

National Institute of Food Science & Technology
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Human Nutrition and Dietetics

1. Major histocompatibility complexes-I proteins present antigens to _____ cells.
 - A. Helper T cells
 - B. Suppressor T cells
 - C. **Cytotoxic T cells**
 - D. B cells
2. Heavy metals and minerals in food samples can be determined by
 - A. Spectrophotometer
 - B. Gel electrophoresis
 - C. Atomic absorption spectrophotometer
 - D. **Chromatography**
3. Enzymes are _____ in nature.
 - A. Fat
 - B. **Protein**
 - C. Carbohydrates
 - D. None of These
4. Goiter is the deficiency disease of:
 - A. Magnesium
 - B. Ion
 - C. **Iodine**
 - D. Zinc
5. There are _____ stages of change: A model for nutrition counseling.
 - A. 2
 - B. 3
 - C. 4
 - D. **5**
6. A UV-Visible spectrophotometer measures _____ of light transmitted through a sample compared to a reference measurement of the incident light source
 - A. Absorption
 - B. Emission
 - C. **Intensity**
 - D. None of these
7. Products of the complement cascade _____ strongly activates phagocytosis.
 - A. **C3b**
 - B. C3a
 - C. C4a
 - D. C4b
8. _____ is a physical method of separation in which the components to be separated are distributed between two phases
 - A. Spectroscopy
 - B. **Chromatography**
 - C. Centrifugation

- D. All of these
9. Cell-mediated immunity is controlled by:
- G cells
 - T lymphocytes**
 - B lymphocytes
 - Plasma cells
10. In a chromatographic separation, which of the following is most appropriate for the qualitative analysis of a substance?
- Absorption time
 - Excitation rate
 - Retention time**
 - None of these
11. _____ isolates particular spectral line and eliminates stray radiation. It is device used to isolate the radiation of the desired wavelength from wavelength of the continuous spectra.
- Modulation
 - Monochromator**
 - HPLC
 - Chromatogram
12. Which cells are called natural killer cells?
- Cytotoxic T cells**
 - Suppressor T cells
 - Helper T cells
 - B cells
13. _____ uses visible light and ultraviolet to analyze the chemical structure of substance.
- HPLC
 - GCMS
 - Flame photometer
 - UV-Visible spectrophotometer**
14. _____ is routinely used to determine the concentrations of Na & K, in particular, in various samples.
- AAS
 - Flame photometer**
 - GCMS
 - HPLC
15. _____ is a form of column chromatography that pumps a sample mixture or analyte in a solvent.
- UV Visible spectrophotometer
 - HPLC**
 - GCMS
 - AAS
16. Cooperation, collaboration and communication is the part of _____ core competency.
- Interdisciplinary**
 - Intradisciplinary
 - Personal

- D. All of These
17. Clients have their own set of needs, _____, concerns that will have an impact on the counseling relationship.
- A. **Hope**
- B. Expectations
- C. Respect
- D. None of These
18. Communication theory and diffusion of innovations are part of _____ capacity.
- A. Political
- B. Social
- C. **Environmental**
- D. Personal
19. _____ is a necessary but usually not sufficient factor in changing individual or collective behavior.
- A. Experience
- B. **Knowledge**
- C. Experience and Knowledge
- D. None of These
20. Nutrition education also needs to accommodate _____ change.
- A. Social
- B. Environmental
- C. Technological
- D. **Social and Technological**
21. _____ proteins are involved in complementary system of antibody's action.
- A. 10
- B. **20**
- C. 30
- D. 40
22. _____ is a way of understanding and examining what is "right" and what is "wrong" in biomedical research and practice.
- A. Ethics
- B. **Bioethics**
- C. Research
- D. Interaction
23. Strive not to harm a person who is dependent upon your actions is called:
- A. **Non-maleficence**
- B. maleficence
- C. Deception by Commission
- D. All of These
24. How many glasses of juice are included in Gerson therapy?
- A. **10 to 13**
- B. 10 to 12
- C. 13 to 16
- D. 8 to 10
25. Biofield therapies include:
- A. **Reiki**

- B. Naturopathy
 C. Meditation
 D. Imagery
26. Plasmablasts, are the precursors of:
 A. T cells
 B. B cells
 C. **Plasma cells**
 D. All of these
27. Complementary foods should be given to babies _____ times a day between the age of 6-8 months.
 A. **2-3**
 B. 3-4
 C. 1-2
 D. 3-5
28. Fragment C5a initiates _____ of neutrophils and macrophages.
 A. Margination
 B. Diapedesis
 C. **Chemotaxis**
 D. All of These
29. _____ inhibits the wrinkle formation.
 A. Gingerol
 B. Quercetin
 C. **Myricetin**
 D. Lycopene
30. The simplest form of carbohydrates is:
 A. Lactose
 B. **Glucose**
 C. Sucrose
 D. Starch
31. Which enzyme is present in mouth for the digestion of carbohydrates?
 A. Lipase
 B. Sucrase
 C. **Amylase**
 D. Protease
32. Pro-insulin comprised of _____ amino acids.
 A. 110
 B. 24
 C. 51
 D. **86**
33. _____ is most useful for elements with relatively low excitation energies.
 A. AAS
 B. **Flame emission**
 C. GCMS
 D. Flame absorption
34. An active ingredient of cinnamon called methyl hydroxychalcone polymer has been proven to mimic

- A. Cortisol
 B. **Insulin**
 C. Glucagon
 D. Hemoglobin
35. The temperature of muffle furnace for ashing is _____
 A. 450 °C
 B. **550 °C**
 C. 650 °C
 D. 750 °C
36. Antibodies are produced by:
 A. Beta cells
 B. Alpha cells
 C. **B lymphocytes**
 D. T lymphocytes
37. _____ is the period of development during the carrying of an embryo.
 A. Aging
 B. **Gestation**
 C. Lactation
 D. Development
38. Blood supply is increased _____ during pregnancy.
 A. **4 lb**
 B. 6 lb
 C. 8 lb
 D. 2 lb
39. In Macrosomia, birth weight is greater than _____
 A. 2500 g
 B. 3000 g
 C. 3500 g
 D. **4000 g**
40. GC can be applied to the separation of any compound that is naturally _____.
 A. **Volatile**
 B. Gaseous
 C. Liquid
 D. Solid
41. Parenteral nutrition is administered into body through
 A. Tube feeding
 B. **IV**
 C. Oral
 D. IM
42. A specific category of therapeutic agents which, for regulatory purposes, are distinct from drugs”
 A. Designer foods
 B. **Medical foods**
 C. Functional foods
 D. Nutraceutical foods
43. _____ is an example of inborn error of metabolism.
 A. Diabetes

B. **Phenylketonuria**

C. Heart attack

D. Diverticulitis

44. _____ refers to the transfer of a solute from one liquid phase to another.

A. **Extraction**

B. Batch extraction

C. Ion exchange chromatography

D. Partition chromatography

45. The physiological response to a need for food is:

A. Appetite

B. **Hunger**

C. Satiety

D. All above

ANSWER: B

46. Leptin is produced by:

A. **Adipocytes**

B. Hepatocytes

C. Osteocytes

D. Mayocytes

47. There are _____ sets of nerve cells present in hypothalamus, which control hunger.

A. 1

B. **2**

C. 3

D. 4

48. Ghrelin is made in the _____

A. Mouth

B. Small intestine

C. **Stomach**

D. Pancreas

49. The main purpose of the gas in GC is to move the solutes along the _____ .

A. **Column**

B. Mobile phase

C. Stationary phase

D. Gaseous phase

50. Vata dosha reflects the characteristics of _____ .

A. Air

B. Water

C. **Wind**

D. Fire

51. The armed conflicts in Burkina Faso, Cameroon, Chad, and Nigeria all worsened in _____.

A. 2001

B. 2011

C. **2019**

D. 2009

52. UNHCR stand for:

A. Office of High Commissioner for Refugees

- B. UN Refugee Agency
 C. United Nations High Commissioner for Refugees
D. Both B&C
53. _____ which a supplementary ration is provided to everyone in an identified vulnerable group (e.g. children under five or women of child-bearing age) for a defined period in order to prevent deterioration in nutritional status
 A. Supplementary feeding
 B. Supplementary Feeding Programmes
C. Blanket supplementary feeding
 D. Blanket supplementary Programmes
54. _____ are to rehabilitate severely malnourished persons. The main aim is to reduce excess mortality. In most emergency situations, the majority of those with severe wasting are young children
A. Therapeutic Feeding Programmes
 B. Supplementary Feeding Programmes
 C. Blanket supplementary feeding
 D. Blanket supplementary Programmes
55. Severe is a medical emergency:
 A. TFP
 B. SFP
C. PEM
 D. SAM
56. The most common symptom of food-borne illness is:
 A. Kidney failure
 B. Diarrhea
C. Headache
 D. Skin rash
57. An estimated _____ million almost 1 in 10 people in the world – fall ill after eating contaminated food and 420 000 die every year, resulting in the loss of _____ million healthy life years
 A. 33,600
B. 600,33
 C. 800,44
 D. 44,800
58. _____ is a Gram-positive, rod-shaped, anaerobic, spore-forming, motile bacterium with the ability to produce the neurotoxin.
A. Clostridium botulinum
 B. Salmonella
 C. Listeria
 D. Staphylococcus Aureus
59. Hair is a source of microbiological contamination as the human scalp often contains _____ a food poisoning organism. Therefore, any hair in food can be a root cause of cross contamination and can indeed make us ill.
 A. Clostridium botulinum
 B. Salmonella
 C. Listeria

D. Staphylococcus aureus

60. Main causes of food born illness:

- A. Cross- Contamination
- B. Time-Temperature Abuse
- C. Poor Personal Hygiene

D. All

61. Time temperature abuse happens when the food is exposed to Temperature Danger Zone _____ for more than 4 hrs

- A. 41-140 degree fahrenheit**
- B. 41-160 degree fahrenheit
- C. 41-180 degree fahrenheit
- D. None

62. Micronutrient interventions can include

- A. Small-quantity lipid nutrient supplements
- B. Iron supplements
- C. High dose vitamin A supplementation

D. All

63. Micronutrient powders contain at least _____ iron _____ retinol and _____ zinc but often contain up to 22 micronutrients.

- A. 10 to 12.5 mg, 300 mcg, 5 mg**
- B. 5 mg, 10 to 12.5 mg, 300 mcg
- C. 300 mcg, 5 mg, 10 to 12.5 mg
- D. None

64. Selecting the Micronutrient Intervention:

- A. Identify the problem
- B. Establish a multi- sectoral platform
- C. Consider safety

D. All

65. How many types of food contamination?

- A. 3**
- B. 4
- C. 6
- D. 5

66. The health services in any health care system may be of:

- A. Primary care level
- B. Secondary care level
- C. Tertiary care level

D. All

67. The _____ is first contact with individual in any health care system.

- A. Primary care level**
- B. Secondary care level
- C. Tertiary care level
- D. All of above

68. Which one of the following jewelry is acceptable for a food handler to wear?

- A. Plain wedding band
- B. Arm ring

C. Bracelet

D. None

69. Which of the following does bacteria need to assist it to grow and multiply?

A. Water

B. Food

C. Warm temperature

D. All

70. A child who is _____ is shorter than expected based on age.

A. At homeostatic growth

B. Stunting

C. Wasting

D. Underweight

71. WHO and UNICEF's global recommendations for optimal infant feeding as set out in the global strategy are?

A. 180 days

B. 270 days

C. 6 months

D. A&C

72. Selecting the Micronutrient Intervention

A. Identify the problem

B. Establish a multi- sectoral platform:

C. Consider safety

D. All

73. There are _____ dimensions of health.

A. 3

B. 4

C. 5

D. 6

74. Which of the following could lead to iodine deficiency?

A. Low intake of fruits and vegetables

B. Intake only of locally grown food in central Africa

C. Insufficient caloric intake

D. Inadequate sunlight exposure

75. The energy needed in addition to breast milk is:

A. 200 kcal per day in infants 6–8months

B. 300 kcal per day in infants 9–11 months

C. 550 kcal per day in children 12–23 months of age

D. All

76. Colostrum the special milk that is secreted in the first _____ days after delivery. Colostrum is rich source of antibodies, fat soluble vitamins and proteins so rich source of immunity

A. 2-3

B. 3-4

C. 4-5

D. 5-6

77. _____ and _____ should never be fed to infants because of the risk of botulism and SIDS.

- A. Dessert and sweets
 B. Sorbitol and fructose
C. Honey and corn syrup
 D. None
78. What is the best post covid era strategy you recommend as HND student?
 A. Vaccination
 B. Diet
C. Vaccination and diet
 D. Vaccination and quarantine
79. Inorganic compounds mean exclusion of :
 A. Oxygen & Hydrogen
 B. Nitrogen & Argon
 C. Nitrogen & Carbon
D. A&C
80. Inorganic material mainly performs :
 A. Building & Clotting of blood
 B. Building & nerve responses
C. Building & regulating
 D. Building & fluids transportation
81. The trace minerals are like:
 A. Se, Zn & Mg
 B. Se, Zn & S
C. Se, Zn & MO
 D. Se, Zn & Na
82. From the time of ingestion to excretion minerals:
 A. **Unchanged**
 B. Changed
 C. Slightly changed
 D. Neither changed nor destroyed
83. Major minerals are :
 A. Fe & Mn
B. S & Cl
 C. F & Cr
 D. Co & I
84. Vitamin D in case of RDA for 1 year children is:
 A. 400 IU
 B. 450 IU
 C. 500 IU
D. 600 IU
85. 99% Ca present as :
 A. Bone fluids
 B. Extracellular fluids
C. Crystalline form
 D. Intracellular fluids
86. The requirement of Ca mg/D in adults of 51-70 years is:
 A. 1200 (male); 1000 (female)

- B. 1100 (male); 1200 (female)
 C. 1200 (male); 1200 (female)
D. 1000 (male); 1200 (female)
87. Ca absorption decreased due to:
 A. High levels of Fe and Phosphates
 B. High levels of Mn and Phosphates
C. High levels of Mg and Phosphates
 D. High levels of Na and Phosphates
88. Parathyroid hormone involved in:
 A. Stimulate removal of Ca
 B. Stimulate Ca binding
 C. Stimulate liver for Ca absorption
D. Stimulate exchangeable Ca from bones
89. Blood clot formation is stimulated by the enzyme:
 A. Alkaline phosphatase
B. Thromboplastin
 C. Alanine transaminase
 D. Aspartate aminotransferase
90. An inadequate intake of calcium along with vitamin D may contribute to:
 A. Osteomalacia,
 B. Colon cancer
 C. Hypertension
D. All
91. Older children and adolescents require P :
 A. **1250mg/day**
 B. 1050mg/day
 C. 850mg/day
 D. 1450mg/day
92. Phosphorylation is a process of:
 A. **Attachment of phosphoryl group**
 B. Detachment of acyl-phosphoryl group
 C. Attachment of acyl-phosphoryl group
 D. Detachment of phosphoryl group
93. Pregnant women need Fe :
 A. 15mg/day
 B. 20mg/day
C. 27mg/day
 D. 35mg/day
94. Fe absorption is facilitated from the GI tract in the presence of:
 A. Vit. A
B. Vit. C
 C. Vit. D
 D. Vit. E
95. The ferritin is formed when:
A. Free ions combined with apoferritin
 B. Free ions removed ferroporphyrin complex

- C. Free ions combine with non heme iron
 D. B&C
96. Approximately 10% of women lose iron per day through menstrual bleeding is:
 A. More than 2.4 mg
B. More than 1.4 mg
 C. Less than 1.4 mg
 D. None
97. SIADH can result from one of the following:
 A. Renal disorders
B. Pulmonary disorders
 C. Hepatic disorders
 D. Heart disorders
98. Se status is assessed by measurement of:
 A. Level of albumin
 B. Level of Fe
 C. Urine
D. GSH-Px
99. Which of the following statement is true?
 A. Type of menu selected for a business unit within a food service is influenced by unit's food
B. Type of menu selected for a business unit within a food service is influenced by unit's food and dinning concept
 C. Type of menu selected for a business unit within a food service is influenced by dinning concept
 D. None of the above
100. Which of the following statement is not true?
 A. Single-use menu is planned for a certain day or event
 B. Single-use menu is not repeated in exactly the same form
C. Single-use menu means that the same menu is used each day
 D. Both a and b
101. Recipes consist of four components, A 5kg, B250g, C500mg and D 0.5kg, Calculate the percentage of D.
A. 8.70%
 B. 87%
 C. 4.0%
 D. 6.0%
102. A recipe consists of four components, A 5kg, B250g, C5000mg and D 0.5kg. The yield of this recipe is 7 serving portions. Company needs to scale up for 63 portions, the resulting weight of final recipe is
A. 51.80 Kg
 B. 518 Kg
 C. 51.80g
 D. 51.80mg
103. Which of the following statement is not false?
 A. A menu that includes one or more food choices in at least one menu category is cycle menu
 B. A menu that offers only one item per menu category is called cycle menu
 C. An outline of food to be included in each meal is called cycle menu
D. A carefully planned set of menus that is rotated at definite time intervals is called cycle menu

104. Which of the following statement is false?
- A. Organizations using the full-selective menu have a list of alternatives to offer customers if they do not want any of the menu items offered
 - B. Advantage of full-selective menu is that it allows maximum choice to customers
 - C. Primary disadvantage of full-selective menu is the obvious demand on operational resources
 - D. Full-selective menu offers at least two choices in every category
105. Which of the following statement is not true?
- A. The savvy menu planner is attuned to and accounts for political trends and issues to the food service
 - B. The savvy menu planner is attuned to and accounts for behavioral trends and issues to the food service
 - C. The savvy menu planner is attuned to and accounts for social trends and issues to the food service
 - D. The savvy menu planner is attuned to and accounts for economic trends and issues to the food service
106. Which of the following statement is false?
- A. Store room clerk should have the ability to evaluate product quality
 - B. Store room clerk should have the ability to recognize unacceptable product
 - C. Store room clerk should have an understanding of poor documentation procedures
 - D. None of the above
107. Which of the following statement is true?
- A. In organizations, HR department is responsible for processing the billing of food and supply purchases
 - B. In organizations, accounting department is responsible for processing the billing of food and supply purchases
 - C. In organizations, both HR and accounting department are responsible for processing the billing of food and supply purchases
 - D. None of the above
108. Which of the following statement is not true?
- A. The amount and capacity of receiving equipment depends on the size of deliveries
 - B. The amount and capacity of receiving equipment depends on the frequency of deliveries
 - C. The amount and capacity of receiving equipment depends on the accuracy of deliveries
 - D. Large deliveries may require a forklift for pallet deliveries
109. Which of the following statement is not false?
- A. Deliveries should be checked immediately on arrival
 - B. Deliveries should be checked after one hour of arrival
 - C. Deliveries should be checked in second shift of day after arrival
 - D. None of the above
110. Which of the following statement is not true; Objectives of cooking in food production are?
- A. Fulfilling the requirements of food testing authorities
 - B. Enhancing the aesthetic appeal of raw food product by maximizing sensory qualities of color, texture and flavor
 - C. Destroying the harmful organisms to ensure that food is microbiologically safe for human consumption
 - D. Improving the digestibility and maximizing nutrients retention
111. In govt institutes, Purchase Power of the head is

- A. 50000Rs
- B. 60000Rs
- C. 100000Rs
- D. None

112. Which of the following statement is false?

- A. Additional information usually includes the date of purchase
- B. Additional information usually includes the brand purchased
- C. Additional information usually includes the price paid
- D. None of the above

113. Which of the following statement is true?

- A. A recipe is standardized when it has been tested and adapted to the requirements of consumers
- B. A recipe is standardized when it has been tested and adapted to the requirements of health professionals
- C. A recipe is standardized when it has been tested and adapted to the requirements of a specific food service operation
- D. A recipe is standardized when it has been tested and adapted to the requirements of food testing laboratories

114. Which of the following statement is true; Forecasting is

- A. A prediction of food needs for more than one day or other specific period of time
- B. A prediction of food needs for a day or other specific period of time
- C. A prediction of food needs for a week
- D. A prediction of food needs for a whole year

115. A recipe consists of four components, A 5kg, B250g, C5000mg and D 0.5kg. The yield of this recipe is 9 serving portions. Company needs to scale up for 63 portions, The required amount of component C for final recipe is

- A. 35g
- B. 35mg
- C. 350g
- D. 350mg

116. Which of the following statement is not false?

- A. Procurement is the process of securing right product for a facility at right time and in form that meets pre-established standards for quantity and quality
- B. Procurement is the process of securing right product for a facility at right time and in form that meets pre-established standards for quality and price
- C. Procurement is the process of securing right product for a facility at right time and in form that meets pre-established standards for price and quantity
- D. All of the above

117. Which of the following statement is true?

- A. Most common middlemen who influence the food service segment are brokers
- B. Most common middlemen who influence the food service segment are manufacturer's representatives
- C. Both a and b
- D. None of the above

118. Which of the following statement is not false?

- A. Brokers are conduits between manufacturers, distributors and consumers

- B. Brokers are wholesalers who do not assume ownership of goods, but whose responsibility is to bring buyers and sellers together
- C. Brokers serves as sales representative for a manufacturer or group of manufacturers
- D. Brokers serves as a sales representative for a single manufacturer
119. Which of the following statement is not true?
- A. Purchasing should be on the basis of quantity
- B. Purchasing should be on the basis of price
- C. Purchasing should be on the basis of quality
- D. Purchasing should be on the basis of service
120. In govt institutes, Purchase Power of the committee is
- A. 99K
- B. 104K
- C. >100K
- D. None
121. Which of the following statements is false?
- A. Centralized delivery systems include assembling of meals in central location
- B. In centralized delivery systems meals transported using carts
- C. Centralized delivery systems cannot be done off site in a commissary
- D. Centralized delivery systems are typically used in restaurants
122. Which of the following statement is false?
- A. In decentralized systems assembled meals are transported to the service unit
- B. Bulk quantities of hot and cold prepared foods are sent to the kitchen
- C. Decentralized system is less expensive as compared to centralized delivery systems
- D. Decentralized systems typically used in hotels
123. Which of the following statement is true?
- A. Self-service also known as grab and go
- B. Self-service is typically use in restaurants
- C. In self-service customers are served by waiters
- D. Self-service cannot be machine vended
124. Which of the following are not false; Off premise delivery is delivering meals to
- A. Kids
- B. Office workers
- C. Chronically ill or elderly people
- D. Companies not having food service facilities
125. Which of the following are false; Architectural features for building of food service operations includes
- A. Geographical location
- B. Building style and material
- C. Consumer preference
- D. Lighting, ventilation and built-in refrigeration
126. Which of the following statements are not false?
- A. Economic factors are main factors which affects the food service design
- B. Changes in desired menu are not important in food service design
- C. Type of employees are not concerned in food service design
- D. Environment is not concerned in food service facilities
127. Which of the following statements are true?

