

Quiz Questions

Multi-choice questions (tick the write answer/answers)

1. The actual energy requirement for the separation will be many times ----- W_{\min}
 - a) greater than
 - b) less than
 - c) equal to

2. The most commonly used to separate a solution that has a mixture of some desirable components and some that are not desirable.
 - a) Ultra-filtration
 - b) Micro-filtration
 - c) nano-filtration
 - d) reverse osmosis

3. For food products, the water activity is generally less than
 - a) 1
 - b) 0.25
 - c) .65
 - d) .5

4. This initial drying period is followed by a much slower rate of drying as the moisture content of the product-----.
 - a) decreases
 - b) increase
 - c) constant

5. Under hygienic conditions and without other treatment, meat can be stored at above its freezing point (-----) for about six weeks without spoilage

- a) -1.5°C
- b) 6°C
- c) 10°C
- d) 1000°C

6. What is the collective term for disease causing microorganisms?

- a) Parasite
- b) Bacteria
- c) Pathogen
- d) Virus
- e) Host

7. What vitamin is synthesized by bacteria in the intestine?

- a) Vitamin E
- b) Vitamin K
- c) Vitamin D
- d) Vitamin A
- e) Vitamin C

8. What bacterium is called the "cafeteria germ"?

- a) *Escherichia coli*
- b) *Clostridium botulinum*
- c) *Campylobacter jejuni*
- d) *Salmonella*
- e) *Clostridium perfringens*

9. Who is at a greater risk of developing a food borne illness?

- a) Adolescents

- b) Men
- c) Middle-ages adults
- d) Women
- e) Infants and toddlers

10. Which of the following is not a condition that bacteria would thrive and multiply?

- a) Stable for a period of time
- b) Dry
- c) Nutrient-rich
- d) Proper pH
- e) Correct temperature

11. What item in the kitchen may be the most contaminated item?

- a) Counter top
- b) Sink
- c) Dishwasher
- d) Cooking utensils
- e) Sponge

12. What is the temperature danger zone?

- a) 30°F-130°F
- b) 60°F-160°F
- c) 40°F-140°F
- d) 20°F-120°F
- e) 50°F-150°F

13. What should be done if you are unsure about the safety of a food?

- a) Take a small taste
- b) Throw it out
- c) Examine closely under good lighting

- d) Reheat thoroughly
- e) Smell it

14. The food business may be characterized as:

- a) Vulnerable to spoilage,
- b) High temp.
- c) Quality project

15. What agency is responsible for ensuring safe and accurately labeled meat, poultry, and eggs?

- a) Environmental Protection Agency
- b) Animal and Plant Health Inspection Service
- c) World Health Organization
- d) USDA Food Safety and Inspection Service
- e) Food and Drug Administration

Fill in the blanks type Questions

1. Major manufactured food product is(Sugar).
2. Quality Factors in Food industry(Appearance Factors).
3.usually measured by counts of bacteria, yeast, mold, and insect, fragments sediment levels.(Sanitary Quality)
4.trends project India to emerge as the most populous country in the world in the coming decades. (Population).
5. Average annual growth rates for per capita consumption of selected food items
6. Projections of(Food Demand).
7. Organic substances that regulate numerous and diverseprocesses in the body (physiological).
8. Proponents of low carb diets blameon the obesity epidemic but this is not well supported by research.(carbohydrates).

9.Ingredients with Purpose Direct food additives serve four major purposes in our foods. (Food Additives).
10. To make foods appealing– the majority ofare most often used for this purpose. (Food additives).
11.such as vermin, insects, fungi and bacteria- these may feed on the food and contaminate it. (living organisms)
12. including damage due to pressure or poor handling, physical changes such as dehydration or crystallisation. (Physical processes)
13. Light can lead to oxidation of fats in some raw materials.....(dairy products).
14. Removal ofouter layers, such as potato peeling or the skinning of peaches. (unwanted)
16. The softness or hardness of a grinding wheel depends upon the type & amount of bonding material used. For general purpose cutter grinding.....grinding wheel is normally used. (aluminum oxide)
17. Tin based white metals are used, where bearings are subjected to..... (high pressure & load).
19. The concentration of water vapour in troposphere, which depends upon the altitude & temperature varies in the range of zero topercent. (4)
20. The main industrial source of emission of hydrogen sulphide air pollutant is.....(coal based thermal power plants).
21. Waste/polluted water discharged from electroplating, blast furnace and coal mining industries contain mainlysubstances.(inorganic).
22. The amount of chemical coagulant added for treatment of polluted waterwith increase in temperature of the polluted water to be treated.(decreases.)
24. Presence of bacteria in potable (drinking) water causes.....(disease).
25. COD of raw municipal sewage may be in the range of aboutmg/litre. (90-120).
27. Presence ofhardness is responsible for the temporary hardness in water. (Calcium).
28. Microwave ovens Convert -----into electromagnetic field. (electrical energy)

