## M.Sc. 1st Semester Examination, 2023 CLINICAL NUTRITION & DIETETICS

PAPER-CND-101

Full Marks: 50

Time: 2 hours

The figures in the right hand margin indicate marks

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

## GROUP - A

Answer any four of the following:  $2 \times 4$ 

- 1. What do you mean by non-genomic action of hormone?
- 2. Why Vit-D is known as Immuno modulator?

- 3. State the difference between growth and development.
- 4. Write the relation between endurance and performance.
- 5. What causes the chronic myelogenous leukemia (CML)?
- 6. What is meant by metastasis?

## GROUP - B

Answer any four of the following:  $4 \times 4$ 

- 7. "People heterozygous for a tumor-suppressor gene are predisposed to cancer". Justify the statement.
- 8. 'Pro-apoptotic regulator proteins promote caspase activation leading to programmed cell death'. Explain the statement.

9.	State difference between atherosclerosis and		
	arteriosclerosis. Discuss different phases of		
	atherosclerosis with	special	emphasis of
	PAF and ECPF.		1 + 3

- 10. Write the role of dietary ingredients for improving sport performance.
- 11. State the role of mobile model receptor for binding the target cell specific AP<sub>3</sub> binding.
- 12. Why glucose-fructose mixer in sports drink is more effective for sports person? What is phosphagen-system? 2+2

## GROUP - C

Answer any two of the following:  $8 \times 2$ 

13. Discuss the events of IP<sub>3</sub>-DAG signal transduction process for modulation of cellular activities with diagram. 6+2

(Turn Over)

- 14. State the non-genomic signal transduction process of cAMP pathway for cellular activities modulation. Write importance of glycogen loading in sports persons. 6+2
- 15. What are the three general types of proteins involved in the conserved apoptosis pathway of eukaryotic cells? What is hereditary retinoblastoma?
- 16. Why is cancer development considered as multi-step process? What is meant by duplication mutation?
  6+2

[Internal Assessment - 10 Marks]