T. Y. B. Sc. (Biotechnology) SEM – V (CBCS - 2015 COURSE) : SUMMER - 2019

Subject: Clinical Biotechnology

Day: Thursday
Date: 04/04/2019

S-2019-1385

Time: 10.00 AM TO 01.00 PM
Max. Marks: 60

N.B.:

1) Q1 and Q5 are compulsory.
2) Answer ANY TWO questions from Q 2, 3, 4 in Section I.
3) Answer ANY TWO questions from Q 6, 7, 8 in Section II.
4) Answers to Both the sections to be written in 'SAME' answer books.
5) Draw a labeled diagram WHEREVER necessary.

SECTION - 01

Q.1) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

a) Give names of any two biochemical tests and their clinical significance.
b) Name the biological samples used in clinical diagnosis.
c) Define anticoagulants. Give one example.
d) Enlist the various tests in urine analysis.
e) Define the enzyme activity.
f) Name the various markers estimated in lipid profile test.

Q.2) Answer the following: (5 Marks X 2 = 10)

a) Discuss the diseases associated with blood clotting.
b) Describe the composition of blood.

Q.3) Explain the following: (5 Marks X 2 = 10)

a) Differentiate between extrinsic and intrinsic pathway of blood clotting.
b) Explain the types and structure of various lipoproteins

Q.4) Write short notes on the following: (5 Marks X 2 = 10)

a) Urine analysis
b) Free and conjugated billirubin

SECTION - 02

Q.5) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

a) Bilirubin is produced by which part of hemoglobin?
b) Where is the gall bladder located in body?
c) Define acidosis and alkalosis.
d) Name the three ketone bodies.
e) What is the role of antidiuretic hormone (ADH) in water balance?
f) What is OGTT? What is its function?

Q.6) Answer the following: (5 Marks X 2 = 10)

a) Explain jaundice of genetic origin.
b) Describe the applications of radioisotopes in medicine.

Q.7) Explain the following: (5 Marks X 2 = 10)

a) Define enzymes. Explain the diagnostic applications of enzymes.
b) Discuss in detail the Prediabetes conditions.

Q.8) Write short notes on the following: (5 Marks X 2 = 10)

a) Insulin
b) Atherosclerosis

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