

1. The Radcliffe line is the international border between
  - (a) India and China
  - (b) India and Pakistan
  - (c) India and Sri Lanka
  - (d) India and Maldives
2. The oldest fold mountain in India?
  - (a) Nilgiri Mountain
  - (b) Kanchenjunga
  - (c) Vindhya hills
  - (d) Aravalli Range
3. Which of the following rivers originates from the Western Ghats near Mahabeleswar Peak?
  - (a) Krishna
  - (b) Kaveri
  - (c) Godavari
  - (d) Sabarmati
4. The battle of Plassey was fought between
  - (a) Mir Qasim and East India Company
  - (b) Shahalam and Robert Clive
  - (c) Mirjafar and Robert Clive
  - (d) Sirajuddaula and Robert Clive
5. Who is known as "The Father of Indian Renaissance"?
  - (a) Rabindranath Tagore
  - (b) Swami Vivekananda
  - (c) Raja Ram Mohan Roy
  - (d) Jawaharlal Nehru
6. Poora Swaraj day was observed on
  - (a) 8th August 1942
  - (b) 26th January 1930
  - (c) 22nd March 1940
  - (d) 21st December 1928
7. Who was the second President of Indian National Congress?
  - (a) Dadabhai Naoroji
  - (b) Mrs. Annie Besant
  - (c) George Yule
  - (d) Badruddin Tayyabji
8. The 14 major Indian banks were nationalised during which five year plan?
  - (a) Fifth plan
  - (b) Ninth plan
  - (c) Fourth plan
  - (d) Second plan
9. The second longest river in Kerala
  - (a) Bharatha Puzha
  - (b) Periyar
  - (c) Pamba
  - (d) Chalakudi
10. Who was the founder of Trissur City?
  - (a) Kerala Varma
  - (b) Achutha Menon
  - (c) Raja Rama Varma
  - (d) Panampilly Govinda Menon
11. The First book in Malayalam literature questioning the cast system and untouchability?
  - (a) Jathi Nirnayam
  - (b) Adukkalayil ninnu arangathekku
  - (c) Untouchables
  - (d) Jathikummi
12. The founder of the newspaper Swadeshabhimani?
  - (a) Rama Krishna Pillai
  - (b) Vakkom Moulavi
  - (c) Sayyid Ahmed Khan
  - (d) Madhavan Nair
13. Ezhava Memorial was submitted to
  - (a) Karthika Tirunal
  - (b) Babrama Varma
  - (c) Swathi Tirunal
  - (d) Sree Moolam Tirunal
14. Who was the founder of Athmavidya Sangam?
  - (a) Vagbhatananda
  - (b) Sree Narayana Guru
  - (c) Chattampi Swami
  - (d) Ayyankali
15. Who was the founder of Samathwa Samajam?
  - (a) Thycaud Ayya
  - (b) Pandit Karuppan
  - (c) Vaikunda Swami
  - (d) Brahmananda Sivayogi
16. The Brand Ambassador of Harithakeralam project
  - (a) Manju Warriar
  - (b) K.J. Yesudas
  - (c) Mammooty
  - (d) Mohanlal
17. The Secretary General of SAARC
  - (a) Arjun Bahadur Thapa
  - (b) Ahmed Saleem
  - (c) Sheel Sharma
  - (d) Amjad Hussain B. Sial
18. Which team wins the Ranji Trophy Final 2017?
  - (a) Mumbai
  - (b) Gujarat
  - (c) Karnataka
  - (d) Maharashtra
19. Which launching vehicle of ISRO got the reward of 104 space craft in their desired orbits?
  - (a) PSLV C : 34
  - (b) PSLV C : 35
  - (c) PSLV C : 37
  - (d) PSLV C : 36
20. Who is the latest recipient of Jnanpith Award?
  - (a) Shankhe Ghosh
  - (b) Raghuvir Chaudhari
  - (c) Balachandra Nemade
  - (d) Kedarnath Singh
21. Which among the following organisms causes food borne intoxication as a cause of food poisoning?
  - (a) Staphylococcus aureus
  - (b) Gonyaulax Catenella
  - (c) Yersinia Enterocolitica
  - (d) Clavices Purpurea
22. What is the optimum temperature for the growth of most of the psychotrophs?
  - (a) 15° C
  - (b) 20° C
  - (c) 1° C
  - (d) 10° C
23. Still birth in cattle and human beings is caused by the action of food poisoning that involves the presence of which of the bacteria?
