

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION DECEMBER 2023
(Second Semester)

Branch – FOOD PROCESSING TECHNOLOGY

FOOD PROCESS ENGINEERING

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions.

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

1. Choose the basic operations done in the food process Engineering are called as -----.
(i) Unit operations (ii) Processing
(iii) Process management (iv) Unit Process
2. Mention the rate of flow at the beginning for any filtration pressure.
(i) Constant (ii) Smallest
(iii) Greatest (iv) Critical
3. Find out that Lyophilization is also known as _____.
(i) freeze drying (ii) tunnel drying
(iii) sun drying (iv) mechanical drying
4. Which of the following is not of importance when a conveyor is designed?
(i) Type of industry where the conveyor is being used
(ii) Cost
(iii) Type of material being carried by the conveyor
(iv) Length of travel of the conveyor
5. State that Electric field intensity is a ----- quantity
(i) Dimensionless quantity (ii) Scalar quantity
(iii) Vector quantity (iv) All of the above

SECTION - B (15 Marks)

Answer ALL Questions

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

6. a Summarize the role of Psychrometry in drying.
OR
b Bring out the importance of Water activity.
7. a Narrate the significance of cleaning and grading.
OR
b Describe about the performance index.
8. a Explain about Attrition mill.
OR
b Summarize about Bonds law.
9. a Explain about the application of Pneumatic Conveyor
OR
b Explain about the different types of Sheller.

Cont...

10. a Narrate the role of Ultra sonification in food processing.
OR
b State the role of Cold plasma in food processing.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. a Elucidate the procedure for the determination of moisture content by direct and Indirect methods.
OR
b Identify the role of Equilibrium moisture content in drying.
12. a Magnetic separator.
OR
b Discuss about the Spiral Separator with neat sketch.
13. a Point out the requirements for Cryo grinding.
OR
b Analyze the role of Hammer Mills in size reduction.
14. a Discuss about the Ground nut Decorticator with neat sketch.
OR
b Summarise about the Belt conveyor with neat sketch.
15. a Identify the role of High pressure processing in food processing.
OR
b Compare the Pulsed Electric field processing with Ohmic heating.

Z-Z-Z

END