- A. Meat tempered in refrigerator before reheating
 - B. Frozen vegetables tempered in refrigerator before reheating
 - C. Frozen fruits tempered in refrigerator before reheating
 - D. Frozen juices tempered in refrigerator before reheating
128. Which of the following statement are not true?
- A. Work flow is necessary for efficient utilization of labor
 - B. Work flow is necessary for efficiently performing tasks
 - C. Traffic flow refers to ease with which customers move around the facility
 - D. Efficient traffic flow increases the time to perform tasks
129. Which of the following are not false?
- A. Resource maximization is negotiating the best balance among finite resources
 - B. Resource maximization Is reducing the finite resources
 - C. Resource maximization is elaborating the finite resources
 - D. None
130. Which of the following are not true?
- A. On premise delivery includes distribution of food to worker at their work place
 - B. On premise delivery is Time saving service for employees
 - C. On premise delivery is a type of portable service
 - D. On premise delivery carts are not equipped with heated and refrigerated sections
131. Which of the following statement are false?
- A. Equipment that is fixed or built-in should be planned as integral part of structure
 - B. It can transport items in few seconds
 - C. Fixed or built-in equipment can be delivery trucks
 - D. Fixed or built-in equipment can be elevators, manual or power driven conveyors
132. Which of the following are true; To retain temperature of food for short time transport or delivery which equipment is used?
- A. Totes
 - B. Steel carts
 - C. None
 - D. Both a and b
133. Which of the following are false; The objective of re thermalization system is to
- A. Heat the food product to serving temperature
 - B. Retain nutrient content
 - C. Microbial safety
 - D. None
134. In govt institutes, tender is usually carried out for the amount of
- A. <100K
 - B. <1000K
 - C. 99000
 - D. >100K
135. Which item of equipment is used to keep food hot on a buffet?
- A. Chafing dish
 - B. sizzling plate
 - C. Gueridon trolley
 - D. Wooden chopping board
136. An indication that a guest's plate is ready to be cleared is when:

- A. the guest stops eating.
 - B. the food has gone cold.
 - C. the guest has left the table
 - D. the knife and fork are placed together on the plate.**
137. The term “catering” refers to:
- A. Setting up a banquet operation
 - B. Serving a banquet operation
 - C. Selling a banquet function
 - D. All of them**
138. Food and beverage are a general term used in:
- A. Serving
 - B. Catering
 - C. Hospitality**
 - D. None of the above
139. In which form of food service does the customer help himself from the dish held by a waiter:
- A. la carte
 - B. family**
 - C. ala Russe
 - D. banquet
140. Serving a room service meal, a waiter should
- A. knock on the door loudly and announce his presence:
 - B. look through the keyhole and if he sees the guest is up, go straight inside
 - C. carry the tray at waist level and enter the room
 - D. carry the tray shoulder-high in his left hand, knock and wait until told to enter**
141. Decide which menu is the best composed:
- A. Egg mayonnaise, Chicken Pancake Mornay, mashed potato, carrots, steamed chocolate pudding
 - B. Melon Cocktail, Curried Beef and Rice, Brussels sprouts, boiled potatoes, bread and butter pudding**
 - C. Cream of Tomato Soup, Chicken Chasseur, Vichy carrots, Rissolee potatoes, Strawberry Flan
 - D. Cream of Leek Soup, Blanquette of Lamb, cauliflower, new potatoes, Vanilla mousse
142. The correct sequence of lay-out on a cafeteria counter is:
- A. main course, sweet, cash till, cutlery, paper napkin
 - B. cold dish, soup, main dish, sweet, sundries, beverages**
 - C. snacks, vending machine, microwave oven, tray stand
 - D. cutlery, trays, condiments, called order, cash till, water font
143. The term a la carte means:
- A. a set menu without any alternatives or beverages
 - B. a carte du jour menu inclusive of coffee and service charge
 - C. a series of dishes as chosen by a customer and cooked to order**
 - D. a prix-fixe menu with several choices on each course
144. Which of the following combination of items would you find at a waiters’ station?
- A. side plates, dessert bowls and water glasses
 - B. napkins, menus and dessert cutlery**
 - C. sugar bowls, teaspoons and coffee plunger
 - D. tablecloths, under plates and bread knives

145. The best way to deal with a customer who complains about poor service is to:
- apologies
 - offer him a free drink
 - inform the head waiter**
 - try to make excuses
146. The main use of a waiter's cloth is for:
- wiping customer's fingers after eating snails
 - polishing plates and glasses when laying them on the table**
 - covering stains on the tablecloth
 - wiping spilt food from the carpet
147. Silverware can be polished using which of the following systems:
- Gueridon
 - Helitherm
 - Ganymede
 - Polivit**
148. Which of the following is the most junior member of the brigade?
- a chef d'etage
 - a dumb waiter
 - the demi-chef de rang
 - The commis debarrasseur**
149. If a sixty seven kilogram person wants to lose four hundred and fifty two grams weight, he should do exercise like
- Less than an hour of biking per hour in a week**
 - More than an hour of biking per hour in a week
 - Sixty minutes running per day in a week
 - Ninety minutes running per day in a week
150. Antioxidants play a major role to prevent the cell damage during the metabolism which of the following antioxidant is not the enzyme in nature
- Superoxide Dismutase
 - Glutathione Peroxidase
 - Catalase
 - Bilirubin**
151. Cell metabolism is regulated by verity of enzymes present in the cell, the cell organelle mitochondria has amply of the following
- Vitamin C
 - Vitamin E**
 - Coenzyme Q10
 - Vitamin D
152. The amount of energy required for utilization and storage of food in body is called
- Activity need
 - Thermic effect needs**
 - Aerobic need
 - Anaerobic need
153. If a person exercises intensively over thrice a week, then its PAL will be
- One point three
 - One point four

C. One point five

D. One point seven

154. If an athlete exercises seven to fourteen hours in a week, then the carbohydrate requirement will be

A. Four to five grams per kilogram of bw per day

B. Six to seven grams per kilogram of bw per day

C. Four to five grams per gram of bw per day

D. Seven to eight grams per gram of bw per day

155. If a female athlete weighing sixty seven kilogram weight required 2135 kilocalories wants to reduce the weight then the advise value should be

A. One thousand eight hundreds and fifteen kilo calories per day

B. One thousand seven hundred and twenty three kilo calories per day

C. One thousand ten hundred and twenty seven kilo calories per day

D. One thousand fourteen hundred and thirty two kilo calories per day

156. The cheese consumed by sport men very often is an example of

A. High GI food

B. Intermediate GI food

C. Low GI food

D. No GI value

157. If an athlete performing the high intensity training, then usually the protein requirement will be:

A. 0.8 grams per kilogram of bw per day

B. 1.2 to 1.4 grams per kilogram of bw per day

C. 1.4 to 1.8 grams per kilogram of bw per day

D. 1.2 to 1.4 grams per gram of bw per day

158. During the fatigue development in an athlete there is lot of deficiencies except

A. Speed maintained

B. Time spent

C. Skill

D. Dehydration

159. During the tournament if the sport competition proceeds more than one and half an hour then there is more chance of

A. Muscle glycogen depletion

B. Hypoglycemia

C. Acid-base disturbance in muscle

D. Salt depletion

160. If an athlete is training lightly in Ziarat and drinking water supplementary, then there is chances of

A. Dehydration

B. Salty perspiring

C. Hyponatremia

D. Acid-base disturbance in muscle

161. If an athlete is preparing himself for weight lifting in a massive category, the diet plan should be amid to develop the

A. Slow twitch muscle

B. Fast twitch muscle x

C. Fast twitch muscle a

D. Fast twitch muscle b

162. If the preservative is used in the dietary supplements, then it should be mentioned on label at the site of

- A. At type of product
- B. In ingredient table
- C. At serving size

D. At bottom of the label

163. If a dietary supplements is manufactured as rich source of vit D that may reduce the occurrence of weakness in the bone, this supplement can come under the category of

- A. Health claims
- B. Function claims
- C. Nutrients claims
- D. All of them

164. The lactic acid accumulation during training can be minimized by providing the athlete more

- A. Fluid
- B. Carbohydrate

C. Iron

- D. Protein

165. The muscles are the basic functional unit for an athlete and its growth in the body can be augmented by providing the diet supplements having

- A. Arginine
- B. Coenzyme Q10
- C. Glutamine
- D. Siberian ginseng

166. The hostile attitude in an athlete can develop due to prolong use of

- A. Anabolic drugs
- B. Diuretics
- C. Beta blockers
- D. Erythropoietin

167. The sport scientists endorse one fourth of calories requirement should be taken from lipids

- A. Lipids
- B. Protein
- C. Carbohydrate
- D. Alcohol

168. If an athlete wants to lose weight for a particular category competition the effective way is to

- A. Use the diuretics
- B. Exercise

C. Take less energy

- D. Glucocorticosteroids

169. Meal is taken to meet the body requirement of different nutrients and to fuel the muscle cells it is advised to take meal

- A. At least more than twenty four hours before competition
- B. At least three to four hours before competition
- C. Very frequent during competition
- D. After every fifteen minutes during competition

170. Ability to perform prolonged, large muscle, dynamic exercise at moderate to high levels of intensity is called
- A. Flexibility
 - B. Muscular endurance
 - C. **Cardiovascular endurance**
 - D. Muscular strength
171. The cardiovascular endurance of an athlete depends upon
- A. Lung's capacity
 - B. Heart capacity
 - C. Nervous system efficiency
 - D. **All of them**
172. The amount of force can be produced by a muscle in a single movement is
- A. Flexibility
 - B. Muscular endurance
 - C. Cardiovascular endurance
 - D. **Muscular strength**
173. The flexibility in the body of an athlete depends upon the factors except
- A. Length of connective tissue
 - B. Nervous system
 - C. Joint structure
 - D. **Hight of the athlete**
174. The ability to perform a movement precisely using the complete nervous system accurately is
- A. Speed
 - B. **Coordination**
 - C. Agility
 - D. Balance
175. The capability to react rapidly to a coming football is
- A. Speed
 - B. Coordination
 - C. Agility
 - D. **Reaction and movement time**
176. The amount of workout that should be completed in a specific exercise is
- A. **Intensity**
 - B. Type
 - C. Frequency
 - D. Time
177. For setting fitness short term goals by an athlete, he should be advised that they must be
- A. Measurable
 - B. Attainable
 - C. Motivational
 - D. **All of them**
178. To attain physical fitness in a better way the workout plan made may has/have
- A. Favorite exercises
 - B. Cross trainings
 - C. Motivational friend
 - D. **All of them**

179. The overload principle can only be effective to improve fitness of an athlete if the stress is applied to the body has
- A. Equal in amount to the previous force
 - B. Within threshold limit**
 - C. Unbearable to the body
 - D. Less in amount to the previous force
180. The health and fitness goals can be achieved by an athlete by
- A. Healthy diet
 - B. Efficient exercising
 - C. Good time for rest and recovery
 - D. All of them**
181. The cognitive restructuring is a good technique to normalize an athlete for next game by providing
- A. Eustress**
 - B. Distress
 - C. Stress
 - D. Fatigue
182. The envisioning to get gold medal in a 100 meter race is a way to reduce the stress and can be practiced in the technique
- A. Muscle relaxation
 - B. Diaphragmatic breathing
 - C. Cognitive restructuring
 - D. Visualization**
183. The workout having high intensity and low intensity exercises intermingled with relief duration is
- A. Interval trainings**
 - B. Cross trainings
 - C. Low intensity exercises
 - D. High intensity exercises
184. The sprint exercises are performed to improve the physical fitness of an athlete and are considered as
- A. Low intensity exercises
 - B. Moderate intensity exercises
 - C. High intensity exercises**
 - D. All of them
185. To improve the flexibility of a joint the body stretching is a common practice which is advised to an athlete, and it should be hold for at least
- A. 15-30 seconds**
 - B. 30-45 seconds
 - C. 45-60 seconds
 - D. 1-15seconds
186. The walking in a park briskly early in the morning is an example of
- A. Anaerobic activity
 - B. Aerobic activity**
 - C. Sprint
 - D. HIIT

187. The broad jumping is performed to improve the physical fitness of an athlete and are considered as
- Low intensity exercises
 - Moderate intensity exercises
 - High intensity exercises**
 - All of them
188. The food when consumed by an athlete utilized for the thermic effect has share to total calories as
- Ten percent**
 - Twenty percent
 - Fifteen percent
 - Twenty five percent
189. If an athlete wants to burn one pound fat, he should do hard training to burn
- 3500 calories**
 - 2500 calories
 - 3000 calories
 - 4000 calories
190. The average resting pulse rate of an adult athlete is usually
- Sixty to eighty per minute**
 - Eighty to hundred per minute
 - Forty to sixty per minute
 - Ninety to hundred ten per minutes
191. The average resting respiratory rate of an adult athlete is usually
- Twelve to twenty per minute**
 - Twenty to twenty eight per minute
 - Four to twelve per minute
 - Twenty eight to thirty six per minute
192. The intensity of color of the urine has _____ relationship with hydration status of an athlete
- Direct
 - Inverse**
 - Equal
 - None of them
193. The most of the water of hydration is present in intracellular fluid of an athlete which is about
- Sixty percent of TBW
 - Sixty five percent of TBW**
 - Thirty five percent of TBW
 - Twenty nine percent of TBW
194. The average sweating rate at room temperature of an adult athlete is
- 800-1400 ml/h**
 - 1000-1600 ml/h
 - 100-800 ml/h
 - 1800-2400 ml/h
195. During BIA, the highest resistant is excepted from the
- Fat**
 - Muscle
 - Bones

D. Connective tissue

196. During BIA, if the athlete has less muscular mass, then the resistances will be

A. Higher than normal

B. Lower than normal

C. Equal

D. Have no effect

197. During BIA, the most of the current faces conductance while passing through

A. Muscle

B. Body fluids

C. Fat

D. Bone

198. Neonatal death occurs within

a) **First month** b) First year c) in first five years d) None of these

199. To overcome feeding problem in infants

a) Assess growth frequently b) Change volume of feeding c) Change diet composition

d) All of these

200. Gestation period for preterm infants is

a) Less than 50 weeks b) More than 40 weeks **c) Less than 37 weeks** d) None of these

201. During first 6 months of age, daily protein needs of infants is

a) 1.1 g/kg of body weight **b) 2.2 g/kg of body weight** c) 5 g/kg of body weight d) 4.2 g/kg of body weight

202. For infants' cholesterol intake

a) Is harmful b) cause blood pressure **c) helps in brain development** d) None of these

203. Fatty acids in breast milk are

a) Long chain b) Long and medium chain **c) Short and medium chain** d) None of these

204. Daily vitamin D recommendation for infants is

a) 400 IU b) 800 IU c) 1200 IU d) 1600 IU

205. Vegans eat foods

a) Only plant based b) plants and milk c) eggs and milk d) none of these

206. During pregnancy maternal blood volume increases by

a) 50% b) 40% c) 100% **d) 20%**

207. During pregnancy caloric intake from carbohydrates should be

a) 90 - 100% b) 70 - 75 % **c) 50 - 65%** d) 20 - 30%

208. Daily recommended protein intake during pregnancy is

a) 50 g b) 10 g **c) 25 g** d) 100 g

209. Daily recommended intake for dietary folate equivalent during pregnancy is

a) 600 mcg of folate b) 200 mcg of folate c) 1000 mcg of folate d) 400 mcg of folate

210. What is effect of dietary fibre on insulin requirement in diabetic patients?

a) No effect **b) reduces insulin requirement** c) increases insulin requirement

d) both b & c

211. Daily sodium recommendation during pregnancy is

a) 100 mg b) 50 mg c) 75 mg **d) salt to taste**

212. Daily calcium requirement for pregnant adolescents is

a) 300 mg b) 700 mg **c) 1300 mg** d) 1500 mg

213. Depending only on milk in toddler age may result in

a) Healthy body **b) Iron deficiency** c) heart problems d) All of these

214. To overcome dental caries in toddlers following micronutrients are helpful
a) Sodium b) Magnesium c) iron d) **fluoride**
215. Food security means access to
a) Sufficient food b) nutritious food c) safe food d) **All of these**
216. Following conditions may cause nutritional risk in older adults
a) Poverty b) social isolation c) dependency d) **All of these**
217. RDA for protein intake in older adults is
a) 0.1 g/Kg body wt. b) 5 g/Kg body wt. c) **0.8 g/Kg body wt.** d) 2.5 g/Kg body wt.
218. A function of carbohydrates in the diet is to:
A. enable chemical reactions.
B. promote growth and repair of tissues.
C. **supply energy**
D. maintain water balance.
219. Salmonella poisoning is likely to be caused by
a) Fruits b) vegetables c) UHT milk d) **Eggs**
220. Streptococcus mutant cause _____ in young children.
a) Anemia b) diarrhea c) **tooth decay** d) all of these
221. To control obesity very low energy diet is _____.
a) Recommended strongly b) **not recommended** c) best suited d) none of these
222. Toddlers feeding only with milk _____.
a) Grow ideally b) **are at risk of iron deficiency** c) are at risk of vitamin D deficiency d) none of these.
223. After infancy, the highest calcium is required during _____.
a) **Adolescence** b) old age c) adult age d) Toddler stage
224. Beta carotene is a precursor of _____.
a) Calcium b) **Vitamin A** c) vitamin D d) Iron
225. Excessive vitamin A can cause _____.
a) Blurred vision b) Hair loss c) **both of these** d) none of these
226. Calcium requirement for a 17 year boy will be _____ mg/day
a) **1300** b) 1500 c) 13000 d) 500
227. DRI for dietary fiber intake for a boy aged 15 years will be _____ g/day.
a) 68 b) 78 c) 98 d) **38**
228. Fluorosis is caused by _____.
a) **Excess of fluorides** b) deficiency of fluorides c) eating less flour products
d) None of these
229. Good source of Docosahexaenoic acid (DHA) is _____.
a) Milk b) fruits c) Vegetables d) **Eggs**
230. In adults' calcium needs can be met by taking _____ oz of milk daily.
a) **8** b) 6 c) 4 d) 2
231. In adults' energy expenditure for internal chemical activities to maintain the body is _____.
a) 25% b) 50 % c) **75%** d) 100%
232. Iron deficiency anemia in toddlers results in _____.
a) Weight gain b) Cancer development c) Diabetes mellitus d) **Behavioral disturbance**
233. Inadequate protein intake in older adults may lead to _____.
a) Slow growth b) **Muscle wasting** c) Low blood pressure d) Dense bones
234. Vitamin D toxicity from food sources is _____ in old adults