  - (a) Vibrio Cholerae
  - (b) Listeria Monocytogenes
  - (c) Campylobacter jejuni
  - (d) Clostridium botulinum
24. Name the anti microbial ingredient present in clove
  - (a) Cinnamaldehyde
  - (b) Cineole
  - (c) Thujone

- (d) Eugenol
25. Select the Eh value limit, below which an environment is considered to be anaerobic in nature
    - (a) 200 mV
    - (b) -500 mV
    - (c) -200 mV
    - (d) -501 mV
  26. Name a mold like yeast among the following
    - (a) Amylomyces
    - (b) Endomycopsis
    - (c) Candida
    - (d) Pichia
  27. The maximum amount of alcohol content permissible in the case of table wines
    - (a) 10%
    - (b) 12%
    - (c) 20%
    - (d) 14%
  28. Name the fermented product from the juice of the cactus plant Agave
    - (a) Pulque
    - (b) Kempf
    - (c) Sake
    - (d) Kummis
  29. The flavouring compound with antibacterial activity that is present in the flower petals of the plant Hops that is used in the beer industry
    - (a) Cadaverine and Putrescine
    - (b) Flavons and Flavanones
    - (c) Humulone and Lupulone
    - (d) Thujone and ceneo
  30. How the personal hygiene in HACCP system in a meat processing plant is monitored?
    - (a) Visual inspection
    - (b) Hand swabs
    - (c) Both (1) and (2)
    - (d) None of the above
  1. Which is the human organ that is affected by Veno-Occlusive disease?
    - (a) Heart
    - (b) Intestine
    - (c) Liver
    - (d) Kidneys
  2. Deoxynevalenol is grouped under the broad category of chemicals referred to as
    - (a) Trichothecines
    - (b) Lectins
    - (c) Terpenoids
    - (d) Flavanoids
  3. Select the microaerophilic bacteria that causes food poisoning
    - (a) Vibrio parahaemolyticus
    - (b) Camylobacter jejuni
    - (c) Bacillus cereus
    - (d) Clotsridium sp
  4. Mention the name of the scientist who first proposed the use of steel cans for the canning process
    - (a) Francois Appert
    - (b) Lazzaro Spallanzani
    - (c) Peter Durand
    - (d) Harry Russel
  5. Which of the following sequence accurately represent the Aw requirement in the decreasing order of demand for growth in food stuffs?
    - (a) Spoilage bacteria > Spoilage yeast > Spoilage mold > Halophilic bacteria > Osmophilic yeast
    - (b) Halophilic bacteria > Spoilage bacteria > Spoilage yeast > Spoilage mold > Osmophilic yeast
    - (c) Spoilage bacteria > Spoilage yeast > Spoilage mold > Osmophilic yeast > Halophilic bacte-
  - ria
  - (d) Spoilage yeast > Spoilage bacteria > Spoilage mold > Halophilic bacteria > Osmophilic yeast
  36. Which among the following is not a Class I preservative?
    - (a) Propionic acid
    - (b) Dextrose
    - (c) Honey
    - (d) Sodium chloride
  37. Itai-Itai disease in Japan is caused by the toxicity of which of the following?
    - (a) Arsenic
    - (b) Copper
    - (c) Mercury
    - (d) Cadmium
  38. Name the toxic alkaloid present in Argemone mexicana which is a major adulterant in mustard
    - (a) Thiocyanate
    - (b) Dioxine
    - (c) Sanguinarine
    - (d) Trimethyl amine
  39. During the production of beer making, in which of the following step the non soluble carbohydrates from the cereals are hydrolyzed into soluble fermentable materials?
