

2022

1st Semester Examination

CLINICAL NUTRITION AND DIETETICS

Paper : CND 101

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* of the following : $2 \times 4 = 8$

1. Define development.
2. What is hypertrophic growth?
3. Write the full form of STAT, IP₃, DAG and MAPK.
4. Write the definitions of exercise and sports.
5. What are 3Fs for sports performance.
6. Write any two features of genomic signal propagation.

Group - B

Answer any *four* of the following : $4 \times 4 = 16$

7. Write the different components of fixed model hormone receptor. What do you mean by R_s and R_i cycle? 2+2

P.T.O.

8. How ROS can able to induce gene mutation? State dietary management of such gene mutation. 2+2
9. Write in brief about IP_3 -DAG signal transduction pathway. 4
10. State the role of vitamin D_3 as positive immuno modulator. 4
11. Write a short note on metastasis. 4
12. 'Cancers occur due to multi-step mutational events' — explain it from genetic perspective. 4

Group - C

Answer any *two* of the following : 8×2=16

13. Write the tyrosine kinase signal transduction pathway of insulin receptor with schematic diagram. 8
14. What is glycogen loading? Write the process of glycogen loading of sports person. 8
15. Discuss the role of Bad and Bax protein in apoptosis. Why are caspases considered as effector protein in apoptosis? What is angiogenesis? 4+2+2
16. Functionally discriminate between oncogenes and tumor suppressor genes.

'P⁵³ gene functions as the last gate keeper in the prevention of cancer' — explain the statement.

Define hereditary retinoblastoma. 2+4+2