- a) Frequent **b) Rare** c) Impossible d) Likely to occur
235. In older adults the upper limit for vitamin E is _____ mg alpha-TE
a) 1800 b) 1200 **c) 1000** d) 1500
236. At menopause, women iron needs drop to _____ mg per day.
a) 18 b) 20 **c) 8** d) 16
237. In adults when fasting glucose level is between 100 and 126 mg/dl, it is categorized as:
a) Pre-diabetes b) Type 1 diabetes c) Type 2 diabetes d) Just normal
238. A 15 year old girl needs _____ mg/day of iron.
a) 13.3 b) 19.6 c) 9.6 d) 10.5
239. Calcium requirement for a toddler of age 6 years will be _____ g/day
a) 500 b) 1000 **c) 800** d) 1200
240. Iron deficiency anemia in toddlers results in _____.
a) Weight gain b) Cancer development c) Diabetes mellitus **d) Behavioral disturbance**
241. Central body fat obesity is indicated by _____ in women and _____ in males.
a) >35 inches, >40 inches b) >35 inches, <40 inches c) <35 inches, <40 inches
<35 inches, >40 inches
242. Inadequate intake of _____ may impair fetal learning ability and vision development.
a) Essential amino acids **b) Essential fatty acids** c) Vitamin B12 d) None of these
243. Iron reserves in _____ indicates the prenatal iron stores of the mother.
a) Pre term infants **b) full term infants** c) none of these d) all of these
244. Malnutrition occurs in many infants during this _____ period and contribute high prevalence of malnutrition in children.
a) Preconception b) pregnancy **c) complementary feeding** d) none of these
245. _____ of a newborn is one of the key measure of health status during pregnancy.
a) Height **b) weight** c) head circumference d) none of these
246. _____ is a major class of protein in mature milk carries iron in a form that is easy to absorb and has bacteriostatic activity.
a) Casein b) lactose binding protein **c) lactoferrin** d) digestive enzymes
247. _____ in women increases the risk of infertility due to highly irregular menstrual cycles.
a) Gestational diabetes b) Hypertension **c) Obesity** d) none of these
248. Which of the following are examples of observational studies?
A Community trials C Randomized controlled trials
B Case control D Field trials
249. _____ attempts to establish causes or risks for certain problem by comparing two or more groups:
A Longitudinal study C Cross sectional study
B Cohort study **D Analytical study**
250. _____ is defined as the ratio of the incidence of outcome among exposed to the incidence among non-exposed:
A Mortality rate C Morbidity ratio
B Relative risk D None
251. _____ is based on multiple observation in the same population to identify risk factors, finding out incidence rate and to study natural history of disease over a prolong period of time:
A Retrospective study C Cohort study
B Cross sectional study **D Longitudinal study**

252. _____type of research discovers the existence of a relationship or interdependence between two or more aspects of a situation:
 A Basic research C **Correlation research**
 B Fundamental research D Explanatory research
253. _____ is undertaken to explore an area where little is known or to investigate the possibilities of undertaking a particular research:
 A Descriptive research C Pilot study
 B Exploratory research D **Both B and C**
254. In _____approach, research process such as objectives, design, sample and questions of participants is predetermined:
 A Qualitative approach C **Structured approach**
 B Qualitative and quantitative approach D Unstructured approach
255. During your workshop, you were familiarized with some of the HEC and other databases to search literature, which database is used to find out thesis:
 A **ProQuest** C ACS and Elsevier
 B Ebrary D Elsevier
256. Which of the following are examples of epidemiological study?
 A RCTs C Non-observational
 B Cross sectional D **All**
257. Which of the following epidemiological design is best to minimize bias and establish cause and effect relationship?
 A Feasibility study C Non-randomized controlled design
 B Cross sectional D **Randomized controlled design**
258. _____type of study where the investigator looks back into the disease history of the patient by investigating clinical reports:
 A **Retrospective studies** C Cohort
 B Cross sectional D Descriptive
259. _____extraction technique is best suited for the extraction of heat liable compounds:
 A **Super critical fluid extraction** C Soxhlet extraction
 B Pressurized solvent extraction D Microwave extraction
260. _____ enzyme is used to dose the pancreatic enzymes:
 A Lactase C Protease
 B Amylase D **Lipase**
261. Tissue transglutaminase inhibitors are beneficial for the management of which of the following disease condition:
 A **Gluten intolerance** C Cystic fibrosis
 B Lactose intolerance D Exocrine pancreatic insufficiency
262. _____is the endogenous antioxidant enzyme involved in removal of reactive oxygen species:
 A Fructosyltransferase C Beta-glucosidase
 B **Glutathione transferase** D Fructofuranosidase
263. Which of the following solvents has most application in traditional Soxhlet extraction of oil from plant materials:
 A **N-hexane** C Diethyl ether
 B Water D Isopropanol alcohol
264. Which of the following is produced by the parietal cells of the stomach and assists in the absorption of cobalamin?

- A Lactase C **Intrinsic factor**
 B Lysozyme D Pepsin
265. Caffeine is metabolized by the _____ part of the human body.
 A Spleen C Intestine
 B Kidney D **Liver**
266. Which of the following bioactive components of soybean can act as phytoestrogen in postmenopausal women?
 A Polyphenols C Phytosterols
 B Epigallocatechin gallate D **Isoflavones**
267. The industrial production process for inulin synthesis consists of _____.
 A Extraction, Hydrolysis C **Extraction, Refining**
 B Separation, Refining D Hydrolysis
268. _____ compound/s is regarded as important energy fuel for colon cells.
 A Acetate C Propionate
 B **Butyrate** D All
269. Which of the following features of fermentation increase the mineral absorption from the large intestine?
 A Caecal enlargement C Mineral complex with SCFA
 B Acidity and low pH D **All**
270. Inside the human body released energy is trapped in which compound?
 A CO₂ C **ATP**
 B Amino acids D Glycerol
271. Which of the following utilize about 60 to 70 percent of total basal energy requirements?
 A Gastrointestinal tract tissue C Brain tissues
 B Heart tissues D **All**
272. The decrease in basal energy expenditure with increase in age is due to shift in _____ proportion to _____.
 A **Muscle mass, Fat mass** C Muscle mass, Lean body mass
 B Fat mass, Muscle mass D None
273. The constant _____ is an index of energy balance in healthy adults.
 A BMR C **Weight**
 B Physical activity D All
274. The specific dynamic action of the food accounts for _____ percent of total energy requirement.
 A 60 % C **6-10%**
 B 20-30% D None
275. _____ is considered as a greater risk for non-communicable diseases related mortality and morbidity.
 A Diabetes C **Obesity**
 B Hyperlipidemia D CVD
275. Which of the following dietary intake method includes type and amount of food consumed, time of consumption and method of preparation?
 A 24 hour recall method C **Food record**
 B Food frequency questionnaire D Direct observation
276. Which of the following statement regarding food evaluation is true?
 A Foods can be evaluated on the basis of their nutrient contribution per serving

- B Foods can be evaluated on the basis of their nutrient contribution per Kcalories
 C **Both** D None
277. Difference between the calories needed for energy and those to supply nutrients is called as:
 A Empty caloric foods C **Discretionary kcalorie allowance**
 B Nutrient density D None
278. Quercetin ____ the absorption of glucose by the intestinal cells as well as __ the transportation of glucose.
 A Increase/Increase C **Decrease/Decrease**
 B Decrease/Increase D Increase/Decrease
279. A constant state of low-level inflammation called chronic inflammation in_____.
 A Skin cells C **Fat cells**
 B Blood cells D Nerve cells
280. _____induce thermogenesis and are being used as anti-obesity agents.
 A Isoflavone C Anthocyanin
 B Lignan D **Capsaicin**
281. The functionality and bioavailability of bioactive compounds are strongly affected and determined by their _____.
 A Textural properties C **Chemical properties**
 B Physical properties D Biological properties
282. _____characterizes the mechanism by which a nutrient affects a structure or function of the body.
 A Health claim C Qualified health claim
 B **Structure function claim** D Nutrient content claim
283. NLEA stands for_____?
 A **National Labelling and Education Act** C Nutrients Labelling and Education Act
 B Nutrition Labelling and Education Act D None
284. The additive or synergistic effect of prebiotics and probiotics can decrease the_____.?
 A **Enterobacteriaceae** C Streptococcus
 B B. longum D All
285. The activity of _____causing factor can lead to increase ROS production inside human body.
 A CAT enzyme C **Pro-inflammatory enzyme**
 B Reactive nitrogen D None
286. A decrease in_____ can be of value because it reduces the probability of _____.
 A LDL, Peroxidation C **Platelet, Clotting**
 B NO, Vascular dysfunction D None
287. Free radicals can modify _____and_____ contribute to blood vessel dysfunction.
 A NO, HDL C NO, SOD
 B NO, TG D **NO, LDL**
288. _____ is the most common type of cancer in west and mostly caused by eating patterns.
 A Breast cancer C **Colon cancer**
 B Liver cancer D Lung cancer
289. _____ is required for active absorption of _____by increasing the synthesis of protein for transporting the compound across enterocytes.
 A Calcium, Phosphorus C **Vitamin D, Calcium**
 B Iron, Vitamin B12 D Calcium, Vitamin D

290. In _____, a low transplacental transport of vitamin D can cause vitamin D deficiency in _____.
- A Second trimester of gestation, Full term infant C Third trimester of gestation, Full term infant
 B Second trimester of gestation, Preterm infant D **Third trimester of gestation, Preterm infant**
291. The crucial and very first step for designing knowledge, attitude and practice survey questionnaire is to define _____ and _____ which can help you to select module.
- A Questions, Interviewer C Nutrition topics, specific questions
 B **Objectives, Survey population** D None
292. Which of the following condition results due to reduced apoptosis of chondrocyte, vascularization, and mineralization of the cartilage?
- A Osteoporosis C Osteopenia
 B Hypercalcemia D **Rickets**
293. _____ having most potent pro-vitamin A activity.
- A Alpha carotene C Lycopene
 B **Beta carotene** D All of the above
294. _____ lower blood pressure in hypertensive animals.
- A Dipeptide C Polypeptide
 B **Tripeptide** D None
295. ____ and _____ are considered as important prerequisite for probiotic action.
- A Human origin, Viability C **Adhesion, Colonization**
 B Viability, Adhesion D Viability, Colonization
296. _____ bioavailability and absorption can be further enhanced by the additional ingestion of some dietary fat.
- A Ascorbic acid C Lycopene
 B Polyphenols D **Isoflavones**
297. _____ are the parameters should analyzed for probiotic feeding trial.
- A Only Faeces C Serum antibodies and blood
 B Only blood D **All**
298. The process of separation of solid particles from liquids is called _____:
- A De-foaming C **Flotation**
 B De-dusting D Centrifugation
299. SFE stands for _____?
- A Sulphur Facilitated extraction C Sodium Assisted extraction
 B Super Fluid Extraction D **None**
300. _____ processing technique is thought to most destructive to antioxidants.
- A Freezing C High Pressure Processing
 B **Thermal** D Irradiation
301. Higher residual activity of which enzyme/s cause oxidation of phenols:
- A Peroxidase C Polyphenol reductase
 B Polyphenol oxidase D **Both A and B**
302. Fermentation of dietary fiber has positive impact on _____, _____ and produces _____.
- A Colonic pH C SCFA
 B Laxation D **All**
303. Which of the following should survive through upper GIT without losing viability?
- A Dietary Fiber C **Probiotics**

- B Inulin D All
304. Myoglobin accounts for _____% of iron in live animal carcass:
 A 90% C 20%
 B **10%** D 95%
305. The concentration of nitrate/nitrite should be less than _____-ppm in cured meat products.
 A 250 C 200
 B **150** D 100
306. Furan and furfural are products of thermal degradation of _____
 A Lignin C None
 B Cellulose D **Hemicellulose**
307. Recommended procedure to thaw the meat product is:
 A Autoclaving C Microwaving
 B **Refrigeration** D Water boiling
308. Color development in smoked product occur by the reaction of _____ with amino acids:
 A Phenols C Hydrocarbons
 B **Carbonyls** D Alcohols
309. The commercial food irradiation station is located in _____ city of Pakistan.
 A **Lahore** C Faisalabad
 B Tandojam D Peshawar
310. The most direct target of ionization energy is _____ molecules.
 A Water C **Nucleic acid**
 B Fat D Protein
311. _____ animal tissues have ability to store high quantity of oxygen due -----.
 A **Whale/myoglobin** C Camel/hemoglobin
 B Camel/myoglobin D Whale/hemoglobin
312. _____ smoke component is responsible for development of skin on skinless sausages.
 A **Acids** C Phenols
 B Alcohols D Carbonyls
313. _____ organic acid is present in vapor phase of smoke.
 A Valeric acid C **Formic acid**
 B Capric acid D Caproic acid
314. The maximum reduction in hardness of meat was observed between _____ days of aging.
 A **10-14 day** C 14-35 days
 B 7-10 days D 4-7 days
315. Electrons can be accelerated up to _____ MeV, which is about eight times higher than the energy level of gamma rays.
 A 5 C 15
 B **10** D 20
316. Pickle cure is added to meat cut upto -----% increase in weight.
 A 15 C **10**
 B 20 D 25
317. _____ have lengthier storage life at same freezing temperature.
 A Veal C Lamb
 B Goat D **Beef**
318. With respect to meat quality, ----- is best method of meat preservation

- A **Meat freezing** C Meat refrigeration
 B Dehydration D Thermal processing
319. The curing ingredient used for improving water holding capacity of processed meat products is _____.
- A Ascorbates C **Phosphates**
 B Nitrite/Nitrate D Salt
320. Male animals require diets having high _____ ratio than female.
- A **Protein/energy** C Fat/energy
 B None D Protein/fat
321. _____ and _____ animals slaughtering is known as Nehar:
- A Fish and locust C Fish and ostrich
 B **Ostrich and Camel** D Camel and fish
322. Aldehydes and phenols condense to form resins responsible for meat color represent about _____% of the smoke components.
- A 55% C **50%**
 B 45% D 40%
323. The tissues or organs developed first in development order is:
- A Muscles C Fats
 B Bone D **Brain and nervous system**
324. Major pigment responsible for meat color is:
- A **Myoglobin** C Cytochromes
 B Flavones D Hemoglobin
325. _____ animal was domesticated before establishment of settled agriculture.
- A Horse C Goat
 B Cow D **Sheep**
326. Meat quality parameters that predict the yield of processed meat products are:
- A **WHC and pH** C pH and Color
 B Color and IMF D pH and IMF
327. Major components of wood smoke that play a role in browning during meat smoking:
- A **Carbonyls** C Alcohols
 B Hydrocarbons D Phenols
328. Animal having highest oxygen storage ability due high myoglobin content is -----.
- A Cow C Camel
 B Horse D **Whale**
329. The word meat originates from _____ language old word mete.
- A **English** C German
 B Swedish D Norwegian
330. _____% of the smoke flavor of meat products comes from the vapor stage.
- A 85% C **95%**
 B 80% D 90%
331. Sodium reduction is done by partially or full substituting ----- salts most commonly.
- A Magnesium C Selenium
 B Calcium D **Potassium**
332. Low drip loss is an advantage of which technique?
- A Radiofrequency-assisted freezing C Magnetic resonance-assisted freezing
 B Pressure-shift freezing D **All**

333. A group of meat products named Apilight with a formulation that eliminates ingredients causing _____ .
 A Hyperglycemia C Hyperlipidemia
 B Hypertension D **Allergy**
334. Conjugated linoleic acids (CLA) are a group of fatty acids found:
 A **Milk and Meat** C Eggs and egg products
 B Fish and shrimps D Vegetable oil and ghee
335. Oxidative rancidity in irradiated meat can be minimized by:
 A Freezing before irradiation C MAP
 B Antioxidants D **All**
336. Which of the following statement is correct?
 A For domestic consumption, cattle and buffalo weighing approx. 350- 450 kg are usually slaughtered on the floor
 B Conventional techniques are used for the identification or classification of samples
 C **The first stage of chemometrics for spectroscopic data analysis is data pre-processing**
 D All
337. The most direct target of ionization energy is ----- to achieve food safety.
 A Carbohydrate C Water molecules
 B Protein molecules D **DNA molecules**
338. Beef is rich source of _____ .
 A **Carnitine** C Anserine
 B Carnosine D Histidine
339. The desired viability of probiotics should be ----- to have positive health impacts.
 A 102-104 cfu/g C 110-112 cfu/g
 B 96-100 cfu/g D **106-108 cfu/g**
340. A healthy balance between good and bad bacteria in digestive tract is _____.
 A 75/25 C 70/30
 B **85/15** D 95/5
341. The physiological role of the nutrients in growth, development and normal functions of the human body is ----- claim.
 A Qualified Health claim C **Function claim**
 B Nutrient claim D Health claim
342. The probiotic strain for best result should be isolated from _____ origin.
 A **GIT Tack** C Cheese
 B Pickle D Yoghurt
343. Toxic compounds produced during meat processing and storage are _____.
 A Cholesterol oxides C Nitrosamines
 B Polycyclic aromatic hydrocarbons D **All**
344. The most sensitive amino acids to radiation are sulfur bearing notably _____.
 A Arginine, alanine, and valine C Leucine, isoleucine, and methionine
 B Leucine, methionine, and tryptophane D **Cystine, methionine, and tryptophane**
345. _____ helps to maintain healthy balance between good and bad bacteria.
 A **Probiotics** C Prebiotics
 B Symbiotic D None
346. Activity of bioactive peptides derived from meat is based on _____.
 A Ripening stages C Amino acid composition

- B Hydrolysis method D **All**
347. Process of consuming, absorbing and using nutrients needed by the body for growth, development and maintenance of life:
 A Balanced diet C Ingestion
 B **Nutrition** D Assimilation
348. Foods provide energy, promote growth, repair worn down body tissues and sustain the regulatory processes divided into how many categories based on function:
 A **3** C 2
 B 4 D 5
349. Food in the daily diet - contains as many as 100,000 substances, of which only 300 are nutrients and how many are essential nutrients:
 A 35 C 55
 B **45** D 25
350. Basic classification of food based on how many groups:
 A 2 C 6
 B **4** D 3
351. Water, carbohydrates, fats, proteins, some minerals (calcium, phosphorous, sodium, chlorides, potassium, and magnesium) are called:
 A **Macro nutrients** C Major nutrients
 B Micro nutrients D Minor nutrients
352. On an average, human body consists of water
 A 85% C **63%**
 B 45% D 75%
353. Contains ample nutrients in proportions required by an individual called:
 A Major diet C Human diet
 B **Balanced diet** D Proper diet
354. Over- or under-consumption of food nutrients called:
 A Over nutrition C Poor nutrition
 B **Malnutrition** D Under nutrition
355. In poorer families, which deficiency responsible for Kwashiorkor in children:
 A **Protein** C Mineral
 B Iodine D Lipid
356. Bones contain how many percent water:
 A 35% C **26%**
 B 46% D 36%
357. Oxidation of one gram proteins provides how many mL water:
 A 0.61 C 0.3
 B 0.1 D **0.41**
358. How many mL water lost through urine per day?
 A 500 to 1000 C **1000 to 2000**
 B 200 to 500 D 700 to 900
359. Average water content in polished Rice is:
 A **12.3** C 10.3
 B 11.3 D 13.3
360. When oxidized by human body, sugars provide energy:
 A 6kJ C **16kJ**

