

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024
(Fourth Semester)

Branch – FOODS & NUTRITION

NUTRITION AND ENVIRONMENTAL HEALTH

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

- 1 Indicate the food web that reveals groups of organisms in soil interacts with plants.
(i) Aquatic food web (ii) Marine food web
(iii) Detrital food web (iv) Soil food web
- 2 Indicate the term that associates with teratogenesis.
(i) Necrosis of cell (ii) Altered protein functions
(iii) Birth defects of an embryo (iv) Cancerous cell growth
- 3 Name the predominant source of the natural toxin gossypol.
(i) cotton seed meal (ii) Ground nut meal
(iii) Neem seed meal (iv) soybean meal
- 4 Identify the dose level of MSG cause severe renal and vascular functions.
(i) 320mg/Kg BW (ii) 120mg/Kg BW
(iii) 420mg/Kg BW (iv) 220mg/Kg BW
- 5 Indicate the protein based packaging material.
(i) Polysaccharides (ii) Lecithin
(iii) lignin (iv) Cellulose
- 6 Name the antagonist of arsenic toxicity?
(i) Borium (ii) Strontium
(iii) Selenium (iv) Chromium
- 7 Choose the fungal toxin that affects rice and wheat vastly.
(i) Aflatoxins (ii) Bongrek toxins
(iii) Fusarium (iv) Ergot toxins
- 8 Choose the toxin seen in Gas gangrene.
(i) *Clostridium perfringens* (ii) *Clostridium botulinum*
(iii) *Clostridium baratti* (iv) *Clostridium tetani*
- 9 Tell the colour, which is used to dispose paper waste?
(i) Yellow (ii) Blue
(iii) Green (iv) Red
- 10 Identify the one which is not a recreational drug.
(i) Methanol (ii) cocaine
(iii) LSD (iv) alcohol

SECTION - B (35 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 7= 35)

- 11 a) Illustrate the ways in which xenobiotics get excreted.
OR
b) Differentiate between synergism and antagonism.

Cont ...

- 12 a) Outline the toxic effects of saponins and alkaloids.
OR
b) Explain the toxicity caused by methanol in human.
- 13 a) Discuss about the problems water pollution.
OR
b) What are the toxic effects of mercury in human?
- 14 a) Explain the cytotoxic effects of mushrooms.
OR
b) Discuss about the acute and chronic toxic effects of Fungicides and rodenticides.
- 15 a) Explain how nicotine affects physiology of human.
OR
b) Summarize the toxic effects of Poly chlorinated biphenyls as contaminants.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks

(3 x 10 = 30)

- 16 Highlight the mechanism of toxins on nutrition and health in human.
- 17 Discuss the about the toxic effects of natural toxins and suggest treatments.
- 18 Justify how ground water pollution affects ecosystem and human health.
- 19 Discuss the effects of fungal toxins and suggest treatments.
- 20 Discuss about the methods of solid waste disposal.

Z-Z-Z

END