## 2022

## 1st Semester Examination CLINICAL NUTRITION AND DIETETICS

Paper: CND 102

Full Marks: 40

Time: Two Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

## Group - A

Answer any *four* questions from the following:  $2 \times 4 = 8$ 

- 1. What is anaplerotic reaction? Give example.
- 2. What is native gel electrophoresis?
- Name any one blocker of glycolysis and mention the blocking step of it.
- 4. What is transamination reaction? Give example. 1+1
- 5. What is meant by reverse transcription?
- 6. What do you mean by indirect ELISA.

## Group - B

Answer any four questions from the following:

 $4 \times 4 = 16$ 

7. Discuss about different steps of PCR.

4

- 8. Write briefly the steps of  $\beta$ -oxidation.
- P.T.O.

9. Write the principle of reverse phase HPLC Diagrammatically represent the models of FACS.

10. Discuss the basic principle of SDS-PAGE.
<ol> <li>Discuss the role of NADPH and glutathione in protecting cells against ROS.</li> </ol>
12. What is the cause of orotic aciduria from the perspective of nucleotide metabolism.
Group - C
Answer any <i>two</i> questions from the following: $8\times2=16$
13. What are the different sources of xenobiotics? Write the characteristics of xenobiotics. Discuss briefly the xenobiotics metabolism. 2+2+4
14. Classify the enzyme according to their function. Write the competitive and non competitive inhibitions of enzyme. 2+3+3
15. State the cholesterol biosynthesis pathway. 8
16. What are meant by de novo synthesis and salvage pathways for nucleic acid metabolism. 'Methotrexate affects the nucleic acid synthesis' — explain the statement. What is Watson-Crick base pairing rule? 3+4+1