- B 10kJ D 12kJ
361. Average water content in cucumber is
 A 95.1 C 55.1
 B 75.1 D 25.1
362. Occur naturally in many fruits (2 to 6%), and in honey (25 to 37%) is:
 A Sucrose C Fructose
 B **Glucose** D Galactose
363. Which sugar has sweetness of 32 on a scale of 100 for sucrose:
 A **Maltose** C Lactose
 B Glucose D Galactose
364. Human milk contains how many percent lactose:
 A 4.5% C 3.5%
 B **7.5%** D 6.5%
365. Thousands of glucose units joined together in 1,4-position (as distinct from 1,4-bond in maltose) is:
 A Arabinose C **Cellulose**
 B Stachyose D Maltose
366. Complex polysaccharides present in fruits (guava, apple), roots (turnips) is:
 A **Pectins** C Gums
 B Agar D Starch
367. Lipids provide how many energy:
 A 16kcal C **9kcal**
 B 4kcal D 6kcal
368. Short chain fatty acids have melting points?
 A Stable than long chain fatty acids C Medium than long chain fatty acids
 B Higher than long chain fatty acids D **Lower than long chain fatty acids**
369. Lauric acid is present in:
 A Olive oil C **Coconut oil**
 B Sunflower oil D Palm oil
370. Oils from herring, menhaden, cod (liver), halibut (liver), other fish called:
 A Animal oils C Ocean oils
 B Sea oils D **Marine oils**
371. Average protein content of Wheat, whole grain flour is:
 A 7.9 C 8.9
 B **10.9** D 10.45
372. Substances regarded as those present in ash when food or any living organism is cremated:
 A **Inorganic materials** C Ash materials
 B Organic materials D Incinerated materials
373. Precursor for coenzymes flavin mononucleotide (FMN) and flavin adenine dinucleotide (FAD) is:
 A Thiamine C **Riboflavin**
 B Biotin D Pyridoxine
374. Insomnia results in the deficiency of which vitamin:
 A Cyanocobalamin C Biotin
 B **Pyridoxine** D Niacin
375. Which vitamin is found in egg yolk, liver, yeast, legumes, wheat germ, poultry:

- A Vitamin D C Vitamin B-6
B Vitamin H D Vitamin B-12
376. Which vitamin is red in colour, water-soluble:
 A Biotin C Niacin
B Cyanocobalamin D Pantothenic acid
377. If a person's weight is 15 to 20 percent above ideal weight indicated, then person usually classified as:
 A Healthy weight C Under weight
B Over weight D Balanced Weight
378. Men's body should contain how many percent total body fat and not below 3 to 4 percent:
 A 9 to 10% C 13 to 14%
 B 10 to 11% **D 11 to 15%**
379. Maltose, sucrose and lactose are called:
 A Trisaccharides C Monosaccharides
B Disaccharides D Tetrasaccharides
380. B-12 absorbed in which part with aid of intrinsic factor produced by stomach:
 A Duodenum **C Ileum**
 B Jejunum D Pancreas
381. Dietary fibre and which acid in whole meal cereals may decrease absorption of specific minerals such as calcium, iron and zinc:
 A Ascorbic acid C Pantothenic acid
B Phytic acid D Lauric acid
382. Absorb water from residue moving through it and store resultant faeces until they expelled are functions of:
 A Small intestine C Ileum
B Large intestine D Pancreas
383. Residential time of faeces in large intestine varies from how many hours:
 A 4 to 7 **C 12 to 18**
 B 17 to 20 D 7 to 9
384. Long residential time in large intestine results in a disease - regarded as 'mother of diseases' known as:
A Constipation C Diarrhea
 B Nausea D Bloating
385. Processes that occur largely by oxidation reactions, whereby cellular substances are broken down to smaller molecules are known as:
 A Assimilation C Anabolism
B Catabolism D Digestive destruction
386. In human body fructose, galactose enzymatically converted to:
 A Starch **C Glucose**
 B Amino acids D Lipids
387. On an average, muscles can store about how many grams of glycogen:
 A 112g **C 110g**
 B 117g D 111g
388. In humans when peptides enter intestinal wall they are split into:
 A Proteins C Sugars
 B Lipids **D Amino acids**

389. Most sensitive of all vitamins to processing conditions is:
 A Phytic acid C Aspartic acid
B Ascorbic acid D Glutamic acid
390. Body of an average sized adult contains about how many grams of calcium:
 A 1450g **C 1250g**
 B 950g D 1050g
391. In new born babies retarded growth, protruding abdomen and swollen features is due to deficiency of:
 A Magnesium C Calcium
B Iodine D Potassium
392. Which aids in transportation of CO₂ in blood and maintenance of osmotic pressure of body fluids:
 A Magnesium C Cobalt
B Sodium D Phosphorus
393. Found in liver and meat and constituent of vitamin B-12 is:
 A Phosphorus C Sodium
B Cobalt D Manganese
394. Participates in formation and maintenance of strong bones and enamel of teeth is:
A Fluorine C Proline
 B Iodine D Serine
395. Uric acid in body is linked with the consumption of:
 A Carbohydrates **C Protein**
 B Vitamins D Lipids
396. What is the baseline physiological requirements for making a nutritional plan?
A) Energy and nutrients at rest B) Energy and nutrients at work
 C) Both A and B D) None of these
397. Detailed recommendations for developing a plan involves
 A) When to eat B) What to eat
 C) How much to eat **D) All of these**
398. How many steps are used as a guide to follow when developing a nutrition plan?
 A) 2 B) 4
C) 6 D) 8
399. TDEE/Maintenance for sedentary lifestyle is
 A) 1.3 x BMR **B) 1.2 x BMR**
 C) 1.4 x BMR D) None of these
400. Basal metabolic rate is the amount of energy a human body uses when it is at
A) Rest B) Work
 C) Both A and B D) None of these
401. BMR accounts for about ___ of your total energy expenditure
A) 60 to 75% B) 70 to 85%
 C) 40 to 55% D) None of these
402. TEE comes from
 A) Food digestion B) Physical activities
C) Both A and B D) None of these
403. FFM stands for
 A) Fat full mass **B) Fat free mass**

- C) Free fat mass
 404. BMR _____ each year you grow up
 A) **Increases** B) Decreases
 C) Does not affect D) None of these
405. Which exercise affects BMR?
 A) **Body building exercise** B) Aerobic exercise
 C) Both A and B D) None of these
406. BMR and Body temperature are
 A) **Directly related** B) Inversely related
 C) Not related D) None of these
407. The most interesting gland in terms of BMR modification is
 A) Parathyroid B) **Thyroid**
 C) Adrenal D) None of these
408. How many factors affect BMR?
 A) 5 B) 7
 C) **10** D) 12
409. Physical activity accounts for ___ of your TEE
 A) 10% B) **20%**
 C) 30% D) None of these
410. Postprandial (after meal) thermogenesis uses ___ of your TEE
 A) **10%** B) 20%
 C) 30% D) 40%
411. For swimmers, meal they consume ___ hours before competition day is the most important
 A) 48 hours B) **24 hours**
 C) 8 hours D) None of these
412. How many hours before competition a swimmer should consume mini-meal?
 A) 1-2 hours B) **3-4 hours**
 C) 4-6 hours D) None of these
413. Meal for swimmers must include
 A) High protein B) Low protein
 C) **Lean protein** D) None of these
414. ___% of dehydration affects speed and endurance drastically
 A) **1** B) 2
 C) 3 D) 4
415. Electrolytes that play a role in hydration are
 A) Chloride B) Calcium
 C) Magnesium D) **All of these**
416. Liquids are quickly absorbed and are great snacks to avoid
 A) **GI distress** B) Inflammation
 C) Allergy D) None of these
417. A recovery snack is high in
 A) Proteins B) Carbohydrates
 C) **Both A and B** D) None of these
418. Dietary supplements can be in the form of
 A) Tablets B) bars
 C) Powders D) **All of these**

419. A study of NCAA athletes reported that ___% of the athletes take dietary supplements
 A) 33
 B) 23
 C) 43
 D) None of these
420. Energy drinks consumed by athletes are
 A) Red bull
 B) Gatorade
 C) Cola
 D) Both A and B
421. Body carbohydrates stores provide an important fuel source for
 A) Brain
 B) Muscles
 C) Both A and B
 D) None of these
422. _____ is one of the most popular dietary supplements marketed to athletes
 A) Carbohydrates
 B) Proteins
 C) Both A and B
 D) None of these
423. Arginine is a substrate for _____ synthesis
 A) Oxalic acid
 B) Nitric oxide
 C) Both A and B
 D) None of these
424. A non-protein nitrogen is known as
 A) Creatine
 B) Creatinine
 C) Amino acid
 D) None of these
425. Which vitamin(s) function as antioxidants?
 A) Vitamin C
 B) Vitamin E
 C) Both A and B
 D) None of these
426. Trace minerals include
 A) Zinc
 B) Calcium
 C) Sodium
 D) None of these
427. More than _____ herbs are considered to be safe for use by FDA
 A) 1200
 B) 1400
 C) 1600
 D) None of these
428. Recommended intake of water for adult women is
 A) 2.5 liters
 B) 2.4 liters
 C) 2.7 liters
 D) None of these
429. Main ingredient in sports drinks is
 A) Carbs
 B) Electrolytes
 C) Water
 D) None of these
430. _____ helps to rebuild and repair muscles after exercise
 A) Proteins
 B) Lipids
 C) Minerals
 D) None of these
431. To build muscle you need
 A) 1 to 1.5g proteins
 B) 2 to 2.5g proteins
 C) 1 to 2 g proteins
 D) None of these
432. Eating carbs alone causes body to release
 A) Glycogen
 B) Insulin
 C) Glucagon
 D) None of these
433. Complex carbs are in
 A) Fruits
 B) Rice
 C) Sugar
 D) None of these
434. Which essential fatty acids you must take each day?

- A) ALA
C) Both A and B
435. ALA and LA are affected by
 A) Heat
C) Both A and B
436. Protein rich foods are
 A) Salmon
 C) Egg
 B) Lentils
D) All of these
437. Fat intake for an athlete should range between
 A) 10-20%
 C) 30-45%
B) 20-35%
 D) None of these
438. Vegetarian athletes may be at risk for low intakes of
A) Calcium
 C) Potassium
 B) Sodium
 D) Vitamin A
439. Inadequate nutritional intake is more common in _____ athletes
 A) Males
B) Females
 C) Both A and B
 D) None of these
440. Vitamins A, D and E require ____ for proper absorption
A) Fat
 C) Alcohol
 B) Water
 D) None of these
441. Develop a meal plan that will supply adequate
A) Calories
 C) Fats
 B) Salts
 D) None of these
442. Dietary supplement was defined by DSHEA of
 A) 1990
B) 1994
 C) 1996
 D) 1998
443. The number of calories you burn to simply exist without any external influences is known as
 A) TEE
B) BMR
 C) RMR
 D) None of these
444. BMR is determined by
 A) Gender
 C) Height
 B) Age
D) All of these
445. RMR accounts for about _____ of a person total energy requirements
 A) 20-40%
C) 60-80%
 B) 40-60%
 D) None of these
446. A reasonable weight for a healthy five-month-old infant who weighed 8 pounds at birth might be:
 A 12 pounds C 20 pounds
B 16 pounds D 24 pounds
447. Dehydration can develop quickly in infants because:
A Much of their body water is extracellular
 C Only a small percentage of their body weight is water
 B They lose a lot of water through urination and tears
 D They drink lots of breast milk or formula, but little water
448. An infant should begin eating solid foods between:
 A 2 and 4 weeks C **4 and 6 months**
 B 1 and 3 months D 8 and 10 months

449. World Breastfeeding Week (WBW) is celebrated every year in:
 A January C July
 B **August** D February
450. A true food allergy always:
 A **Elicits an immune response** C Creates an aversion to the offending food
 B Causes an immediate reaction D Involves symptoms such as headaches or hives
451. Which of the following strategies is not effective?
 A Play first, eat later C Encourage children to help prepare meals
 B **Provide small portions of unhealthy food** D Use dessert as a reward for eating vegetables
452. Gestation period for preterm infants is:
 A Less than 50 weeks C **Less than 37 weeks**
 B More than 40 weeks D None of these
453. F-75 therapeutic feeding has:
 A 2.9g protein per 100 ml C **0.9g protein per 100 ml**
 B 1.9g protein per 100 ml D 0.8g protein per 100 ml
454. At birth, the body iron content of the infant is high
 A 40 mg/kg fat-free mass C **94 mg/kg fat-free mass**
 B 80 mg/kg fat-free mass D 44 mg/kg fat-free mass
455. Phenylalanine, during metabolic pathway responsible for following amino acid synthesis:
 A Tryptophan C Histidine
 B **Tyrosine** D Glutamate
456. Marasmus is associated with:
 A Wasting C Underweight
 B **Stunting** D All of above
457. A newborn's breathing rate is normally .
 A 10 to 30 breaths per minute C 10 to 20 breaths per minute
 B 20 to 40 breaths per minute D **40 to 60 breaths per minute**
458. At freezing temperature breast milk can be stored up to:
 A 2 month C **6 months**
 B 4 months D 1 year
459. The Prolactin level is highest about -----after the beginning of the feed:
 A 1 hour C **30 minutes**
 B within an hour D None
460. The energy density of complementary foods should be more than breast milk, that is:
 A **0.8 kcal per gram** C 1.2 kcal per gram
 B 1.0 kcal per gram D Both a and b
461. 85th to < than 95th percentile for children nutrition status is:
 A Obesity C **Overweight**
 B Underweight D Normal
462. Food allergy an adverse reaction to food that involves ----- also called food-hypersensitivity reaction:
 A **Immune response** C antibodies activation
 B autoimmune response D Both a and c
463. _____ infant formula may be used for infants with IGE-associated symptoms:
 A Hypoallergenic C Lactose-Free
 B **Soy based** D Milk based

464. Use a dessert spoon for feeding infants which holds approx.:
- A 5 ml C **10 ml**
 B 15 ml D 30ml
465. Carbohydrate recommendations for children from the age of one year on are the same as for:
- A Teenagers C Adolescents
 B **Adults** D Infants
466. Complementary feeding is related to:
- A Weaning C **Both a and b**
 B Partial feeding D solid foods
467. The imbalance between anti-inflammatory and pro-inflammatory parameters may cause damage of the
- A Circulatory System C Digestive System
 B **Immune System** D Nervous System
468. The energy needs of infants of 9-11 months is:
- A 200kcal C 550kcal
 B **300kcal** D 600kcal
469. Microcytic anemia is caused by deficiency of:
- A **Vit: B12** C Both a and b
 B Vitamin B9 D None
470. Iron needs for 4-10 years children are:
- A 7mg/day C **10mg/day**
 B 28mg/day D No specific recommendation
471. BMI for age growth charts is used for:
- A Children C Adolescents
 B Infants D **Both a and b**
472. If all the people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life is called
- A **Food Security** C Food Science
 B Food Safety D None
473. Length for age indices is used for:
- A **Infants** C Adults
 B Children D All
474. BMI for age 85th to below the 95th percentile is:
- A Underweight C **Overweight**
 B Obese D None
475. The Apgar score is a test given to:
- A **Infants** C pre-term infants
 B Children D malnourished babies
476. Apgar score is a test given:
- A Once a week C **Twice a day**
 B Once a day D All
477. Reasonable weight for a healthy six-month-old infant who weighed 2.5 kg at birth might be:
- A 4kg C 6kg
 B 4.5kg D **5kg**
478. Lactogenesis stage I is recognized by _____ concentration in plasma:

- A β -lactaglobulin C Lactose
 B α -lactalbunin D **Both b and c**
479. Avoid cow's milk before 12 months as increases the risk of:
 A **Renal dysfunction** C Milk anemia
 B Intestinal bleeding D All
480. Colostrum helps to clear meconium to prevent:
 A **Constipation** C Jaundice
 B Frequent bowels D Dark stool
481. Breast milk or iron-fortified infant formula is recommended instead of _____ milk until 12 months:
 A **Cow** C Artificial
 B Goat D All
482. Daily vitamin D recommendation for infants is:
 A **400 IU** C 1200 IU
 B 800 IU D 1600 IU
483. Hyperbilirubinemia in Term birth resolves in:
 A **7 days** C 3-4 days
 B 7-10 days D 9-10 days
484. _____ infants may have lower levels of lactase than term infants:
 A Postterm C Premature
 B **Preterm** D Normal
485. In approximately -----of growth faltering cases the cause is gastrointestinal disease, neurological disorder or congenital heart disease:
 A **5%** C 50%
 B 10-15% D 10%
486. Benefits of breastfeeding to mother:
 A Decreased maternal postpartum blood loss C Reduced osteoporosis
 B Decreased breast cancer D **All above**
487. The RDA of calcium for children 1 to 3 years old is:
 A **700 mg/day** C 1500mg/day
 B 1000mg/day D 300mg/day
488. Oedema of face and lower limbs is present in:
 A **Kwashiorkor** C Underweight
 B Marasmus D severe acute malnutrition
489. Breast feeding 8-10 times or more in _____ is considered as normal:
 A **24 hours** C 72 hours
 B 48 hours D All
490. _____ Interferes with the production of Dopamine, epinephrine & Thyroxine:
 A Phenylketonuria C Lysine
 B **Tyrosine** D None
491. The need for protein _____ in early childhood as compared to late childhood:
 A Increases C remain same
 B **Decreases** D Changed
492. _____ deficiency is exhibited as Bitot's spots:
 A **Vitamin A** C Vitamin K
 B Vitamin D D Vitamin E

493. 0.9g protein, 70g sugar is composition of:
 A **F-75** C Soya formula
 B F-100 D Cow milk
494. Colostrum is _____ yellow fluid:
 A Thin C Crystal
 B **Thick** D Diluted
495. Major protein in mature milk is:
 A Whey C **Casein**
 B Albumin D Lactoferrin
496. Separation of food material on weight basis:
 A. **Sorting**
 B. Grading
 C. Peeling
 D. Separation
497. In Sterilization temperature is used as:
 A. **Above 100°C**
 B. 65 to 88°C
 C. 55 to 98°C
 D. Below 95°C
498. Ripening is defined as:
 A. Process which indicates that now fruit is ready to harvest or consume
 B. Stage at which mango is ready to harvest and consume
 C. **Process which changes the color, taste, texture and flavor of fruits and vegetables**
 D. Stage at which changes the color, taste, texture and flavor of the food products
499. Function of citric acid process is to:
 A. Increasing softening of fruits
 B. Minimize recrystallization process of sugar
 C. Destroying microbial activity by changing pH
 D. **All options**
500. Select one of the following correct term:
 A. Examples of high acid food is apples and citrus fruits
 B. pH range of 3.5-5.00 fall in acid foods
 C. **Examples of high acid food is pickle and citrus fruits**
 D. Potatoes and other vegetables fall in group of perishable foods
501. Spore forming bacteria can easily destroy by:
 A. **Sterilization and above 100°C**
 B. 100°C and pasteurization
 C. 65-88°C and sterilization
 D. None
502. Food additives used as sprouting agent is:
 A. Dimethyl amine
 B. **Malic Hydride**
 C. Malic hydrazide
 D. Methyl aster
503. Example of Non-climacteric fruit:
 A. Banana

