

2022

MEDICAL LABORATORY AND MOLECULAR
DIAGNOSTIC TECHNOLOGY/MEDICAL
LABORATORY TECHNICIAN

QP : Medical Laboratory Technician

Paper : MDT/MLT-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) Chemical messengers secreted by ductless glands are called _____.

(b) Goiter is caused by deficiency of _____.

(c) _____ hormone is released by the posterior pituitary.

(d) Metabolic rate in mammals is controlled by _____.

(e) Renal threshold level for glucose is _____.

(f) Elevation of _____ is a sensitive indicator of alcoholic liver disease.

(g) The precursor for synthesis of steroid hormone is _____.

2. Answer the following questions :

2×4=8

(a) Why is hormone called chemical messenger?

(b) Name any one female and one male reproductive hormone.

1+1=2

(c) What is the importance of serum albumin in liver disease?

(d) Mention different types of jaundice.

3. Answer any *three* from the following questions :

5×3=15

(a) What are some metabolic functions affected by insulin?

(b) Write a brief note on routine urine examination.

(c) Write a note on atherosclerosis.

(d) How is ADH related with diabetes insipidus?

(e) What are the properties of the receptors for hydrophilic hormones?

(3)

4. Answer any *three* from the following questions : $10 \times 3 = 30$

(a) What are thyroid hormones? Where is thyroid hormones produced? What are the actions of thyroid hormones?

$2+3+5=10$

(b) What are bile pigments? Write in detail about the bile pigment metabolism.

$1+9=10$

(c) What are the different functions of kidney? Write a detailed note about the urea and creatinine clearance tests.

$4+3+3=10$

(d) What are signalling molecules? What are the types of cell signalling? Mention the general characteristics of hormone.

$1+3+6=10$

(e) What are isoenzymes? How does isoenzyme help to relate the disease diagnosis? Write a note on lactate dehydrogenase.

$1+3+6=10$

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