

- Q.19 Describe the working principle of gear pump.
- Q.20 Differentiate between SI base units and SI derived units.
- Q.21 Explain various thermal properties of food.
- Q.22 What is pasteurization? Explain briefly the working of a pasteurizer.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)
- Q.23 Define Evaporator and enlist their types. Explain any one in detail with neat and clean diagram.
- Q.24 What are the various modes of heat transfer? Explain.
- Q.25 Define Manometer. Explain its types and uses.

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4th Semester/ Food Technology Subject : Principles of Food engineering

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Manometers are used to measure _____
- a) Pressure in water pipe
 - b) Difference in pressure at two points
 - c) Atmospheric pressure
 - d) None of these
- Q.2 Which of the following is NOT a physical property of food materials?
- a) Temperature
 - b) Color
 - c) Density
 - d) Taste
- Q.3 SI Unit of Force is _____
- a) Watt
 - b) Meter cube
 - c) Newton
 - d) None of these

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Q.4 Which of the following is commonly used to remove moisture from foods?

- a) Boiler
- b) Heat Exchanger
- c) Drier
- d) Pasteurizer

Q.5 Which of the following heat exchangers used for quick exchange of heat?

- a) Shell and tube heat exchanger
- b) Plate heat exchanger
- c) Scraped surface heat exchanger
- d) Jacketed vessel

Q.6 Reynold's number is used to characterize _____.

- a) Electrical conductivity
- b) Thermal conductivity
- c) Mass flow rate
- d) Fluid flow characteristics

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 After evaporation, solids are left behind. (True/False)

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Q.8 Define Density.

Q.9 _____ is the amount of water vapour in the air. (Humidity / Vapor pressure)

Q.10 Enthalpy is a measurement of _____. (Heat content / Moisture content)

Q.11 MKS unit system means _____.

Q.12 Boiling point of water is _____°F.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Define autoclave with its construction and working principle.

Q.14 Differentiate between thermal conductivity and thermal diffusivity.

Q.15 What is measurement? Define basic measurement system.

Q.16 What are various rheological properties of food?

Q.17 Describe the type of fluid on the basis of direction of flow.

Q.18 Explain the working principle of spray dryer.

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