B. Mango

C. Kinnow

D. Apple

504. Maturity criteria of Banana is based on:

A. Changing color

B. Changing flavor

C. Changing juice contents

D. Changing shape

505. Doubt discovered that ethylene as:

A. Stimulated abscission process

B. Harmon

C. Synthesizing agent

D. None

506. An example of Sequestrants is:

A. Calcium chloride

B. Lecithin

C. Purafil

D. Citric acid

507. Super coal is used to:

A. Create gelling properties in culture media

B. Decreasing sprouting process in potatoes

C. Increasing fruit and vegetable juices turbidity

D. Improving sweetness of juices

508. Select one of the following correct term:

A. Enzyme SAM synthase convert Methionine into ACC

B. Enzyme ACC synthase convert Methionine into SAM

C. Enzyme ACC synthase convert SAM into ACC

D. Enzyme ACC synthase convert ACC into Ethylene

509. Maturity criteria of tomato is based on when harvested on its complete ripening:

A. Changing color

B. Changing flavor

C. Changing juice contents

D. Changing shape

510. Processing operation involve in increasing the shelf-life of food product is known as:

A. Food processing

B. Food preservation

C. Food technology

D. Food science

511. Kwashiorkor is a disease problem related to:

A. Vitamin

B. Calcium

C. Iron

D. Protein

512. Development of off flavor in food is known as:

A. Food

B. Emulsion

- C. **Rancidity**
 D. Colloidal
513. Essential amino acid:
 A. **Threonine**
 B. Tyrosine
 C. Arginine
 D. Cysteine
514. The temperature at which lipids ignite is known as:
 A. Ignition point
 B. **Flash Point**
 C. Thermal death time
 D. None
515. Which of the following is example of perishable food?
 A. **Okra**
 B. Honey
 C. Ice-cream
 D. Sorghum
516. Which of the followings is a carbohydrate?
 A. Thiamin
 B. Coli-calciferol
 C. **Agar**
 D. Phosphorus
517. Muscular weakness is characterized by:
 A. Rickets
 B. Glossitis
 C. **Beri beri**
 D. Scurvy
518. Heat cramps, primarily caused by loss of:
 A. Calcium
 B. Phosphorous
 C. **Sodium**
 D. Chlorine
519. Spore forming bacteria can only be destroyed by:
 A. Simple cooking
 B. **Sterilization**
 C. Pasteurization
 D. Blanching
520. Which of the followings is a vitamin C?
 A. Tocopherols
 B. Coli-calciferol
 C. **Ascorbic acid**
 D. Thiamin
521. Color blindness occur due to the deficiency of:
 A. Vitamin E
 B. **Vitamin A**
 C. Vitamin D

D. Vitamin K

522. Goiter development problem can reduce by the use of:

- A. Sodium
- B. **Iodine**
- C. Zinc
- D. Magnesium

523. Example of stable food is:

- A. Fish
- B. Potatoes
- C. **Wheat**
- D. Milk

524. Method used to clean grains on particle size basis is:

- A. Winnowing
- B. Aspiration
- C. **Screening**
- D. Pitting

525. An example of thin layer of absorbed water is:

- A. Sugar
- B. Milk
- C. **Powder milk**
- D. Dry poultry

526. Autolysis is defined by:

- A. Self-destruction of microbes
- B. **Self-destruction of enzymes**
- C. Self-destruction of bacterial
- D. All

527. Loss in weight during Thawing is known as:

- A. Thawing
- B. Melting
- C. **Drip loss**
- D. Freeze burn

528. In immersion of freezing method mixture of sugar (62%) and sodium chloride (21%) give cooling up to the temperature of:

- A. -41°C
- B. **-46°C**
- C. -29°C
- D. -47°C

529. During drying process when air and moves in opposite direction then it is known as:

- A. Concurrent
- B. **Counter-current**
- C. Center exhaust
- D. Re-counter

530. Which one is a filter aid?

- A. Ethylene bromide
- B. **Diatomaceous earth**
- C. Potassium metabisulphite

D. All

531. Indirect contact drier technique is used by:

- A. Cabinet drier
- B. Drum drier
- C. Sponge drier

D. Spray drier

532. Remove unwanted heat and give cooling effect to the food product

- A. Compressor
- B. Condenser
- C. Expansion valve

D. Evaporator

533. Blanching functions as:

- A. To destroy spore forming bacteria
- B. To destroy alive form of bacterial
- C. To destroy enzymatic activity
- D. None

D. None

534. Spore forming bacteria can easily destroy by:

- A. Sterilization
- B. Pasteurization
- C. Blanching
- D. Simple boiling in water

535. Extract heat from the refrigerant to outside the air

- a. Compressor
- b. Condenser
- c. Expansion valve
- d. Evaporator

536. One of the most important character of good packaging material is:

- a. Transparent
- b. Economical
- c. Non toxic
- d. Nonreactive

537. Which of following food is suitable for drying through fluidized bed freezer

- a. Milk
- b. Juices
- c. Beans
- d. None

538. Bleaching used to whiten the fresh milk:

- a. Potassium metabisulphite
- b. Sodium benzoate
- c. Benzyl peroxide
- d. None

539. An example of Sequestrants is:

- a. Calcium chloride
- b. Lecithin
- c. Purafil
- d. Polyphosphate

540. Instrument used to measure concentration of salt in salt solution or any food item:
- Colorimeter
 - Viscometer
 - Solometer**
 - Colour meter
541. It is used as preservative as well as destroy the microbes and enzymes in fruits and vegetables
- K₂O
 - Acid
 - Balancing
 - Potassium metabisulphite**
542. If you are 250 g cardamom syrup, then how much water will you use?
- 10 L**
 - 1.5 L
 - 100 mL
 - 1500 mL
543. How much grams of CMC were used in orange juice?
- 2 g**
 - 12 g
 - 5 g
 - 7 g
544. In orange squash making, in 1 L orange juice how much citric acid was used?
- 8-10 g/mL
 - 8-10 g/L**
 - 80-100 g/L
 - 20-50 g/L
545. In tomato ketchup, if you are taking 8 kg tomato, how much quantity of ginger will you use?
- 120 g
 - 100 g**
 - 200 g
 - 1 Kg
546. It is used to separate food particles in different categories based on their quality characteristics
- Sorting
 - Peeling
 - Grading**
 - Shelling
547. In orange squash making, if you use 10 L orange juice then how much sugar was used?
- 750 g
 - 7.5 Kg**
 - 7 Kg
 - 700 g
548. It is used to cut stem or any part of a plant with the help of plant cutter
- Grading
 - Lye peeling
 - Sorting
 - Stemming**
549. In tomato ketchup, if you are taking 8 kg tomato, how much quantity of sugar will you use?

- a. 90 g
 - b. 900g**
 - c. 100 g
 - d. 1 Kg
550. In tomato ketchup, if you are taking 20 kg tomato, how much quantity of salt will you use?
- a. 25 G
 - b. 75 g
 - c. 10 g
 - d. 50 g**
551. If you are taking 5 kg homogenized pulp to make apple jam, how much pectin will you use?
- a. 50-65 g**
 - b. 100-120 g
 - c. 10-15 g
 - d. 20- 50 g
552. Instrument used to remove the extra air from canned food with the application of heat in form of steam by passing through food products while moving on conveyer belt could be known as:
- a. Retort
 - b. Vacuum pump
 - c. Exhaust box**
 - d. Autoclave
553. Select one of the most suitable statement
- a. Preservative used to just inactivate microbes and act as bleaching agent known as potassium metabisulphite
 - b. Stabilizer used to destroy microbes, enzymes, bleaching and increase stabilizing property of juices
 - c. Sodium benzoate is used to destroy microbes and act as bleaching agent in processing of mango squash
 - d. Guar gum used increase the thickness of mango juices as well as of tomato ketchup**
554. According to definition and importance of food packaging you should select one of the best option which fulfill the requirement of good packaging material:
- a. Food packaging material should used to reduce the contamination with best character of non-reactive and having image of the product
 - b. Food packaging material should used to minimize recontamination chances with best character of nontoxic and having image of the product**
 - c. Food packaging material should used to reduce the recontamination with best character of non-reactive and having name of the product
 - d. Food packaging material should used to reduce the contamination with best character of nontoxic and having name of the product
555. Which food additive is recommended in using as to improve the coloring property and destroy bacteria multiplication in dehydrated fruits and vegetable products?
- a. Potassium mtabisulphite and sodium metabisulphite**
 - b. Potassium metabisulphite and sodium benzoate
 - c. Sodium metabisulphite and sodium benzoate
 - d. Purafil and potassium benzoate
556. In bread processing:
- a. Glucose converts into ethyle alcohol and water in the presence of *S. carlsbergensis*

- b. Ethyl alcohols convert into acetic acid and carbon dioxide through Streptococcus
 - c. Glucose converts into ethyl alcohol and carbon dioxide in the presence of Shigella
 - d. **Glucose converts into ethyl alcohol and carbon dioxide in the presence of *S. cerevisiae***
557. Select one of the best:
- a. **Concurrent system used in moving air in same direction with food**
 - b. Concurrent system used in moving air in opposite direction with food
 - c. Counter-current system used in moving air in same direction with food
 - d. Con-counter system used in moving air in same direction with food
558. Select one of the most appropriate statement
- a. **Different fruits and vegetables can be trimmed out to remove their bruised portion**
 - b. Different fruits and vegetables can be categorized on the weight basis is known as grading
 - c. Different fruits and vegetables can be core to remove their green portion through cutting device
 - d. Different fruits and vegetables can be categorized on the ripened fruit is known as sorting
559. Select one of the most appropriate statement
- a. Different fruits and vegetables can treat through blanching to improve their bitterness
 - b. **Different fruits and vegetables can treat through sulphiting to improve their shininess**
 - c. Different fruits and vegetables can be treated through preservative to improve their firmness
 - d. Different fruits and vegetables can be treated through preservative to improve their flavor
560. Correct the statement
- a. Destruction of enzymatic activity along killing of all type of bacteria can be possible through blanching and sterilization respectively
 - b. Destruction of enzymatic activity along killing of spore forming bacteria in foods can be possible through blanching and pasteurization respectively
 - c. **Destruction of enzymatic activity along killing of spore forming bacteria from foods can be possible through blanching and sterilization respectively**
 - d. Destruction of pathogenic form along with spore forming moulds in liquid foods can only be possible through pasteurization and sterilization.
561. Select one of the most suitable statement
- a. In the fermentation process of acetic acid the bacteria used to convert glucose in acetic acid directly with the help of Acetomonas rather than Acetobactor.
 - b. **In the fermentation process of acetic acid the bacteria used to convert ethyl alcohol in acetic acid directly with the help of Acetomonas and Acetobactor.**
 - c. In the fermentation process of acetic acid the bacteria used to convert ethyl alcohol in acetic acid directly with the help of Acetomonas rather than Aspergillus.
 - d. In the fermentation process of acetic acid the bacteria used to convert glucose in acetic acid directly with the help of Aspergillus and Acetobactor.
562. Select one of the most suitable statement
- a. Food science is involve to increase the shelf-life of foods
 - b. **Food preservation is involved to just change the value of foods**
 - c. Food processing is involved to increase in changing the value of foods
 - d. All of options are correct
563. In radurization process:
- a. All type of bacteria destroys from the surface of frozen food
 - b. Spore forming bacteria destroy from the surface of frozen food
 - c. **Alive form bacteria destroy from the surface of frozen food**

- d. Alive form of bacteria destroys from throughout the frozen food
564. Select one of the correct statement
- On thawing frozen food spoil rapidly by increasing drip loss and freeze burn
 - On thawing frozen food remain fresh by increasing drip loss and freeze burn
 - On thawing frozen food if drip loss increases then freeze burn decrease
 - On thawing Frozen food if drip loss decreases then freeze burn increase
565. Select one of the correct statement
- Vinegar is used to improve softness and shelf-life of prepared final product
 - Vinegar is used to improve flavor and digestibility of final product
 - Vinegar is used to mask the undesirable flavor and enhance softness final product
 - All of the options are correct
566. Select one of the best
- Autoclave and retort are used to increase to thickness of the product during cooking
 - Autoclave and retort are used to sterilize of the final product during cooking
 - Autoclave is used to sterilize while retort use for thickening the final cooked product
 - Autoclave thickening the final cooked product while retort use in sterilization
567. Increase water holding capacity in food products during its preparation is known as
- Preservative
 - Stabilizer
 - Sequestrant
 - Emulsion
568. In _____ sterilization food chunks are first heat processed and then packed in two piece sterilized packing material.
- Aseptic sterilization
 - Thermal sterilization
 - Commercial sterilization
 - None
569. MSG is commonly known as:
- Flavour enhancer
 - Taste enhancer
 - Sweetener
 - Stabilizer
570. Addition of anything in food use to improve profit margin along with improving their color and taste properties of squashes is known as:
- Food additive
 - Food adulterant
 - Contaminants
 - None
571. Benefits of using liquid glucose in syrups are:
- Improve shininess
 - Improve thickness
 - Improve apperarnce
 - All
572. Food Science is the study:
- Nature of food
 - Composition of food

- c. Behavior of food
 - d. All of above
573. Changes in color, flavor, taste, texture and aroma known as:
- a. Preservation process
 - b. Decaying process
 - c. Ripening process
 - d. Grading process
574. Breakdown of complex compounds into simpler is known as:
- a. Maturity Process
 - b. Respiration process
 - c. Peeling process
 - d. Washing process
575. Lye peeler efficiency increased by the addition of sodium hydroxide solution of:
- a. 5-4%
 - b. 4-3%
 - c. 3-2%
 - d. 1-2%
576. Refractometer used for:
- a. Energy calculation
 - b. Acids calculation
 - c. Sugar calculation
 - d. Flavors calculation
577. The air is removed from the canned food by:
- a. Exhaust box
 - b. Mix master
 - c. Can reformer
 - d. Can flanging
578. Uncooked food products preserved with:
- a. Malic acid
 - b. Gelatin
 - c. KMS
 - d. Super coal
579. Various sulfur dioxide liberating chemicals are:
- a. Sodium benzoate
 - b. Citric acid
 - c. Nitric oxide
 - d. Sodium metabisulphite
580. Mostly fruits and vegetables are dried at temperature of :
- a. 55-60°C
 - b. 60-65°C
 - c. 65-70°C
 - d. 70-75°C
581. For the preparation of juice concentrate; the juice/pulp (1L) of Orange required:
- a. 6-8g citric acid
 - b. 8-10g citric acid
 - c. 10-12g citric acid

- d. 12-14g citric acid
582. For the preparation of Orange Squash (Juice 1L) required :
- Sugar 650g
 - Sugar 750g**
 - Sugar 850g
 - Sugar 950g
583. For the preparation of Orange Squash (Juice 1L) required:
- Color 0.25g/L**
 - Color 0.35g/L
 - Color 0.45g/L
 - Color 0.55g/L
584. For the preparation of Lemon Squash (Juice 1L) required:
- Citric acid 5-6g/L
 - Citric acid 7-8g/L
 - Citric acid 8-9g/L
 - None of above**
585. Gel is obtained from:
- Guar gum
 - Xanthan
 - Starch**
 - CMC
586. To separate the pulp from the seed use a machine namely:
- Rotary washer
 - B. Abrasive peeler
 - C. **Pulper**
 - Blender
587. In sulfiting process chemical use namely:
- NaOH
 - KMS**
 - NaCl
 - KMNO₄
588. A process is used to kill the vegetative/ alive/pathogenic bacteria is known as:
- Filtration
 - Scalding
 - Thawing
 - Pasteurization**
589. Which term is used to remove central inedible portion:
- Shelling
 - Coring**
 - Pitting
 - Cutting
590. An instrument is used to measure the salt concentration in the solution is namely :
- pH meter
 - B. Acidity meter
 - C. Refractometer
 - None of these**

591. Which is the example of non-climacteric fruit :
- Mango
 - Peach
 - Plum
 - Pineapple**
592. Enzymatic activity is inactivated through:
- Packaging
 - Tap water
 - Blanching**
 - Abrasive peeler
593. The brix of syrup is achieved by heating up to final brix of:
- 55°B
 - 65°B**
 - 75°B
 - 85°B
594. Birds after slaughtering is dipped in hot water of:
- 53-54°C
 - 55-56°C
 - 56-57°C**
 - 58-59°C
595. In fruits and vegetables pickle preservative used to increase coloring properties through:
- Potassium metabisulphite**
 - Sodium benzoate
 - MSG
 - Hydrogen peroxide
596. Molecules move against concentration gradient in:
- | | |
|---------------------------|-------------------------|
| A All | C Facilitated diffusion |
| B Active transport | D Passive transport |
496. Periplasmic space of gram negative bacteria contains:
- | | |
|-----------------|-----------------------|
| A Peptidoglycan | C Degradative enzymes |
| B Porins | D All |
597. Prokaryotes have _____ volume to surface ratio:
- | | |
|----------------|---------------|
| A Large | C Appropriate |
| B Small | D None |
497. Porins allow the passage of _____ molecules across the membrane:
- | | |
|---------------|----------------------|
| A Hydrophilic | C Large |
| B Small | D Hydrophobic |
598. Lipopolysaccharide are present in gram positive bacteria:
- | | |
|-------|---------------|
| A 9% | C 58% |
| B 13% | D Zero |
599. Flagella are identified by the:
- | | |
|-------------|----------------------------|
| A Motility | C Hanging drop preparation |
| B H antigen | D All |
600. Lysozymes possess drug resistance in _____ bacteria:
- | | |
|------------------------|-----------------|
| A Gram negative | C Saccharolytic |
| B Gram positive | D Proteolytic |

601. Sex pili are characterized as _____ appendages:
 A Abundant C 10 micron long
 B Short D **None**
602. Cocci possess _____ pattern of flagella:
 A Trichous C Bitrichous
 B **Peritrichous** D All
603. High temperature lactics grow at:
 A 37 °C C 45 °C
 B Above 37 °C D **All**
604. Clostridium butyricum is _____ bacteria:
 A Proteolytic C **Saccharolytic**
 B Lipolytic D None
605. Enterobacteria are _____ anaerobes:
 A **Obligate** C Fragile
 B Facultative D Halophilic
606. Pseudomonas fluorescence is a potent:
 A Proteolytic C Saccharolytic
 B **Lipolytic** D Butyric
607. Major defects in UHT milk include:
 A Loss of sweetness C Bulging of pack
 B Precipitation D **All**
608. Boiled milk should be utilized within _____ hrs in absence of refrigeration:
 A **16** C 18
 B 12 D 24
609. Bacillus cereus is spread originally from:
 A **Grass** C Raw milk
 B Cow's udder D All
610. Botulism is a disease caused by:
 A Pollution C Adulteration
 B Contamination D **Infection**
611. Clostridium perfringens has high growth temperature:
 A 37 °C C **50 °C**
 B 45 °C D All
612. Escherichia coli in foods is an indication of:
 A Good hygiene C Food poisoning
 B Quality food D **None**
613. Listeria monocytogenes can be isolated from:
 A Plants C Animal skin
 B **Animal feces** D None
614. Listeria monocytogenes is mostly associated with contaminated:
 A Milk C Eggs
 B **Meat** D All
615. The major cause of microbial spoilage in grains are:
 A Bacteria C **Molds**
 B Viruses D All
616. Aflatoxins are associated with:

- A **Fungi** C Nematodes
 B Viruses D Lactics
617. Proteolysis is favored by:
 A Low temp storage C Acid formers destruction
 B Lactics absence D **All**
618. Spoilage by Gram negative psychrotrophs in milk is detected by _____ flavor:
 A Fruity C Putrid
 B Rancid D **All**
619. Pseudomonas causes _____ type of spoilage in dairy:
 A Bitter taste C High pH
 B Slime production D **All**
620. Rhizopus nigricans grows in bakery products at a water activity (aw) of:
 A **0.91** C 0.87
 B 0.80 D 0.65
621. Xerophilic molds spoil dried fruits at a water activity (aw) of:
 A < 0.6 C 0.70-0.79
 B **0.60-0.69** D All
622. Chalk bread spoilage is due to:
 A **Pichia** C Aspergillus
 B Rhizopus D Penicillium
623. Human diarrhea is associated with:
 A Campylobacter jejuni C Listeria
 B **Campylobacter coli** D All
624. Incubatin period for campylobacteriosis ranges:
 A 12-24 hrs C **2-11 days**
 B 24-48 hrs D None
625. ETEC produce toxins type:
 A Labile C **Both (labile and stable)**
 B Stable D Invasive
626. Common clinical feature of ETEC include:
 A Diarrhea C Vomiting
 B Fever D **All**
627. Hemorrhagic colitis is caused by:
 A ETEC C **EHEC**
 B EPEC D None
628. Complications of EHEC include:
 A **All** C Acute alcerative
 B Bloody diarrhea D HUS
629. Mycotoxins can resist the temperature above:
 A **100 °C** C 300 °C
 B 400 °C D All
630. An autoclave used to sterilize by providing:
 A High pressure C 121°C
 B Steam D **All**
631. Microscope is an instrument used to study microorganisms which are visible to:
 A Naked eye C Colony counter