29. -----of food system is affected by free ionic salt content, moisture, and solid contents. (Dielectric behavior)
30. Another distinguishing characteristic is a pH less than ----, which is sufficient to kill most bacteria. (4.6)
31. Fermentation by yeast is the basis of the -----industry. (alcoholic beverage)
32. $G_m = H_m - T S_m$ where H_m is the enthalpy of mixing and S_m is the ----- of mixing. (entropy)
33. ----- reduction by irreversible adsorption of compounds. (Pore size)
34. An asymmetric membrane comprises a very thin (----- micron) skin layer on a highly porous (100-200 microns) thick substructure. (0.1-1.0)
35. -----is a water purification technology that uses a semipermeable membrane. (Reverse osmosis)
36. Reverse osmosis is extensively used in the----- industry for the production of whey protein powders. (dairy)
37. Water activity (a_w) is defined as the ratio of the ----- of water measured at the food surface (P_w) to the saturation vapor pressure of pure water at the same temperature (P_w°). (vapor pressure)
38. Primary separation of powder is accomplished by gravitational setting of the ----- powder particles. (heavier)
39. Air can be passed either through steam coils or an electric heater to attain elevated temperatures, typically between -----and -----°C. (150,500)
40. Lactic acid bacteria added to milk convert lactose to------. (lactic acid)
41. Fatter fish are generally pretty good sources of Vitamins --- and ---. (A,D)
42. Food production storage and regeneration method utilizing principle of ----- temperature control to preserve qualities of processed foods. (low)
43. In cook-freez production, require high speed -----temperature at least -20 °C w/in 90 mins. (low)
44. Crystalline sugar is stored in ------. (silos)
45. In Continuous sugar dissolving process, as hot dissolving process at a temperature of 85

°C or cold dissolving process at a temperature of -----°C. (35 – 45)

46. The consumption of meat has various traditions and rituals associated with it in different cultures such as -----and----- . (kosher, halal)
47. Draining as much blood as possible from the carcass is necessary because blood causes the meat to have an unappealing appearance and is a very good breeding ground for ----- . (microorganisms)
48. ----- and colour uniformity are vital components of visual quality of fresh foods and play a major role in consumer choice. (Colour)
49. High levels of lauric acid to improve ----- properties for use in confectionery, coatings or low fat dairy products. (emulsification)
50. If the humidity of the storage environment exceeds the equilibrium relative humidity (ERH) of the food, the food will ----- moisture during storage. (gain)
51. Eggs, fruit or vegetables may be separated into -----weight categories using spring-loaded, strain gauge or electronic weighing devices incorporated into conveying systems. (weight)
52. Sterilization is the total elimination of all ----- including spores. (microorganisms)
54. Dose of chlorine for disinfection of water is aboutmg/litre of water. (1)
55. Water effluent generated in printing industry is decolourised by..... (Electrolytic decomposition)

True/False Type Questions

1. The quality of carbohydrates is the real issue and it is still wise to consume quality whole grains with adequate fiber.(True/False)
2. A balanced diet containing recommended servings of carbohydrates, fats and proteins will meet the RDA standards. (True/False)
3. A diet containing recommended servings of carbohydrates, fats and proteins will meet the RDA standards. (True/False)
4. Food additives are largely responsible for the food supply to which we have grown

accustomed. (True/False)

