

M.Sc. 1st Semester Examination, 2024

CLINICAL NUTRITION & DIETETICS

PAPER – CND-101

Full Marks : 50

Time : 2 hours

Answer **all** questions

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** questions of the following : 2 × 4

1. What are tumor suppressor genes ? Provide example.

(Turn Over)

2. What are oncogenes and how do they differ from proto oncogenes ?
3. State nongenomic signal transduction process of hormone receptor.
4. Write the role of antioxidative nutrient on reproductive activity.
5. What do you mean by regulatory unit of fixed model receptor.
6. Write the full form of IP_3 and DAG.

GROUP – B

Answer any **four** questions of the following : 4×4

7. Describe how p53 mutation leads to development of cancer.
8. Write schematically the signal transduction pathways through which activated 'Src' produce cancer.

9. "Vitamin D is an immunomodulator" –Justify.
10. State the major role of nutrients on cardiovascular activities.
11. Differentiate ischemic stroke and hemorrhagic stroke. What is DASH diet ?
12. Why life style can be considered as the most important determinants of health ?

GROUP – C

Answer any **two** questions of the following : 8×2

13. Generally, tumor suppressor gene follow "two hit hypothesis". Explain this statement for the development retinoblastoma. Differentiate between carcinoma and sarcoma. $6 + 2$
14. Discuss the tyrosine kinase signal transduction pathway with a schematic diagram. $6 + 2$

(4)

15. State the different types of growth. Describe the nutritional and hormonal factors controlling growth. Write in brief about the sensors on growth assessment. 3 + 3 + 2
16. How does creatine supplement improve the performance of sprinters and what is carbohydrate loading? Discuss the role of β -blockers and angiotensin converting enzyme inhibitors in the management of coronary heart disease. 4 + 4

[Internal Assessment – 10 Marks]