- B **Microscope** D All
632. Laboratory refrigerator is used for:
 A Repository C Maintenance
 B Storage D **All**
633. Needles are commonly used to inoculate _____ media:
 A **Semi soft** C Liquid
 B Semi hard D Solid
634. The wireloop may be made of:
 A Iron C **Platinum**
 B Plastic D Silver
635. Most common contaminating yeast and molds in milk & milk products include:
 A Saccharomyces C **Torula**
 B Schizosaccharomyces D Candida
636. Yeast/mold count 101-500 per gram of milk shows _____ quality milk:
 A Fair C Excellent
 B Good D **None**
637. Crowding of colonies makes enumeration difficult in _____ method:
 A **Spread plate** C Streak plate
 B Pour plate D Spiral plate
638. Application of _____ in Gram's staining is called as Mordant:
 A Methyl alcohol C **Iodine**
 B Ethyl alcohol D Heat
639. Lobate belongs to _____ of colony morphology:
 A Shape C **Margin**
 B Elevation D Physiology
640. 75 grams of sample requires _____ mL of diluent to prepare 10⁻¹ dilution:
 A 750 C **675**
 B 650 D 700
641. Dilution blank for 10⁻⁵ dilution of 10g sample contains _____ g of original sample:
 A 1 C 0.4
 B 0.1 D **zero**
642. Water <100°C is used for sterilization of:
 A Serum C Body fluids
 B Vaccine D **All**
643. MBRt stands for methylene blue reductase test used for microbial quality of:
 A Fruits C Meat
 B Vegetables D **Milk**
644. Potash fertilizers exhibits _____ effect on health
 a. Maximum
 b. Minimum
 c. Acute
 d. **No**
645. Paraquat is an example of _____
 a. Pesticide
 b. Insecticide
 c. **Herbicide**

- d. Rodenticide
646. Which one is an example of inorganic pesticide?
- Endosulfan
 - Lindane
 - Heptachlor
 - Sodium fluoride**
647. Which act as acidulant as well as sequestrant?
- Tartaric acid**
 - Acetic acid
 - Lactic acid
 - Phosphoric acid
648. 07.5 g/kg is _____ dose for Tartaric acid
- LD 50**
 - LD 75
 - LD 100
 - LD 25
649. In animals, higher concentration of BHT can damage
- Kidney
 - Lungs
 - Colon
 - Liver**
650. Use of food additives is strictly governed by several regulations e.g. pure food rules __
- 2019
 - 2010
 - 2007**
 - 2009
651. Cellulose packaging use for food is about _____ %
- 35
 - 34**
 - 33
 - 32
652. Phthalates makes the bottles flexible and _____ brittle
- More
 - Highly
 - No
 - Less**
653. Heterocyclic aromatic amines are developed at temperature above ____ °C
- 190
 - 180
 - 150**
 - 170
654. The word toxicology is derived from _____ words
- Latin
 - English
 - Greek**
 - Irish

655. Which technique is more effective for the prevention of water borne diseases?
- Coagulation
 - Boiling**
 - Sedimentation
 - Filtration
656. All of these are examples of toxic residues of heavy metals except
- Arsenic
 - Lead
 - Mercury
 - Antimony**
657. Erosion of Jaw is toxic effect of
- Phosphorous**
 - Zinc
 - Sodium
 - Tin
658. Favism suffering people have deficiency of enzyme
- Glucose-1-phosphate dehydrogenase
 - Glucose-6-phosphate dehydrogenase**
 - Fructose-1-phosphate dehydrogenase
 - Fructose-6-phosphate dehydrogenase
659. Trypsin inhibitors are naturally found in _____
- Legumes**
 - Eggs
 - Alfalfa
 - Soybeans
660. Excessive consumption of proteins results in in increased _____ losses
- Iron
 - Selenium
 - Calcium**
 - Phosphorous
661. All fishes exhibit tetrodotoxism except
- Puffer fish
 - Sun fish
 - Porcupine fish
 - Damsel fish**
662. Temperature used in UHT is:
- 135-150°C**
 - 120-125°C
 - 100-120°C
 - 90-100°C
663. Which treatment is also called Flash Pasteurization?
- Canning
 - HTST**
 - Pasteurization
 - None of these
664. Human body produces which vitamin by action of ultraviolet rays of sun?

- a. Vitamin A
 - b. Vitamin B
 - c. **Vitamin D**
 - d. None of these
665. Moisture content in semi-perishable food ranges?
60-90%
- a. 40-50%
 - b. 50-55%
 - c. None of these
666. Fresh moist foods have water activity of:
- a. **0.99**
 - b. 1.6
 - c. 1.0
 - d. None of these
667. Bacteria are normally produced by?
- a. Budding
 - b. **Binary fission**
 - c. Both a and b
 - d. None of these
668. A natural process of decay that makes food unacceptable to customers is called
- a. Preservation
 - b. **Food Spoilage**
 - c. Disinfection
 - d. None of these
669. Which of the following cause the majority of food poisoning cases?
- a. **Bacteria and Viruses**
 - b. Chemicals
 - c. Poisonous plants
 - d. None of these
670. What is the most common symptom of food poisoning?
- a. Dizziness
 - b. **Vomiting**
 - c. Headache
 - d. Fever
671. HACCP is a system used to
- a. Identify and control food waste
 - b. Ensure that cleaning chemicals are used completely
 - c. **Identify and control food safety hazards**
 - d. None of these
672. Bacteria needs which of these to help it grow and multiply
- a. Moisture
 - b. Warm temperatures
 - c. **Both a and b**
 - d. None of these
673. Time required to kill microorganism at a given lethal temperature or a set of conditions is called as?

- a. **D value**
 - b. C value
 - c. F value
 - d. All of above
674. Germicidal wavelength of UV ranges of -----nm.
- a. 90-100
 - b. **100-280**
 - c. 150-200
 - d. 100-200
675. Severe diarrhoea and dehydration in human is due to lack of_____
- a. Rennin
 - b. Lysine
 - c. Both a and b
 - d. **Lactase**
676. Deteriorative changes occurring from within the food system is called as
- a. **Autolysis**
 - b. Hydrolysis
 - c. Purification
 - d. Proteolysis
677. Which bacteria grow best at moderate temperature
- a. Thermophilic
 - b. **Mesophilic**
 - c. Psychrophilic
 - d. All of these
678. The growth of aerobic food spoilage and pathogenic microorganisms can be suppressed by
- a. Humectants
 - b. Exhausting
 - c. **Both a and b**
 - d. None of above
679. Which of the following group can grow on least water activity
- a. Bacteria
 - b. **Fungi**
 - c. Rodents
 - d. None of above
680. Which of the compounds from the following are less toxic
- a. Organochlorine
 - b. **Organophosphorus**
 - c. Both A & B
 - d. None of the above
681. How many allergens groups are there?
- a. **8**
 - b. 7
 - c. 6
 - d. 4
682. Which of the following is related to the food allergy?
- a. Gastric enzymes

- b. **IgE**
 c. Celiac disease
 d. None of the above
683. Which of the following is not a beneficial fungus?
 a. Penicillium
 b. Yeast
 c. Aspergillus
 d. **None of the above**
684. Fructose intolerance is misdiagnosed as irritable bowel syndrome because
 a. Gastrointestinal disturbance
 b. Fructose Malabsorption
 c. **Both a & b**
 d. None of the above
685. Egg allergy caused by
 a. Conalbumin
 b. Albumin
 c. **Lysozyme**
 d. None of the above
686. Updated version of ISO 22000 is published in
 a. **2018**
 b. 2015
 c. 2017
 d. 2005
687. Updated version of ISO 9000 is published in
 a. 2018
 b. **2015**
 c. 2016
 d. 2014
688. Which of the following microorganism is associated with the toxicity of canned products?
 a. Staphylococcus
 b. Bacillus cereus
 c. Penicillium
 d. **None of the above**
689. Which of the following types of Aflatoxins are dangerous to human bodies?
 a. B1, B2
 b. **G1, G2**
 c. M1, M2
 d. None of the above
690. Green gills of mushrooms mean that
 a. Edible mushrooms
 b. **Inedible mushrooms**
 c. Both a & b
 d. None of the above
691. Which of the following is not an example of disinfectant?
 a. Ozone
 b. Oxonia

- c. Hydrogen peroxide
 - d. **None of the above**
692. The temperature range for psychrophile microorganisms is
- a. 20-30
 - b. 10-20
 - c. Below freezing
 - d. **None of the above**
693. Gangrene can be caused by
- a. Staphylococcus
 - b. Clostridium
 - c. Bacillus
 - d. **None of the above**
694. A hotel employee whose job is to assist guests by booking tours, making theatre and restaurant reservations, etc.:
- a. Page boy
 - b. **Concierge**
 - c. Valet
 - d. Reception manager
695. Any representation which states, suggests, or implies that a food has particular qualities relating to its origin, nutritional properties, nature, processing, composition or any other quality:
- a. Contravention
 - b. Approved
 - c. **Claim**
 - d. Cosigner
696. EFTA used number range for stabilizers is -----:
- a. E300-E499
 - b. E500-E599
 - c. **E400-E499**
 - d. E100-E199
697. Food additives may not include one of the following:
- a. **Malt extract**
 - b. Isobutane
 - c. Calcium carbonate
 - d. Gelatin
698. Which of the following is not a permitted synthetic color used in different food applications?
- a. Monoazo
 - b. Ponceau
 - c. **Carotenal**
 - d. Sunset yellow
699. Use of permitted synthetic dyes in which of the following food is prohibited:
- a. Fruit drink
 - b. Sweets
 - c. Preserved papaya
 - d. **None**
700. Which of the following diluent or filler material shall not be permitted to be used in color preparation conforming to the prescribed standards:

- a. Sugar
 - b. Gelatin
 - c. Sodium sulphate
 - d. **Benzoic acid**
701. Q.8. According to E numbers, which of the following preservative is not permitted to be used in different food preservations?
- a. E200
 - b. E203
 - c. **E302**
 - d. E299
702. Q.9. The permitted concentration of galic acid as antioxidant is----:
- a. 0.03%
 - b. 0.001%
 - c. 0.02%
 - d. **0.01%**
703. Q.10. Vitamin D preparation may contain anti-oxidants prescribed in these rules not exceeding_____ .
- a. 0.05%
 - b. **0.08%**
 - c. 0.03%
 - d. None
704. What is the major cause of foodborne illnesses?
- a. Salmonella
 - b. Pathogenic bacteria
 - c. Staphylococci
 - d. **All**
705. Which of the following is not a labeling requirement under Codex Alimentarius?
- a. Lot identification
 - b. Drained weight
 - c. Storage conditions
 - d. **Nutrition value**
706. Which of the following is not the role of senate?
- a. **Debate legislation**
 - b. Legislation
 - c. Policy guidance
 - d. Oversight of the executive
707. Sulphur dioxide can be added to dehydrated vegetables in the proportion of----:
- a. **2000 ppm**
 - b. 1000 ppm
 - c. 500 ppm
 - d. 1500 ppm
708. Mark the wrong statement:
- a. A person may file a complaint to the authority for any violation
 - b. **Prior notice shall be required to be given to a manufacturer for the purposes of holding an inquiry**

- c. If defendant fails to appear before the authority, the authority may proceed ex-parte and impose fine
- d. None
709. If the Authority is enquiring about the existence of a defective service, it shall examine which of the following aspects:
- Has the manufacturer set some standards with regard to the product?
 - Does the product follow to an express warranty?
 - Is the product defective due to any other cause?
 - None**
710. The orders of the court of Punjab consumer protection authority may be challenged to the:
- Secretary to the government industrial department
 - Head of the authority
 - Lahore high court**
 - All
711. Which of the following is not the function of the council under Punjab consumer protection rules 2009?
- Advise the government and authority on matters relating to protection of consumers
 - Establish and manage a laboratory for carrying out tests of the products or equipment of the services
 - Increase awareness about consumer protection issues
 - Examine the work being done by the federal councils**
712. Which of the following is not an objective of PSQCA?
- Protecting the consumers
 - Testing and assessment of raw material
 - Work on improvement of analytical methods
 - None**
713. The functions of the board of drug regulatory authority may not include:
- Approve the budget of the authority
 - Monitor and supervise all the functions of the authority
 - Frame the policy and provide guidelines based on regional trends only**
 - None
714. The drug regulatory authority funds shall not be financed from the following sources namely:
- Endowments
 - Charges collected
 - Fee collected
 - Deduction from employee salaries**
715. The definition of hotel may not include:
- Lodging establishment
 - Monetary consideration
 - Ten lettable rooms
 - Rooms for students**
716. The registration and license of a hotel or restaurant may not be cancelled due to which of the following reasons:
- Transfer of hotel or restaurant**
 - If owner is declared insolvent by a competent court
 - It ceases to conform to the requirements of registration

- d. If business is wholly or partly suspended
717. The owner of three-star hotel shall provide which of the following medical facilities for guests:
- A doctor on call available in close proximity of the hotel premises
 - Two employees trained and qualified in first aid
 - A drug store or chemists shop with twenty-four hours service, if not existing in close proximity.
 - None
718. Any owner who fails to comply with the provisions of section 21 (medical facilities) shall be liable to which of the following penalties?
- Two thousand rupees
 - Forfeiture of license
 - Cancellation of registration
 - All
719. The federal government may, by notification in the official gazette, direct that all or any of its power under this Act shall subject to such conditions, if any, as may be specified in the notification, be exercised:
- By any officer or authority subordinate to the federal government
 - By any provincial government or by any officer or authority subordinate to such government
 - A provincial government may, with the approval of the federal government constitute a hotels and restaurants committee to perform, within the province
 - All
720. Medical Social Work is a process which serves to assist the physician in diagnosis and treatment of patient through study of the patient in his social situation and by interpreting the patient and his environment to the physician said by:
- Dr. Cobat
 - Dr. Satry
 - Dr. Cobot
 - Dr. Cobet
721. What is the aim of Medical Social Work Project (MSSP)?
- To carry out the study about medical social worker
 - Treating the patients from socially and psychologically
 - Providing maximum help to maintain health of patient
 - All
722. What are the functions of social worker in medical setting?
- Provide medicines to patients
 - Provide proper channel of communication
 - Explaining the nature of the disease
 - All
723. _____ is a registered NGO which arrange funds for needy patients with the help of philanthropists:
- Patient Welfare Society
 - Health Welfare Committee
 - Medical Social Services Projects
 - None

724. Which type of patient get free medicines of about 2000 rupees and issued medicines on daily basis:
- To indoor patients
 - To outdoor patients
 - To hospitalized patient
 - To sick poor patient
725. Your school exists as a school and not just as a building because you and others agree that it is a school is the example of _____:
- Social construction
 - Social Constriction
 - Health belief Model
 - Trans-theoretical Model
726. Which type of eating disorder may cause restricted eating patterns and fear of gaining weight despite being underweight to individuals?
- Bulimia nervosa
 - Anorexia nervosa
 - Binge eating disorder
 - Rumination disorder
727. People with binge-eating disorder mostly _____:
- Lose control overeating
 - Increase Purging
 - Excessive exercise
 - Fasting
728. Eating unusually large amounts of food in a specific amount of time, such as a 2-hour period and eating even when you're full or not hungry are the symptoms of _____:
- Bulimia nervosa
 - Anorexia nervosa
 - Binge eating disorder
 - Rumination disorder
729. Which is a theoretical model is used to explain and predict individual changes in health behaviors. It is one of the most widely used models for understanding health behaviors:
- Health Belief Model
 - Social ecological Model
 - Trans theoretical Model
 - None
730. What is the name of the model that looks at behavior change through a cycle of pre-contemplation, contemplation, planning, action, maintenance and relapse?
- Theory of Planned Behavior
 - Health Belief Model
 - Trans theoretical Model
 - None
731. What is this the definition of: Belief in one's own ability to organize and execute a course of action, and the expectation that the action will result in, or lead to, a desired outcome?
- Self-efficacy
 - Self-belief
 - Self-direction

- d. All
732. Initiatives that promote job creation, small-business development and supporting small farms and any project that revitalizes or stabilizes low and moderate income known as_____:
- Community development
 - Social construction
 - Medical Social Services Projects
 - Social Protection
733. Karachi Neighborhood Improvement Project is the example of community development project, how this project works to transform Karachi into a more Competent and Productive Mega City:
- Public Spaces and Mobility Improvement in Selected Neighborhoods.
 - Support to Improved Citizen Services and City Capacity Development.
 - Support to Implementation and Technical Assistance.
 - All
734. Which one is the example of community development project for any specific purpose?
- Provision of Polio control
 - Sindh Resilience Project
 - Karachi Neighborhood Improvement Project
 - All
735. Which Pathways Through which Social Protection can impacts positively by?
- Improving dietary quality
 - Increasing income
 - Improving access to health services
 - All
736. Social protection can positively impact nutrition by direct links related to the diversity, safety and quantity of food consumed by:
- Individual
 - Community
 - Group
 - Population
737. Social protection instruments in relation to their impact on nutrition are:
- Cash transfer
 - Improve health
 - Improve care practices
 - Improve diet
738. The assembly of social protection instruments in relation to their impact on nutrition was developed by:
- WHO (World Health Organization)
 - UNICEF (United Nations Children's Fund)
 - FDA (Food Drug Administration)
 - IOM (Institute of Medicine)
739. Favorable political and _____for long-term investments and sustainability of nutrition-sensitive social protection policies and programs:
- Policy Environment
 - Policy Development
 - Policy Makers

- d. Policy Enablers
740. Linkages with complementary interventions within the broader agricultural and rural development agenda to build human capital and address:
- Obesity
 - Malnutrition**
 - Anemia
 - Polio
741. Which programs contribute to improved health outcomes by improving access and quality of health and sanitation services and by providing education on health-related issues and hygiene?
- Social protection**
 - Community development
 - Social construction
 - Social change
742. Which term used to describe variations or modifications of any aspect of social processes, social patterns, and social interactions within a social organization?
- Community Development
 - Social Construction
 - Social Change**
 - Social Protection
743. Who said that “By social change I understand a change in social structure” like the size of society, the composition of the balance of its parts or the type of its composition?
- Lundberg
 - Morris Ginsberg**
 - Gillin and Gillin
 - Dr. Cobat
744. The minimum area/areas that must be included by the evaluation team in order to assess the nutrition intervention -----
- Connectedness
 - Coherence
 - Impact**
 - Timeliness
745. Cross cutting theme/themes identified by the Sphere in 2011-----
- Children
 - HIV
 - Psychosocial support
 - All of them**
746. “People’s capacity and strategies to survive are integral to the design and approach of the humanitarian response and agencies should act to progressively increase the disaster affected people’s decision-making power and ownership of programmes during the course of a response”, this statement belongs to:
- Sphere common standard 2
 - Sphere common standard 1**
 - Sphere common standard
 - None of them
747. Community participation is the active involvement of the community in:
- Farming associations

- b. **Implementation**
 - c. Decision making
 - d. All of them
748. Nutrition BCC has recently started to be recognized as an important part of emergency nutrition programming and can be helpful to:
- a. Discourage poor practices
 - b. Promote good behavior
 - c. Familiarize communities with the use of new products or services
 - d. **All of them**
749. HIV-positive women should be encouraged to continue breastfeeding for:
- a. 16 months
 - b. 24 months
 - c. **12 months**
 - d. 6 months
750. Services for HIV care should be established as a priority, these include provision of facility/facilities such as:
- a. ART
 - b. VCT
 - c. Cotrimoxazole
 - d. **All of them**
751. The optimal IYCF feeding practices in children 0-24 months are:
- a. Introduction of safe complementary foods at 4 months that continues for 2 years
 - b. **Within 1-hour breastfeeding initiation**
 - c. Exclusive breastfeeding for 7 complete months
 - d. Within 1/2-hour breastfeeding initiation
752. Which of the following is not a key element of IYCF response in emergencies?
- a. **Population displacement**
 - b. Communication
 - c. Coordination
 - d. Assessment and monitoring
753. Why and for whom is infant and young child feeding important in emergencies?
- a. Food insecurity
 - b. Population displacement
 - c. Less availability of caregivers
 - d. **All of them**
754. Basic cross-sectoral interventions may include-----
- a. Implement behaviour change communication strategies
 - b. Enable referral for skilled IYCF assistance
 - c. Provide safe and appropriate foods
 - d. **All of them**
755. EMMA stands for-----
- a. Emergency Market Methods and Analysis
 - b. Emergency Management Methods and Analysis
 - c. **Emergency Market Mapping and Analysis**
 - d. Emergency Management Mapping and Analysis
756. Which of the following is not a key element of livelihood framework?