5. Detection of indirect additives and impurities has reached incredibly precise proportions allowing for identification of infinitesimally minute amounts of substances in foods. (True/False)
6. Food additives afford us the convenience and enjoyment of a wide variety of appetizing, nutritious, fresh, and palatable foods. (True/False)
7. Food processors do the same thing by using ascorbic acid – the principal active ingredient in citrus juice – when packaging fruit slices. (True/False)
8. Potatoes with higher starch content, which take up less oil and require less energy during frying. (True/False)
9. Wheat with increased levels of high molecular weight glutamines for improved bread making performance. (True/False)
10. Cleaning is essentially separation in which some difference in physical properties of the contaminants and the food units is exploited. . (True/False)
11. Lye (1–2% alkali) solution can be used to soften the skin which can again be removed by water sprays. There is, however, a danger of damage to the product. . (True/False)
12. Removal of unwanted outer layers, such as potato peeling or the skinning of peaches. . (True/False)
13. Food processing typically takes clean, harvested crops or slaughtered and butchered animal products. (True/False)
14. Food safety includes guidelines and procedures that help keep foods free from contaminants and safe to eat. (True/False)
15. The four Cs of keeping food safe in the kitchen are clean, combat cross contamination, cook thoroughly, and chill to a cold enough temperature. (True/False)
16. It is acceptable to leave meat on the counter for the afternoon for thawing purposes. (True/False)
17. Food preservation illustrates the roles that farmers, food manufacturers, food transporters, retailers, and consumers play in ensuring the food supply remains safe. (True/False)
18. Foods that have been approved for irradiation in the United States include fruits, vegetables, herbs, spices, fresh meat, and white potatoes. (True/False)

19. As fruit ripens, sugars are linked together to form starch. (True/False)
20. The missing ingredient in whole wheat flour is folic acid. (True/False)
21. Brush border enzymes are located in the microvilli of the large intestine. (True/False)
22. Emotional and physical stress can trigger the release of epinephrine. (True/False)
23. Honey should never be given to children under one year of age. (True/False)
24. Foods high in carbohydrate foods are the main staples in many of the world's cuisines.
(True/False)
25. The Dietary Guidelines for Americans 2005 specifically recommend consuming vegetable oils daily to meet vitamin E needs. (True/False)
26. It is important for milk to be packaged in opaque containers to preserve the riboflavin content from being destroyed by light. (True/False)
27. Alcohol can be absorbed through the stomach directly into the blood. (True/False)
28. The depth of penetration is the depth to which microwave energy reaches until it is 37% of its value. (true/false)
29. Pickling may also improve the nutritious value of food by introducing B vitamins produced by bacteria. (true/false)
30. Both the concentrate and the permeate could be recovered to use. (true/false)
31. The membrane operations more widely used are those based in applying a pressure difference between both sides of the membrane. (true/false)
32. Nanofiltration is a form of filtration that uses membranes to separate different fluids or ions. (true/false)
33. The smallest molecular weight species for which the membranes have more than 100% rejection. (true/false)
34. During drying, both moisture content and water activity change. (true/false)
35. Drying rate is plotted against the moisture content (instead of time). (true/false)
36. Atomization produces a cloud of droplets with very large surface area for drying.
(true/false)
37. A condenser collects the vapors as they exit the freeze dryer to enhance efficiency and prevent fouling of the vacuum pump. (true/false)
38. In Cook-Chill Production Low temperature conditions above freezing point, 0-3 C

.(true/false)

39. During the lautering process (also called “wort separation” or “mash separation”) the undissolved substances are separated from the wort. (true/false)
40. Whisky is usually filtrated through a cellulose filter to remove fatty particles at a temperature between 4 and 40 ° C prior to being run into bottles. (true/false)
41. The blended whisky is left undisturbed in oak casks (generally plain oak) for 11 to 12 months in order to optimize the product quality. (true/false)
42. The muscles of stressed animals are low in water and glycogen, and their pH fails to attain acidic values, all of which results in poor meat quality. (true/false)
43. During the first day after death, glycolysis continues until the accumulation of lactic acid causes the pH to reach about 8.5. (true/false)
44. For low temperature processes such as chilling, freezing or freeze-drying, the colour changes little during processing. (true/false)
45. Chemical analysis of fat and protein in milk may be carried out to determine its suitability for manufacturing cheese, yoghurt or cream. (true/false)
46. Smooth-skinned fruits and vegetables are much typical to clean and are less likely to harbour insects or fungi than ribbed or irregular units. (true/false)
47. Hard wheat with 11.5–14.0% protein is desirable for white bread and some whole wheat breads require even higher protein levels, 14–16%. (true/false)
48. Shape sorting is useful in cases where the food units are contaminated with particles of similar size and weight. (true/false)
49. Lye (5–7% alkali) solution can be used to soften the skin which can again be removed by water sprays. (true/false)
50. Effluent from processing oilseeds contains some fats usually as suspended matter. (true/false)
51. Discharge licenses may include maxima for flow, temperature, suspended solids, dissolved solids, BOD₅, nitrogen, phosphorous and turbidity. (true/false)
52. Canning aims to destroy all micro-organisms and their spores through the application of ice. (true/false)