

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2022
(Second Semester)

Branch - FOOD PROCESSING TECHNOLOGY

CHEMISTRY – II

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

1. Sample preparation for detection & quantitation of natural toxicants in foods & feeds were reviewed by
(i) Springer and McClure (ii) Benton-Jones and Steyn
(iii) Kratochvil and Taylor (iv) Park and Pohland
2. Mention the Columns for HPLC are commonly ___ cm in length and ___ mm in diameter.
(i) 10-20 & 4-8 (ii) 10-15 & 6-8 (iii) 10-30 & 3-10 (iv) 10-20 & 2-9
3. Curcumin is responsible for the characteristic colour of
(i) yellow (ii) orange (iii) orange- yellow (iv) reddish-brown
4. The base which is not present in DNA is
(i) adenine (ii) uracil (iii) guanine (iv) thymine
5. Colourless, odourless and non-corrosive air pollutant is
(i) SO₂ (ii) CO (iii) CO₂ (iv) O₃

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 11.a) Explain the extraction of organic compounds.
(OR)
b) Outline the applications of purification techniques in food industry.
- 12.a) Bring out the process of filtration.
(OR)
b) Distinguish between adsorption chromatography & partition chromatography.
- 13.a) Produce the efficacy of different antioxidants.
(OR)
b) How do you measure colour of food colourants?
- 14.a) Classify amino acids with examples.
(OR)
b) State a note on DNA & RNA bases.
- 15.a) Sketch various types of pollutants from food industry.
(OR)
b) Explain the removal of solid particles, oil and grease in waste water treatment.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

16. a) Discuss the preparation of samples for analysis.
(OR)
b) Enumerate the types of crystallization with examples.
17. a) Discuss the principle and process of fractionation.
(OR)
b) Classify the chromatographic techniques based on the nature of the phases used.
18. a) Elucidate the classification of food colourants.
(OR)
b) Examine the types of mineral salts with examples.
19. a) Highlight the synthesis of peptides by solid phase techniques.
(OR)
b) Identify the properties & functions of DNA.
20. a) Summarize the process of solid waste management.
(OR)
b) Point out the primary & secondary treatment of waste water.

Z-Z-Z END