- a. Policies, institutions, and processes
 - b. **Communication**
 - c. Vulnerability context
 - d. Livelihood's strategies
757. WHO estimates that undernutrition contributes to more than one third of all child deaths of an age of-----
- a. 0-49 months
 - b. **0-59 months**
 - c. 0-56 months
 - d. 5 years
758. The major cause/causes of morbidity and mortality is/are:
- a. Typhoid
 - b. Meningococcal meningitis
 - c. **Acute respiratory infections**
 - d. TB
759. For effective communicable disease control, important interventions are required from other sectors:
- a. Shelter
 - b. Water and sanitation
 - c. Food and nutrition
 - d. **All of them**
760. IMCI stands for:
- a. Integrated Marketing of Childhood Illnesses
 - b. Important Management of Childhood Illnesses
 - c. Integrated Management of Childhood Intelligence
 - d. **None of them**
761. Targeted SFPs should always be implemented when:
- a. GFD for the household has yet to be established
 - b. Food insecurity
 - c. **Adequate general ration**
 - d. None of them
762. Emergency supplementary feeding programmes aim to prevent individuals with MAM from developing SAM by meeting their additional needs, focusing particularly on children with an age of:
- a. **6-59 months**
 - b. 0-59 months
 - c. 6-24 months
 - d. None of them
763. The objectives of targeted SFPs are primarily -----
- a. Preventative
 - b. **Curative**
 - c. Targeted
 - d. General
764. Blanket SFPs are closed when the GFD is adequate, and prevalence of global acute malnutrition is below:
- a. 12 %
 - b. Less than 30 patients

- c. 25 %
d. 15 %
765. Take-home rations should be provided in the form of a pre-mix which provides-----kcal.
 a. 700-1200 kcal
b. 1000-1200 kcal
 c. 500-700 kcal
 d. 700 kcal
766. Assessing food needs in GFD provides the information and understanding needed to inform key decisions include:
 a. Setting objectives
 b. Planning the ration
 c. Targeting
d. All of them
767. For designing a food basket, which factor/factors needs/need to be considered:
a. Food Processing and preservation
 b. Physical activity levels
 c. Age
 d. Access to alternative food sources
768. Social protection in Pakistan is grounded in constitutional norms and social insurance was introduced in:
a. 1976
 b. 1986
 c. 1975
 d. 1974
769. ESSI stands for:
 a. Employees Support and Security Institution
 b. Employees Social Services Institution
c. Employees Social Security Institution
 d. None of them
770. Pakistan Bait-ul-Mal's programmes directly assisting individuals are:
 a. Individual financial assistance
 b. Food support programme
 c. Prevention of child labor
d. All of them
771. The symptom/symptoms of anorexia nervosa may include:
 a. Acid reflux disorder
 b. Feeling distressed
 c. Electrolyte imbalance
d. Emaciation
772. Social protection can positively impact nutrition by:
 a. Improving dietary quality
 b. Increasing income
 c. Improving access to health services
d. All of them
773. Scaling up and sustaining social protection interventions to ensure a long-lasting and positive impact on food security and nutrition requires:

- a. **Linkages with complementary interventions**
 - b. Scale up safety nets in times of crises
 - c. Incorporate clear nutrition objectives and indicators
 - d. All of them
774. Key principles of making social protection a nutrition-sensitive matter:
- a. Institutional mechanisms for coordination
 - b. Favorable political and policy environment
 - c. **Target the nutritionally vulnerable**
 - d. All of them
775. “Improve care practices” as social protection instrument may include:
- a. Cash transfers
 - b. Heathy diet
 - c. Food transfers
 - d. **Labor regulations**
776. Women are engaged in food production and rural economics, accounting for _____ % of agricultural employment in developing countries.
- a. **43 %**
 - b. 40 %
 - c. 45 %
 - d. 50 %
777. In order to enhance the interaction between gender and nutrition, the recommendations may include:
- a. Promote gender-sensitive elements
 - b. Targeting youth
 - c. Balanced distribution of household tasks
 - d. **All of them**
778. How many medical and social services projects are working at national level hospitals in Punjab, Pakistan:
- a. 120
 - b. 112
 - c. **110**
 - d. 115
779. Initiatives that promote job creation, small-business development and supporting small farms is called:
- a. Rural development
 - b. **Community development**
 - c. Community Engagement
 - d. None of them
780. Principles/ principle for a successful community development project may include:
- a. Adaptability
 - b. **Plan**
 - c. Process
 - d. Self help
781. In the past, child malnutrition rates in the developing world fell from 32 % to 28 % during the 1990, with 8 developing nations reducing malnutrition levels by:
- a. 35 %

- b. 25 %
 - c. 32 %
 - d. None of them
782. How much percentage of pregnant women suffer from iron deficiency (anemia)?
- a. 40 %
 - b. 45 %
 - c. 50 %
 - d. 55 %
783. The bottle-fed child living in poverty is up to 14 times as likely to die of diarrhoea and _____ times more likely to die of pneumonia than an exclusively breastfed infant.
- a. 6 times
 - b. 3 times
 - c. 5 times
 - d. None of them
784. Nutrition surveillance systems vary significantly and will depend on:
- a. Type of emergency
 - b. Information required
 - c. Capacity of staff
 - d. All of the above
785. The methods/method used for surveillance system are/is:
- a. Repeated small scale surveys
 - b. Clinic-based monitoring
 - c. Sentinel site surveillance
 - d. All of the above
786. In surveillance system, in an emergency setting additional sources of data can be obtained from:
- a. Large scale national surveys
 - b. School census data
 - c. Rapid nutrition assessments
 - d. All of the above
787. The components/component of the food security include/includes:
- a. Food Preparation
 - b. Food availability
 - c. Food Safety
 - d. Food quality
788. For implementing a food security assessment, which steps /step are/is essential?
- a. Preparation
 - b. Analysis
 - c. Information collection
 - d. All of the above
789. Interventions/Intervention to treat undernutrition in emergencies include/includes:
- a. Market support
 - b. Cash transfer
 - c. Production support
 - d. Therapeutic care
790. CLAs stands for:

- a. Cluster lead agencies
 - b. Collective lead approaches
 - c. Challenges lead agencies
 - d. None of the above
791. _____ reflects the negative effects of nutritional deprivation on a child's potential growth over time.
- a. Wasting
 - b. Stunting
 - c. Oedema
 - d. SAM
792. Q.99. The underlying causes of malnutrition include:
- a. Disease
 - b. Social context
 - c. Inadequate care
 - d. Economic context
793. The methods/method used to assess the nutrition of population include/includes:
- a. Nutrition surveillance
 - b. Clinical signs
 - c. Wasting
 - d. Bilateral oedema
794. The egg yolk is recommended in diet for:
- | | |
|----------------|----------------|
| A Life stage 3 | C Life stage 1 |
| B Life stage 4 | D Life stage 2 |
795. Which protein from these groups are not considered as good quality protein?
- | | |
|--------|----------------|
| A Milk | C Cereals |
| B Meat | D All of these |
796. The requirement means minimum amount of nutrients required to maintain minimum specified criteria of:
- | | |
|------------|-------------------|
| A Wellness | C Adequate Intake |
| B Adequacy | D SHCF |
797. Iron fortification in wheat flour may be the solution for prevention of _____ in women:
- | | |
|---------------------------------|-----------------|
| A Anemia | C Glycemia |
| B Vitamin A deficiency disorder | D None of these |
798. The main protein that leaks out from the damaged kidneys by diabetes is called:
- | | |
|-------------|------------|
| A Globulin | C Albumin |
| B Bilirubin | D Prolamin |
799. BMR slows down at roughly _____ every _____ after the age of 20:
- | | |
|----------------|----------------|
| A 2%, 12 years | C 3%, 10 years |
| B 2%, 10 years | D 3%, 12 years |
800. The amount of heat necessary to raise the temperature of 1kg of water 1oF is called as:
- | | |
|------------|--------------------------|
| A Calories | C Both Calories and Kcal |
| B Kcal | D None of these |
801. The person having Ascites condition should restrict the fluids and:
- | | |
|-------------|------------|
| A Sodium | C Zinc |
| B Potassium | D Selenium |
802. If food contains 08g CHO, 06g protein and 05g fat then calculated total energy level shall be:

- A 105 C 101
 B 103 D 108
803. The major cause of gluten allergy is due to the consumption of:
 A Rice C Corn
 B **Wheat** D Millet
804. The life stage group (Male) comes in the category of 19-24 years require energy:
 A 2500 Calories C 2700 Calories
 B 2300 Calories D **2900 Calories**
805. Binge eating disorder (BED) may also be the cause of:
 A Stress C **Obesity**
 B Polycystic ovary syndrome D Hypothyroidism
806. The value that uses as nutrient guidelines when scientific evidence of RDA is not found is:
 A Estimated average requirement C Adequacy
 B **Adequate Intake** D Malnutrition
807. The medical issues commonly admitted by untreated morbid obesity include:
 A Hypertension C KFT
 B CHD D **All of these**
808. Which food is the best source of Iron among these foods?
 A White button Mushrooms C Spinach
 B **Large white beans** D Quinoa
809. What is essential for making the bile in liver?
 A **Cholesterol** C Alkaline phosphatase
 B Lipo-protein D Phospholipid
810. Protein energy malnutrition has severe form:
 A Marasmus C **Both Marasmus and Kwashiorkor**
 B Kwashiorkor D None of these
811. The best factor of food commodities for making good diet plan is:
 A Conveniency C Economy
 B Availability D **All of these**
812. Which of the common condition caused by reduced expression or activity of lactase in small intestine?
 A Fat malabsorption C Protein malabsorption
 B **Lactose malabsorption** D None of these
813. Which of the following food contain sucrose?
 A Wheat C **Sugar**
 B Meat D Milk
814. The fat malabsorption is due to poor digestion and specifically one of the causes of:
 A Liver congestion C Lack of pancreatic enzyme
 B Poor quality bile D **All of these**
815. The body fat percentage includes
 A Essential body fat C **Essential body fat & Storage body fat**
 B Storage body fat D None of these
816. The body mass index does not take into the account:
 A **Body composition** C Body weight and height ratio
 B Body mass weight D None of these
817. The food composition data are very important in the field of:

- A Clinical practices C Public health and education
 B Nutrition policy D All of these

818. The common method for measuring dietary patterns in large epidemiological studies of diet and health is:

- A Dietary recall tool C Food Frequency Questionnaires
 B Food guide pyramid D Eat well guide

819. The coarse wheat bread is frequently recommended to athlete due to

- A. Insoluble fiber
 B. Soluble fiber
 C. Moderate GI food
 D. No GI value

820. Which vitamin required for synthesis of coenzyme A (CoA):

- A Pyridoxine C Pantothenic acid
 B Niacin D Riboflavin

821. During fetal life brain growth takes place:

- A. 15%
 B. 70%
 C. 10%
 D. 40%

822. Which parameter is used for defining newborn babies with intrauterine growth retardation?

- A. BMI
 B. Skinfold thickness
 C. MUAC
 D. Ponderal Index

823. Which hormone control satiety?

- A. Adrenaline
 B. Epinephrine
 C. Leptin
 D. Serotonin

824. Which foods are most satiating?

- A. Protein
 B. Carbohydrates
 C. Fats
 D. Fibre

826. Wholemeal bread and cereals are rich in

- a. Protein, fibre, vitamin C
 b. Carbohydrate, fibre, vitamin B
 c. Fat, iron, protein
 d. Water, fatty acid, amino acids

827. Vegetables and fruit provide

- a. Fibre, fat and protein
 b. Vitamin C and A, fibre and many minerals
 c. Vitamin D
 d. Creatine

828. Which nutrient if not used is converted to fat and stored around the body

- a. Fat

b. Carbohydrate

- c. Protein
- d. Vitamins

829. Which of the following nutrient cannot convert into glucose in body if needed?

- a. Starch
- b. Fructose
- c. Protein

d. Linoleic acid

830. The formula for Body Mass Indexing is

- a. Height divided by weight
- b. Weight divided by height
- c. Weight divided by height squared

d. Height divided by weight squared

831. Which one of the following gut hormones is responsible for promoting appetite?

- a. Leptin
- b. Ghrelin**
- c. Peptide YY
- d. CCK

832. The lungs are covered by two membranes called _____.

- a. Glottis
- b. Pleura**
- c. Epiglottis
- d. Epidermis

833. Which of the following is not part of dietary fibre?

- a. Lignin
- b. Cellulose
- c. Pectin
- d. Starch**

834. Photophobia-blurring is due to deficiency of:

- a. Vitamin C
- b. Folate
- c. Vitamin A**
- d. Pyridoxine

835. Transverse lines on your fingers are the clinical symptom of:

- a. Iron deficiency
- b. Vitamin A deficiency
- c. Pyridoxine deficiency
- d. Protein deficiency**

836. Which of the following is an example of a *prebiotic*?

- a. Yogurt
- b. Inulin**
- c. Creatinine
- d. Fish oil

837. Level 2 of waist circumference (cm) for males is:

- a. 80
- b. 88

c. 94

d. 102

838. Which of the following statements regarding fiber is true?

- a. Insoluble fiber has been shown to reduce total cholesterol
- b. Insoluble fiber has been shown to improve blood sugar control in diabetics
- c. Soluble fiber has been shown to lower the risk of pancreatic cancer
- d. Soluble fiber has been shown to reduce total cholesterol

839. Which of the following values represent the recommended daily intake of fiber per day?

- a. 35-40g
- b. 25-30g
- c. 15-20g
- d. 10-15g

840. Which of the following components of energy expenditure generally accounts for the largest proportion of the 24h energy expenditure total?

- a. Thermic Effect of Food
- b. Resting Energy Expenditure
- c. Activity related energy expenditure
- d. Energy of fidgeting

841. The essential fatty acids that must be derived from the diet are:

- a. Stearidonic acid and eicosatetraenoic acid
- b. Eicosapentaenoic acid and docosapentaenoic acid
- c. Linoleic and alpha-linoleic acid
- d. Gamma-linoleic acid and arachidonic acid

842. While comparing energy expenditure by body, following statement is true.

- a. Children have a higher BMR.
- b. Adults have a higher BMR
- c. Children and adults have same BMR
- d. BMR depends on gender and not on age

843. GRAS stands for:

- a. Generally recognized as safe
- b. Globally recognized as safe
- c. Globally recommended safety allowance
- d. None of above

844. One of the fat-soluble vitamins involved in coagulation is:

- a. Vitamin K
- b. Vitamin A
- c. Vitamin D
- d. Vitamin E

845. Products that contain live microorganisms in sufficient numbers to alter intestinal microflora and promote intestinal microbial balance are known as:

- a. Antibiotics
- b. Probiotics
- c. Prebiotic
- d. Symbiotic

846. Characteristics of successful dieters include all of the following except:

- a. Maintaining a daily food journal

- b. Counting calories
 - c. Adhering to a strict eating plan
 - d. **Eliminating all carbohydrates from their diets**
847. Iron supplements are frequently recommended for all of the following except:
- a. Women who are pregnant
 - b. Infants and toddlers
 - c. Teenage girls
 - d. **Post-menopausal women**
848. Emulsifying agent produced by the liver and stored in the gall bladder aids fat digestion and absorption.
- a. Amino Acid
 - b. Cholesterol
 - c. Mucus
 - d. **Bile**
849. Which of the following equation is used for basal energy expenditure (BEE) in men?
- a. **$66.5 + (13.8 \times W) + (5.0 \times H) - (6.8 \times A)$**
 - b. $655.1 + (9.6 \times W) + (1.8 \times H) - (4.7 \times A)$
 - c. $655.1 + (11.6 \times L) + (1.8 \times H) - (4.7 \times A)$
 - d. $655.1 + (9.6 \times W) + (1.8 \times L) - (4.7 \times H)$
850. Which of the following statement for respiratory quotient is true?
- a. Respiratory quotient for protein is higher than fat diet
 - b. Respiratory quotient for carbohydrate is higher than protein diet
 - c. **Respiratory quotient for fat is higher than mixed diet**
 - d. Respiratory quotient for mixed diet is higher than lipid diet
851. Which of the following is a method of determining the quality of proteins?
- a. Biological value
 - b. Net protein utilization
 - c. Protein efficiency ratio
 - d. **All of the above**
851. Provide substantial nutrients and relatively fewer calories
- a. Protein foods
 - b. Nutrient foods
 - c. **Nutrient-dense foods**
 - d. Fatty foods
852. Anabolic process of converting extra glucose into glycogen is called
- a. Gluconeogenesis
 - b. Metabolism
 - c. Anabolism
 - d. **Glycogenesis**
853. You eat 2400 calories in a day and want to find out how much is from protein when you take in 60 g of protein, what would it be?
- a. 5%
 - b. **10%**
 - c. 15%
 - d. 20%

854. If a person weighed 220 lbs and you want to find their recommended protein intake, what would you do?

- a. **Divide pounds by 2.2 to convert to kilograms, multiply by 0.8g/kg**
- b. Multiply pounds by 2.2 to convert to kg, divide by 0.8g/kg
- c. Multiply pounds by 2.2 to convert to kg, multiply by 0.8 g/kg
- d. Multiply pounds by 0.8 to convert to kg, divide by 2.2

855. Most is reabsorbed and recycled while the rest can be trapped by fibers in the large intestine and carried out of the body with feces.

- a. Carbohydrates
- b. Cholesterol
- c. **Bile**
- d. Protein

856. Little fat digestion occurs in the

- a. Liver
- b. Bile
- c. Mouth
- d. **Stomach**

857. Peristalsis is:

- a. A disease of nervous system
- b. **Involuntary muscular action**
- c. An artificial sweetener
- d. Protein

858. Chyme is the:

- a. Chemical name of gastric juice
- b. **Semi-liquid form of food in stomach**
- c. A disease of colon
- d. Cancer related component for chemotherapy

859. Carboxypeptidase is an enzyme of:

- a. Bile
- b. **Pancreas**
- c. Salivary gland
- d. Duodenum

860. Which of the following is not an enzyme of intestinal juice?

- a. Maltase
- b. Sucrase
- c. Lactase
- d. **Lipase**

861. Lipogenesis is:

- a. Change of glucose into glycogen
- b. **Change of glucose into fatty acid**
- c. Change of lipid into glucose
- d. Change of lipid into glycogen

862. Which of the following is present in cabbage?

- a. Phytic acid
- b. **Goitrogen**
- c. Avidin

d. Oxalic Acid

863. Which of the following food has high glycemic index?

- a. Honey
- b. Pasta
- c. Margarine
- d. All of the above

864. Wholemeal bread and cereals are rich in

- a. Protein, fibre, vitamin C
- b. Carbohydrate, fibre, vitamin B
- c. Fat, iron, protein
- d. Water, fatty acid, amino acids

865. Vegetables and fruit provide

- a. Fibre, fat and protein
- b. Vitamin C and A, fibre and many minerals
- c. Vitamin D
- d. Creatine

866. Which nutrient, for most people, provides about 70% of the body's energy

- a. Fat
- b. Carbohydrate
- c. Protein
- d. Vitamins

867. Which Nutrient is a concentrated form of energy?

- a. Fat
- b. Carbohydrate
- c. Protein
- d. Vitamins

868. Which Nutrient helps protect and support some organs of your body?

- a. Fat
- b. Carbohydrate
- c. Minerals
- d. Vitamins

869. Which nutrient if not used is converted to fat and stored around the body

- a. Fat
- b. Carbohydrate
- c. Protein
- d. Vitamins

870. Which of the following nutrient is needed in tiny quantities and plays role only in the regulation of body processes

- a. Minerals
- b. Carbohydrate
- c. Protein
- d. Vitamins

871. The formula for Body Mass Index is

- a. Height divided by weight
- b. Weight divided by height
- c. Weight divided by height squared

d. Height divided by weight squared

872. The lungs are covered by two membranes called:

- a. Glottis
- b. Pleura**
- c. Epiglottis
- d. Epidermis

873. Dislike for a particular food is called:

- a. Food Allergy
- b. Food aversion**
- c. Food poisoning
- d. Food intolerance

874. Which of the following is not part of dietary fibre?

- a. Lignin
- b. Cellulose
- c. Pectin
- d. Starch**

875. Which of following vitamin is the cause of Beri beri?

- e. Riboflavin
- f. Niacin
- g. Thiamine**
- h. Pyridoxine

876. According to USDA guidelines, how much trans-fat is allowed to eat daily?

- a. 0 g**
- b. 10 g
- c. 5 g
- d. 15 g

877. Which of the following is an example of a *prebiotic*?

- a. Yogurt
- b. Inulin**
- c. Creatinine
- d. Fish Oil

878. Which of the following statements regarding macronutrient energy value is TRUE?

- a. Carbohydrates provide 9kcal/gram consumed
- b. Protein provides 2 kcal/gram consumed
- c. Fat provides 7kcal/gram consumed
- d. Protein provides 4 kcal/gram consumed**

879. Which of the following statements regarding Fiber is TRUE?

- a. Insoluble fiber has been shown to reduce total cholesterol
- b. Insoluble fiber has been shown to improve blood sugar control in diabetics
- c. Soluble fiber has been shown to lower the risk of pancreatic cancer
- d. Soluble fiber has been shown to reduce total cholesterol**

880. Which of the following values represent the recommended daily intake of fiber per day?

- a. 35-40g
- b. 25-30g**
- c. 15-20g
- d. 10-15g

881. Which of the following components of energy expenditure generally accounts for the largest proportion of the 24h energy expenditure total?

