2013

M.Sc.

1st Semester Examination

CLINICAL NUTRITION AND DIETETICS

PAPER—CND-104

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer *Q. No. 1* and any *three* of the following.

1. Answer any *ten* questions of the following : 10×1

(a) Write the full name of ABC.
(b) Write the full form of PAGE.
(c) Write the full form of APAP.
(d) What is the contribution of Martin and Synge in Science ?
(e) What is bonded phase ?
(f) What is agglutination type of reaction ?
(g) Which types of electrophoresis gives 'Himalayan Fantasy appearance ?
(h) Mention one example of a mobile phase solvent.
(i) What is the use of GLC in clinical nutritional science ?
(j) How do you express nanometer in meter scale ?
(k) Write the name of two markers of apoptosis used in immunofluorescence cytotechnology.
(l) What is S-ELISA ?
(m) Why 'g' is preferred over 'rpm' in centrifugation ?

(n) What is Zwitter ion?
(o) Write one application of paper electrophoresis.

2. (a) What is retention time?
(b) What is plate theory?
(c) Write the application of paper chromatography.
(d) Why PAP is preferred over ABC technique?
2+2+2+4

3. (a) Why immunofluorescence cytotechnology is preferred over immunoenzymatic cytotechnology?
(b) Write the steps for detection of specific markers by ABC technique.
(c) What do you mean by 'Standard'? 3+5+2

4. (a) Write the principle of HPLC.
(b) Mention the factors influence the HPLC performance.
(c) What are the differences between TLC and HPLC?
(d) What is reverse phase HPLC?
(e) Mention any two applications of HPLC.
$2+2\frac{1}{2}+3+1\frac{1}{2}+1$

5. (a) What is '*in-situ hybridization*'?
(b) Discuss the steps involved in the conduction of in-situ hybridization.
(c) Diagrammatically represent and elaborate the principle of two dimensional immunoelectrophoresis.
2+4+4

6. (a) Describe the different components of luminometer mentioning the principle of Chemiluminescence.
(b) State briefly the about the cell fractionation technique with special reference to differential and density gradient centrifugation. 5+5

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