Q.20 Interpret the role of bio sensors and E-sensors in monitoring food quality and safety.

Q.21 How does insect protein serve as a sustainable alternative to traditional animal protein sources?

Q.22 How have advancements in food technology improved food safety and quality?

Section-D

Note: Long answer questions. Attempt any two question out of three Questions. (2x8=16)

Q.23 Describe the benefits and uses of Ozone Treatment in food preservation.

Q.24 Explain the application of Artificial Intelligence (AI) in food processing and its impact on quality assurance.

Q25 Describe the recent advancements in food technology that are transforming the industry.

No. of Printed Pages : 4
Roll No. .....

221154C

5th Sem.
Branch : Food Technology
Subject : Advances in Food Technology

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple Choice Questions. All Questions are compulsory. (6x1=6)

Q.1 Why is innovation important in the food industry?

a) To create new products and improve food safety
b) To reduce the variety of food products
c) To limit the use of technology
d) To increase manual labour in production

Q.2 Which trend is emerging in the food technology industry?

a) Manual harvesting
b) Use of robotics in food production
c) Decreased demand for food packaging
d) Reduction in food safety standards

Q.3 Which of the following technologies uses extremely high pressure to inactivate pathogens in food?

a) Microwave processing
b) High Pressure Processing (HPP)
c) Ultrasound technology
d) Cold plasma treatment

Q.4 Which technology involves using sound waves for emulsification extraction, and microbial inactivation?

a) Ohmic hating

b) Ultrasound technology

c) Micro wave processing

d) Pulsed Electric Fields (PEF)

Q.5 Which food printing technology involves the transformation of food properties during the eating process?

a) 3D food printing

b) 4D food printing

c) Microwave processing

d) Nano technology

Q.6 What is the role of Ozone Treatment in food processing?

a) To add flavor to food

b) To sanitize and inactivate microbes on food surfaces

c) To increase water content in food

d) To extend the shelf life of baked goods

Section-B

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

Q.7 Tempeh is fermented and has a higher protein content than tofu. (True/False)

Q.8 Edamane is a type of nature soybeans that are typically used for making soy sauce. (True/False)

Q.9 DNA barcoding is used solely for marketing purposes in the food industry. (True/False)

Q.10 Quality control techniques are unnecessary for ensuring food safety. (True/False)

Q.11 Block chain technology can improve efficiency and traceability in the food supply chain. (True/False)

Q.12 Advances in food packaging can contribute to reducing food waste and improving sustainability. (True/False)

Section-C

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

Q.13 Summarize the current trends and prospects in food technology that are shaping future developments.

Q.14 Discuss the role of High-Pressure Homogenization in improving the texture and stability of liquid foods.

Q.15 Give examples of how Pulsed Electric Fields (PEF) are used in food processing and their effects on microbial inactivation.

Q.16 Explain the potential of plant-based eggs and seafood in meeting dietary needs and sustainability goals.

Q.17 Summarize the application of Block chain Technology in the food industry and its benefits for traceability.

Q.18 Discuss the importance of consumer awareness in promoting sustainable food technology.

Q.19 Summarize the rapid methods for detecting food borne pathogens and their importance in food safety.