- a. Thermic Effect of Food
- b. Resting Energy Expenditure**
- c. Activity related energy expenditure
- d. Energy of fidgeting

882. All of the following statements about omega-3 fatty acids are true except:

- a. They help to maintain healthy triglyceride and high-density lipoprotein
- b. They have significantly contributed to the obesity epidemic**
- c. They are necessary for healthy infant growth and development
- d. They play an important role in the production of hormones that govern numerous metabolic and biological processes

883. Which of the following is true for BMR?

- a. It increases with age
- b. It increases with weight**
- c. It decreases with weight
- d. It is not affected by weight or age

884. Which of the following is not an example of artificial sweetener

- a. Neospheridin
- b. Neosugar
- c. Saccharin
- d. Monosodium glutamate**

885. Which of the following statements is true?

- a. Animal fat has more saturated fatty acids.**
- b. Plant fat has more saturated fatty acids.
- c. Animal and plants fat have equal amount of saturated fatty acids.
- d. Marine oils have more saturated fatty acids

886. Essential fatty acids are considered essential because:

- a. They can't be synthesized by the body.**
- b. They are the major source of energy
- c. They are the carriers of essential vitamins in body
- d. They are essential for taste of food and give feeling of satiety

887. Member of _____ group are suspected to be physiologically harmful.

- a. Lauric acid group
- b. Linolenic acid group
- c. Linoleic acid group
- d. Euracic acid group**

888. Marine oils:

- a. Lower the cholesterol**
- b. Raise blood cholesterol
- c. Have no effect on cholesterol
- d. Increase risk of atherosclerosis

889. Simplasse is a protein based substitute for:

- a. Sugar
- b. Fats**
- c. Enzymes

d. Vitamins

890. Which of the following is not a component of amino acid?

- a. R group
- b. Amine group
- c. Carboxylic group
- d. Water molecule

891. One of the fat-soluble vitamins involved in coagulation is:

- a. Vitamin K
- b. Vitamin A
- c. Vitamin D
- d. Vitamin E

892. Products that contain live microorganisms in sufficient numbers to alter intestinal microflora and promote intestinal microbial balance are known as:

- a. Antibiotics
- b. Probiotics
- c. Fruits and vegetables
- d. Digestive enzymes

893. Non-digestible food ingredients that stimulate the growth and activity of certain bacteria in the colon are called:

- a. Insoluble fiber
- b. Probiotics
- c. Prebiotics
- d. Cellulose

894. The USDA Dietary Guidelines for Americans advise:

- a. Limiting carbohydrates to 10 percent of daily calories
- b. Limiting total fat intake to 20 to 35 percent of calories
- c. Limiting saturated fat to 20 percent of daily calories
- d. Limiting intake of fats and oils to 10 percent of daily calories

895. Consuming fewer than 130 grams of carbohydrate per day may lead to:

- a. Hypoglycemia
- b. Kwashiorkor
- c. Marasmus
- d. Ketosis

896. Characteristics of successful dieters include all of the following except:

- a. Maintaining a daily food journal
- b. Counting calories
- c. Adhering to a strict eating plan
- d. Eliminating all carbohydrates from their diets

897. Iron supplements are frequently recommended for all of the following except:

- a. Women who are pregnant
- b. Infants and toddlers
- c. Teenage girls
- d. Post-menopausal women

898. Which of the following is the body's primary source of energy?

- a. Fructose
- b. Sucrose

c. Glycogen

d. **Glucose**

899. Emulsifying agent produced by the liver and stored in the gall bladder aids fat digestion and absorption.

a. Amino Acid

b. Cholesterol

c. Mucus

d. **Bile**

900. Less than _____ percent of kcal should be from saturated fat

a. 20

b. 35

c. **10**

d. 25

901. To prevent chronic disease you need to engage in physical activity of _____ on most days.

a. 90 min

b. 60 min

c. **30 min**

d. 15 min

902. Overweight and obesity are major risk factors for diseases such as

a. Colon Cancer

b. **Diabetes**

c. Lung disease

d. Thyroid Cancer

903. When it comes to sodium, for a healthy diet, sodium should be limited to

a. 4000 mg/day

b. 3000 mg/day

c. 3500 mg/day

d. **2300 mg/day**

904. Limit all of the following in your diet except

a. Saturated and Trans fats

b. Sugar and Salts

c. Cholesterol

d. **Fiber**

905. Which of the following is a method of determining the quality of proteins?

a. Biological value

b. Net protein utilization

c. Protein efficiency ratio

d. **All of the above**

906. Scurvy is caused by deficiency of:

a. Vitamin A

b. Vitamin D

c. **Vitamin C**

d. Vitamin H

907. Retinol is commonly called:

a. Vitamin C

b. **Vitamin A**

- c. Niacin
d. Biotin
908. How much stunting is prevalent in children of Pakistan?
a. 44%
b. 20%
c. 10 %
d. 5 %
909. Which of the following is not a disease of vitamin D deficiency?
a. Rickets
b. Osteoporosis
c. Osteomalacia
d. Alzheimer's disease
910. Vitamin E is also called:
a. Tocotrienol
b. Ergosterol
c. Tocopherol
d. Both a & c above
911. Which of the following is a good source of iodine?
a. Cabbage
b. Seafood
c. Tomato
d. Potato
912. _____ is an antioxidant with activity as a free radical scavenger.
a. Zinc
b. Molybdenum
c. Selenium
d. Fluorine
913. Provide substantial nutrients and relatively fewer calories
a. Protein foods
b. Nutrient foods
c. Nutrient-dense foods
d. Fatty foods
914. Anabolic process of converting extra glucose into glycogen is called
a. Catharsis
b. Metabolism
c. Anabolism
d. Glycogenesis
915. Incomplete proteins are considered to be in:
a. Animal proteins
b. Soy proteins
c. Most plant proteins
d. All
916. Functions of fat in the body:
a. Provides a backup energy supply for the body that can be used when carbs are low
b. Supplies essential nutrients in the form of fatty acids to the body, which are necessary for proper functioning

c. Increases one's feeling of fullness after eating

d. **All of the Above**

917. Gastric juice is:

a. **Highly acidic**

b. Mildly acidic

c. Highly Basic

d. Neutral

918. The amount of gastric juice released in stomach is directly proportional to

e. Amount of starch in food

f. **Amount of protein in food**

g. Amount of fat in food

h. Amount of water in food

919. Diseases that spread from one person to another are called _____.

(a) **Communicable diseases**

(b) Degenerative diseases

(c) Non-communicable diseases

(d) None of the above

920. The Deficiency of vitamin E leads to _____

(a) Soft Bones

(b) Bleeding in gums

(c) **Weakness in muscles**

(d) Neurological disorders

921. Which of the following is not an infectious disease?

(a) Dengue

(b) **Scurvy**

(c) Typhoid Fever

(d) Whooping cough

922. Reduced number and size of RBC's and decreased amount of hemoglobin is a characteristic of:

(a) Pernicious anemia

(b) Megaloblastic anemia

(c) **Microcytic anemia**

(d) All of these

923. Fluorosis is due to:

(a) Deficiency of fluorine

(b) **Excess of fluorine**

(c) Deficiency of calcium and fluorine

(d) None of these

924. Calcium deposition in soft tissues is due to:

(a) Deficiency of Vitamin D

(b) **Excess of Vitamin D**

(c) Excess of Vitamin C

(d) Deficiency of Vitamin C

925. The condition of inflammation and cracking of skin at corners of mouth is:

(a) Pellagra

(b) **Cheilosis**

(c) Scurvy

(d) Rickets

926. Lack of fat-soluble vitamins causes

(a) Internal bleeding of gums

(b) Loosening of teeth

(c) Painful swollen joints

(d) Multiple fractures

927. Which is not a symptom of Marasmus?

(a) Muscle wasting

(b) Subcutaneous fat loss

(c) Monkey face

(d) Edema

928. The RDA for fiber is:

(a) 22-34 g

(b) 35 g

(c) 20 g

(d) 10-15 g

929. Vitamin made up of thiazol and pyridine moiety is

(a) Vitamin B1

(b) Vitamin B6

(c) Vitamin B12

(d) Biotin

930. Riboflavin exist in the form of _____ coenzyme

(a) NAD

(b) NADP

(c) FAD

(d) Non of these

931. Deficiency of ----- vitamin leads to glossitis

(a) Vitamin B1

(b) Vitamin B2

(c) Vitamin B12

(d) Niacin

932. The Vitamin which work as a part of enzyme that take part in transamination

(a) Vitamin B1

(b) Vitamin B2

(c) Vitamin B6

(d) Niacin

933. Vitamin associated with the synthesis of nucleic acid and formation of RBC

(a) Biotin

(b) Folic acid

(c) Thiamine

(d) Niacin

934. Vitamin that take part as coenzyme for carboxylation and transcarboxylation reactions

(a) Biotin

(b) Folic acid

(c) Thiamine

(d) Niacin

935. Vitamin _____ combines with avidin and become unavailable to the body

- (a) **Biotin**
- (b) Folic acid
- (c) Thiamine
- (d) Niacin

936. Potassium deficiency in the body leads to

- (a) Osteomalacia
- (b) Dermatitis
- (c) Rickets

(d) **Muscular paralysis**

937. Mineral associated with the production of insulin in the body is

- (a) Iron
- (b) Calcium
- (c) **Zinc**
- (d) Magnesium

938. Number of naturally occurring amino acids are:

- (a) 24
- (b) **20**
- (c) 18
- (d) 22

939. Vitamin B-6 is also known as:

- (a) Niacin
- (b) Biotin
- (c) **Pyridoxine**
- (d) Folic acid

940. When the levels of insulin are high which organ stop producing glucose?

- A. Kidney
- B. Bile
- C. Liver**
- D. Pancreas

941. Which type of diabetes have no islet cell antibodies?

- A. Gestational diabetes
- B. Types 1 diabetes
- C. Secondary diabetes
- D. Type 2 diabetes**

942. According to the British hypertension society the systolic blood pressure in isolated systolic hypertension grade 1 is:

- A. 140-159 mmHg
- B. 120-129 mmHg
- C. 130-139 mmHg
- D. 140-149 mmHg**

943. In renin angiotensin mechanism of hypertension which hormone has the sodium retaining properties

- A. Serotonin
- B. Aldosterone**
- C. Cortisol

D. Melatonin

944. Diabetes is diagnosed when fasting plasma glucose concentration is:

- A. More than 110 mg per dl
- B. More than 80 mg per dl
- C. More than 126 mg per dl**
- D. More than 90 mg per dl

945. FSG stands for:

- A. Food serum glucose
- B. Food stored glucose
- C. Fast stored glucose
- D. Fast serum glucose**

946. HbA1c target range for diabetes is:

- A. 6.1-7**
- B. 4-6
- C. 5-6
- D. More than 7

947. For diabetic patients the protein requirement per kg body weight is:

- A. 1-1.5 g per kg body weight
- B. 0.5-1 g per kg body weight
- C. 0.8-1 g per kg body weight**
- D. 1-2 g per kg body weight

948. RBP stands for:

- A. Retinal binding protein
- B. Retinol binding protein**
- C. Retinyl binding protein
- D. Retinoic binding protein

949. The RDA of Vitamin A for women is:

- A. 1000 microgram per day
- B. 750-1000 microgram per day
- C. 1200 microgram per day
- D. 750 microgram per day**

950. In recommended daily requirement of potassium is:

- A. 4700 mg**
- B. 3700 mg
- C. 2700 mg
- D. 5700 mg

51. The serving of nuts in DASH diet is:

- A. 3-4 servings a week
- B. 2-4 servings a week
- C. 4-5 servings a week**
- D. 3-5 servings a week

952. For the diagnosis of rickets and osteomalacia which of the following present in high level after blood test:

- A. Calcium
- B. Phosphorus
- C. Sulphur

D. Alkaline phosphatase

953. Rickets is most common in children between the age:

- A. 3-4 years
- B. 2-3 months
- C. 6-36 months**
- D. 4-5 years

954. Wasting means:

- A. Low height for weight
- B. Low age for height
- C. Low weight for height**
- D. Low height for age

955. Requirement of calcium in adolescent:

- A. 400-800 mg
- B. 1500 mg
- C. 1400 mg
- D. 1200 mg**

956. Currently licensed drug for long term treatment of obesity is:

- A. Sibutramine
- B. Metformin
- C. Octreotide
- D. Orlistat**

957. Edema observed on face in:

- A. Mild Kwashiorkor
- B. Moderate Kwashiorkor
- C. Severe Kwashiorkor**
- D. Marasmic Kwashiorkor

958. An index used to measure stunting or chronic malnutrition

- A. Weight for height or length
- B. MUAC for age, sex and height
- C. Weight for age
- D. Height for age**

959. The unit of BMI is:

- A. kg per cm square
- B. kg cm square
- C. kg per meter square**
- D. kg per meter cube

960. Which hormone is secreted from stomach and pancreas?

- A. Adiponectin
- B. Leptin
- C. Adipose
- D. Ghrelin**

961. Pellagra is caused in those whose diet consisted mainly of:

- A. Vegetables
- B. Barley
- C. Wheat
- D. Maize**

962. The direct precursor of niacin is:

- A. Riboflavin
- B. Tryptophan**
- C. Nicotinamide
- D. Iron

963. Which vitamin helps in better absorption of niacin?

- A. Vitamin C**
- B. Vitamin D
- C. Vitamin A
- D. Vitamin E

964. The type of Beri Beri in which nervous system is involved is:

- A. Wet beri beri
- B. Dry beri beri**
- C. Infantile beri beri
- D. Shoshin beri beri

965. Egg white contains:

- A. Biotin
- B. Avidin**
- C. Globin
- D. Thiamin

966. The standard method of accessing body fat is:

- A. BMI
- B. Skinfold thickness
- C. DEXA**
- D. Waist circumference

967. The most effective long-term treatment for obesity is:

- A. Gastric banding
- B. Gastric ballooning
- C. Bariatric surgery**
- D. Sleeve gastrectomy

968. Which drug was recently withdrawn due to cardiovascular side effects?

- A. Orlistat
- B. Sibutramine**
- C. Slimz
- D. Orslim

969. Liquid medication with high osmolarities could be diluted with.

- A. Sterile water**
- B. Glucose
- C. Electrolyte solution
- D. Normal saline

970. Insoluble fiber reaches the _____ after ingestion and is associated with good bowel function.

- A. Small intestine
- B. Bladder
- C. Large intestine**
- D. Stomach

971. Dextrose provides:

- A. 3.4 kcal/g
- B. 8.0 kcal/g
- C. 6.0 kcal/g
- D. 4.0 kcal/g

972. _____ refers to care being provided outside the hospital

- A. Ambulatory care
- B. Acute Care
- C. Critical Care
- D. Home Health Care

973. Common conditions that require critical care

- A. Heart Problem
- B. Lung Problem
- C. Organ Failure

D. All of these

974. Sources of noise includes:

- A. Xray
- B. Infusion Pump
- C. CBC
- D. All of these

975. Domiciliary care is also known as:

- A. Social Care
- B. Emotional Care
- C. Local Care
- D. Acute Care

976. Occupational health professionals work in _____ or they may serve as consultants on a limited or part time basis

- A. Industrial Setting
- B. Residential Setting
- C. Hospital Setting
- D. Hostel Setting

977. The term _____ is included because the diagnosis of pica does not apply to ingestion of diet products that have minimal nutritional content.

- A. Bacterial
- B. Fungal
- C. Nonfood
- D. Metal

978. Malnutrition secondary to repeated regurgitation may be associated with:

- A. Anorexia
- B. Growth delay
- C. Marasmus
- D. PEM

979. Thrush in _____ can be treated with liquid antifungal medicine.

- A. Conjunctivitis
- B. Candidiasis
- C. Listeriosis
- D. GBS

980. Sepsis is a serious infection that involves the spread of germs throughout the body's blood and tissues.

- A. Conjunctivitis
- B. Candidiasis
- C. Listeriosis

D. Sepsis

981. Meningitis, particularly _____ meningitis, is a serious infection in newborns.

- A. Bacterial**
- B. Viral
- C. Fungal
- D. None of these

982. The direct methods of nutritional assessment deals with the individual and measure _____ criteria

- A. Objective**
- B. Subjective
- C. Descriptive
- D. Quantitative

983. Per capita income, population density & social habits are included in

- A. Social factors
- B. Ecological factors
- C. Economic factors**
- D. Physical factors

984. Evidence shows that _____ is associated with type 2 diabetes & high risk of cardiovascular morbidity & mortality

- A. Obesity level**
- B. Growth index
- C. Low BMI
- D. Physical factors

985. Waist circumference is measured at the level of the umbilicus to the nearest

- A. 0.5cm**
- B. 0.15cm
- C. 0.5 inches
- D. 0.15inches

986. _____ for the presence of ova and/or intestinal parasites

- A. Urine Dipstick
- B. CBC
- C. Stool examination**
- D. Albumin level

987. _____ is quick, easy, & depends on short-term memory, but may not be truly representative of the person's usual intake

- A. Food diary
- B. 24hr recall**
- C. Food frequency
- D. Dietary history

988. ICU patients are considered _____ in surgery.

- A. Severe stress

B. Mild stress

C. Moderate stress

D. Normal

989. Surgical stress, sepsis, bacteremia, medications are known as:

A. Extraordinary Stressors

B. Mild Stressors

C. Moderate Stressors

D. Normal Stressors

990. 0.75 L D70 W gives _____ g Dextrose & _____ kcal.

A. 525g. 1875kcal

B. 525g. 1785kcal

C. 5225g. 1875kcal

D. 5250g. 1785kcal

991. 1.25 L ; 8.5% AA provides _____ Kcal.

A. 426

B. 642

C. 246

D. 462

992. 1.25 L D30W; 250 mL 20% lipid and _____ Kcal.

A. 1775

B. 1885

C. 1575

D. 1650

993. MFO stands for

A. Mixed-Function oxidase system

B. Mixed-Function oxidative support

C. Multi-Function oxidase system

D. Multi-Formation oxidase system

994. Absorption of drugs depends upon

A. Administration of supplements

B. Rate of gastric emptying

C. Renal excretion

D. Motility

995. Fat soluble drugs may accumulate in body & increase risk of toxicity in:

A. Elderly

B. Infants

C. Underweight

D. Teenagers

996. The rate of diarrheal disease caused by the consumption of contaminated food is:

A. 60%

B. 80%

C. 70%

D. 50%

997. Which one of the following is severe febrile disease?

A. Malaria

B. Tuberculosis

C. Typhoid fever

D. Louse born typhus

998. A tool in which there is no involvement of BMI, protein and other parameters:

A. MNA

B. MUST

C. NRS

D. SGA

999. Which is the most appropriate nutritional screening tool for elderly outdoor patients?

A. MNA

B. MUST

C. SGA

D. SNAQ

1000. NNS stands for

A. National Nutrient Survey

B. National Nutrition Standards

C. National Nutrients Supplements

D. National Nutrition Survey