMLT

Semester : 1 Date : 22/03/2017 Time : 10:30 To 01:30 Marks : 70

Instructions:

(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

Q-1. Complete the following sentences by choosing correct word given in the brackets: **1x14=14**

(a) ATP synthesis takes place in_____. (Lysosome /Mitochondria).

(b) 70 S Ribosomes found in _____cell. (Prokaryotic /Eukaryotic)

(c) Ribose is a_____sugar. (Hexose /Pentose).

(d) Glucose and galactose are _____of each other. (Anomer/Epimer).

(e) _____is reducing sugar. (Sucrose /Maltose)

(f) Conversion of glucose to glycogen is known as_____.(Glycogenesis/ Gluconeogenesis)

(g) End product of purine catabolism is_____. (Uric acid/fatty acids)

(h) The normal level of calcium in plasma is_____mg/dl. (9 to 11 / 40 to 110)

(i) Cobalt containing vitamin is _____. (Riboflavin /Cobalamin)

(j) Amino acid change in linear sequence is known as___. (Mutarotation/ Mutation).

(k) The normal blood urea level is_____mg/dl. (20 to 40 / 140 to 210)

(l) Respiratory distress syndrome is due to deficiency of__. (Cephalin /Lecithin)

(m) Bile salts help in the absorption of _____.(Amino acids/Lipids)

(n) Bilirubin in blood is carried by _____. (Albumin /Globulin).

Attempt any four from Q-2 to Q-8:

Q-2. Write notes on the following- **2x7=14**

(a) Functions of polysaccharides
(b) Isomerism in monosaccharides

OR

(a) Fatty acids

(b) Derived lipids

Q-3 Write notes on the following- **2 x7=14**

(a) Uncouplers

(b) Electrophoresis

OR

(a) Renal regulation of blood pH

(b) Immunoglobulins

Q-4 Write short notes on the following- **5+5+4=14**

(a) Plasma proteins

(b) Denaturation of proteins

(c) Classification of amino acids

OR

(a) Watson Crick model of DNA

(b) Vitamin B_1 & B_2

(c) Vitamin C

Q-5. Write short notes on the following- **5+5+4=14**

(a) Sickle cell anemia

(b) Biochemical Functions of iron

(c) Carnitine transport system

OR

(a) Thyroid function tests

(b) Fatty liver

(c) Atherosclerosis .

Q-6. Explain the following- **2 X 7=14**

(a) Deamination and its significance

(b) Phenylketonuria

OR

(a) Gluconeogenesis

(b) Digestion of carbohydrates

Q-7. Discuss the following- **2 X 7=14**

(a) Uronic acid pathway.

(b) Glycated hemoglobin

OR

(a) Regulation of plasma calcium level

(b) Biochemical functions of iodine, copper & fluoride

Q-8. Describe the following- **2 x 7=14**

(a) Types of enzyme inhibition

(b) Mechanism of enzyme action

OR

(a) Cytoplasm and its Organelles

(b) Nutritional disorders