[2]A- State whether each of the Following Statements is True or False and Correct the false one(s): [15] Marks

- 1- The measurement of plasma [urate] confirms a clinical diagnosis of myocardial infarction.
- 2- On standing for 15 min, plasma [proteins] may decrease.
- 3- Poor accuracy widens the reference value for the substance being determined.
- 4-5% of healthy individuals fall outside the reference values.
- 5- Urine appears to be green because of the tetracyclines drug intake.
- 6- Osmometers measure plasma or urine iron.
- 7-The results of base excess would be expressed as negative quantities.
- 8- Cystinuria is an inherited disease in which cystine is deposited in the cells of lymphoreticular system.

B- Complete the following sentences:

[5] Marks

- i- Injections of(1).... promote the entry of(2).... and glucose into cells.
- ii- In infectious hepatitis, plasma(3)..... and(4)..... activities are increased, and urobilinogen and(5)..... are present in urine.
- [3] A- Discuss the mechanisms and causes of metabolic acidosis.

[10] Marks

- B- Several conditions may give rise to abnormal amounts of low molecular mass proteins in urine. Comment on this phrase referring to some examples. [4] Marks
- C- The following results were obtained on a 54-year-old woman after surgery for ovarian cancer. Can you account for the abnormalities found?

Serum	Results	Reference range
Urea	2.0	2.5-6.6 mmol/L
Sodium	147	135-145 mmol/L
Potassium	2.0	3.6-5.0 mmol/L
Total CO ₂	10.0	22-30 mmol/L
Bilirubin	7.0	3-16 μmol/L
ALT	11.0	10-50 U/L
ALP	35.0	40-125 U/L
Total protein	42.0	60-80 g/L
Calcium	1.6	2.1-2.6 mmol/L

[6] Marks

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