

2021

(Held in 2022)

Paper : FPT/FPM-VC-1016

**(Basics of Food Processing)**

(Food Processing Technology/Food Processing and Quality Management)

Full Marks: 60

Time: 3 hours

*The figures in the margin indicate full marks for the question*

**1. Answer the following as directed.**

**1X7=7**

- a) Define "raw material".
- b) Write full form of GMP.
- c) Define quality.
- d) What is size reduction?
- e) pH scale is ranging from \_\_\_ to \_\_\_\_\_. (Fill in the blanks)
- f) ppm stands for \_\_\_\_\_. (Fill in the blank)
- g) WVTR stands for Water Vehicle Transport Rate. (State 'True' or 'False')

**2. Answer the following questions:**

**2X4=8**

- a) Define food. Based on perishability, classify food with one example each.
- b) Define endotoxin, exotoxins and mycotoxin.
- c) Define pasteurization. Write main objective of pasteurization.
- d) What is the difference between sorting and grading?

**3. Answer the following (any three):**

**5X3=15**

- a) Intrinsic and extrinsic properties of food
- b) Antioxidant
- c) Cleaning and sanitization
- d) Adulteration
- e) Structure of wheat

**4. Answer the following (any three):**

**10X3=30**

- a) Define food packaging. Classify them with example. Write four characteristics of food packaging material. Why food packing is called as 'silent salesman'?
- b) Define food processing. Describe primary processing and secondary processing with suitable example? How food irradiation helps in food processing.

- c) Define hazard and classify them with example. Write the full form HACCP and PRP. How many principles are there in HACCP, write them properly.
- d) Solve the problems:
- i) Use a Pearson Square method to calculate the amount of orange juice (10% sugar content) and sugar syrup (50% sugar) needed to produce 60 kg of fruits squash containing 15% sugar.
  - ii) How will you prepare 250 mL of 0.1 N NaOH solution?
  - iii) How will you prepare 100 mL of 0.5 N NaOH solution from 2 N NaOH solution?
- e) What is preservation and preservatives? Classify them with example. Write any two methods of preservation in detail.

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