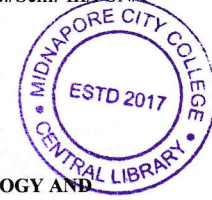


PG CBCS
M.Sc. Semester-III Examination, 2022
FOOD SCIENCE & NUTRITION
PAPER: FSN 301
(FUNCTIONAL FOODS AND NUTRACEUTICALS, FOOD NANOTECHNOLOGY AND
FOODOMICS)



Full Marks: 40

Time: 2 Hours

GROUP- A

Answer any FOUR of the following questions:

2×4=8

1. Define probiotic.
2. Write the name of any four probiotic organisms.
3. Mention the name of four phytosterols.
4. Why Len oestrogens are known as endocrine disrupting chemical?
5. Mention the name of two pro-apoptotic & two anti-apoptotic markers.
6. What do you mean by metastasis?
7. Differentiate apoptosis and necrosis.
8. Define metabolome.

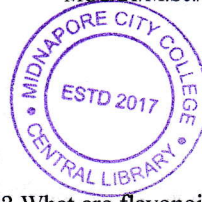
GROUP- B

Answer any FOUR of the following questions:

4×4=16

9. How do the probiotic bacteria lower the cholesterol level in human?
10. Discuss the lipid lowering effect of phytosterols.
11. Why lycopene is considered as antioxidants?
12. 'Flavonoids act as anticancer agent'- justify this statement.
13. Discuss the role of fatty acid on gene expression through nutrigenomic approach.
14. State about the role of food nanotechnology on drug nutrient delivery.
15. Write down the genetic basis of cancer.
16. State the health beneficial effects of prebiotic.

(P.T.O.)

**GROUP- C****Answer any TWO of the following questions:****8×2=16**

17. Why nucleotides are considered as nutraceutical? What are flavonoids? Why low glycemic index foods are preferred in with PCOD? 2+2+4
18. How is cur cumin metabolized in our body? Discuss about the role of cur cumin on neurological disorders. 4+4
19. What do you mean by foodomics? Illustrate the role of foodomics in food science research. 2+6
20. Write down the application of food nanotechnology in food industries. What kind of safety concerns are taken with the help of nanotechnology during packaging of food? 4+4
