BV (4/CBCS) MLT–VC–4026/
MDT–VC–4026 (CC/MC/NC)

2021

MEDICAL LABORATORY TECHNICIAN

Job Role : Medical Laboratory Technician

Paper : MLT–VC–4026/MDT–VC–4026

(Biochemistry—IV)

Full Marks : 60

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Fill in the blanks : 1×7=7

(a) _____ is a marker for prostatic carcinoma.

(b) Non-protein organic part of the enzyme is _____.

(c) _____ enzyme is elevated in alcoholism.

(d) _____ enzyme involves in the transfer of an amino group between aspartate and α-ketoacid.

(e) CK-MB isoenzyme is increased in_____.

(f) Serum bilirubin is commonly measured by _____ method.

(g) Enzymes that differ in amino acid sequence but catalyze the same reaction are _____.

2. Answer the following questions : 2×4=8

(a) What is the site of synthesis of prothrombin? How is vitamin K related with prothrombin?

(b) How is thyroid hormone activity related to the serum cholesterol?

(c) How does kidney maintain acid-base balance?

(d) Why is bilirubin absent in urine even though blood bilirubin is high in pre-hepatic jaundice?

3. Answer any *three* of the following questions : 5×3=15

(a) Write a brief note on the enzymes related to myocardial infarction.

(b) Explain briefly about the formation of gastric HCL.

(c) Classify liver function tests (LFTs). Describe tests based on excretory and synthetic function of liver.

(d) Is there any relation between ADH and water balance of the body? Explain briefly.

(e) What do you mean by clearance test? What is the importance of urea and creatinine clearance test?

4. Answer any *three* of the following questions : 10×3=30

(a) Define hormone. Classify hormones on the basis of mechanism of action and explain in detail. 1+2+7=10

(b) Is jaundice a disease? Classify jaundice and relate it with altered bilirubin metabolism. 1+3+6=10

(c) Write a note on urine formation. How will you evaluate tubular function of the kidney? 5+5=10

(d) What do you mean by plasma functional enzyme and plasma non-functional enzyme? Give at least two examples each. Write a note on 'enzymes used in diagnostic purposes'. 2+2+6=10

(e) Write a detailed note on 'coronary heart disease in relation to cardiac profile tests'. 10

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