    - (a) Mashing
    - (b) Malting
    - (c) Hop addition
    - (d) Wort processing
  40. What is milk plasma?
    - (a) Milk without lactose
    - (b) Milk without casein
    - (c) Milk without fat globules
    - (d) Milk without whey
  41. Name the psychotropic bacteria belonging to enterobacteriaceae that causes enteric infection
    - (a) Shigella Flexneri
    - (b) Yersinia enterocolitica
    - (c) Enterobacter fecalis
    - (d) Escherichia Coli
  42. Which is the toxic protein present in "Killer yeast" that has adverse effect on beneficial yeast?
    - (a) Mycocide
    - (b) Bactocide
    - (c) Zymocide
    - (d) Saccharocide
  43. Which is the new taxonomical name given to the bottom fermenting yeast "Saccharomyces carlsbergensis"?
    - (a) Saccharomyces uvarum
    - (b) Saccharomyces pastorianus
    - (c) Saccharomyces udum
    - (d) Saccharomyces lactis
  44. The scientist who first developed pure culture of yeast for the production of beer
    - (a) Brefeld
    - (b) Joseph Lister
    - (c) Emil Hansen
    - (d) Louis Pasteur
  45. Select the sequence of downstream processing involved in most of the production process of antibiotics
    - (a) Filtration - Solvent Extraction - Crystallization - Drying
    - (b) Solvent Extraction - Filtration - Crystallization - Drying
    - (c) Filtration - Crystallization - Solvent Extraction - Drying
    - (d) Crystallization - Solvent
  - Extraction - Filtration - Drying
  46. Indonesian Tempeh is a processed food derived from
    - (a) Rice
    - (b) Soybean
    - (c) Groundnut
    - (d) Wheat
  47. Name the bacterial species with the presence of an active pyruvate carboxylase enzyme
    - (a) Pseudomonas aeruginosa
    - (b) Lactobacillus brevis
    - (c) Streptococcus lactis
    - (d) Zymomonas mobilis
  48. The enzyme responsible for the conversion of starch into fermentable sugars in the beer making process is
    - (a) cellulase
    - (b) amylase
    - (c) glucanase
    - (d) maltase
  49. The most important anaerobic bacterial species that causes meat putrefaction is
    - (a) Bacillus cereus
    - (b) Clostridium perfringens
    - (c) Clostridium tetani
    - (d) Clostridium botulinum
  50. Name the neurotoxin that is involved in lathyrism
    - (a) Trimethyl amine
    - (b) Trimethyl amine oxide
    - (c) Beta oxalyl amino alanine
    - (d) Sanguinarine
  51. Select the temperature that can be tolerated by the emetic toxin of Bacillus cereus
    - (a) 112°C
    - (b) 85°C
    - (c) 152°C
    - (d) 126°C
  52. Which among the following is the causative agent for shell fish poisoning?
    - (a) Gonyaulax Catenella
    - (b) Vibrio Parahaemolyticus
    - (c) Giardia lamblia
    - (d) Salmonella typhimurium
  53. Select the critical limit of temperature as the CCP in the process steps of pasteurization in an HACCP plant for liquid milk
    - (a) 138 ± 2°C
    - (b) 55 ± 2°C
    - (c) 77 ± 2°C
    - (d) None of the above
  54. VOD is caused by the toxin present in the seeds of which adulterant plant?
    - (a) Crotalaria nanaburn
    - (b) Panicum maximum
    - (c) Argemone Mexicana
    - (d) Arabidopsis Thaliana
  55. Which of the following condition the disease "Hyperkeratosis" is associated with?
    - (a) Acute arsenic exposure
    - (b) Chronic fluoride exposure
    - (c) Acute fluoride exposure
    - (d) Chronic arsenic exposure
  56. Pink colour formation in oysters is due to the infestation with which of the following organism?
    - (a) Rhodotorula
    - (b) Rhosdospirillum
    - (c) Halobacterium
    - (d) Serratia
  57. What do you mean by the term "fugu"?
    - (a) Algal poisoning
    - (b) Shell fish poisoning
    - (c) Algal blooming
    - (d) Puffer fish poisoning

58. Film forming yeast that causes the spoilage of wine is  
 (a) Candida  
 (b) Hansenula  
 (c) Schizosaccharomyces  
 (d) Albugo
59. Which among the following is a heterofermentative lactic acid bacteria?  
 (a) Lactococcus  
 (b) Streptococcus  
 (c) Leuconostoc  
 (d) Pediococcus
60. Select the factors that favour the growth of molds compared to bacteria in fruits  
 (a) Low carbohydrate content and low pH  
 (b) High carbohydrate content and low pH  
 (c) High carbohydrate content and high pH  
 (d) Low carbohydrate content and high pH
61. Bacteriocins are used as a food preservative against which of the following?  
 (a) Gram positive bacteria  
 (b) Gram negative bacteria  
 (c) Yeasts  
 (d) Fungi
62. Reuterine, an anti microbial substance produced by Lactobacillus reuteri, that is used as a food preservative requires which of the following substance as a substrate for its synthesis?  
 (a) Catechol  
 (b) Tryptophan  
 (c) Glycerol  
 (d) Glucose
63. Which among the following private enterprise contributed to the development of HACCP?  
 (a) Nestle  
 (b) Parle  
 (c) Pillsbury  
 (d) Cadbury
64. Dye reduction test is used for assessing the quality of  
 (a) Meat  
 (b) Beer  
 (c) Wine  
 (d) Milk
65. The destructive effect of ozone on bacteria was first noticed by  
 (a) Kurkowitsch  
 (b) Metchnikoff  
 (c) Beijerinck  
 (d) Paul Ehrlich
66. Which is the step that helps in determining the critical control points in an HACCP system?  
 (a) Development of a flow chart  
 (b) Development of a decision tree  
 (c) Development of a flow diagram  
 (d) Listing out of potential hazards
67. Which is the mobile phase in gas chromatography?  
 (a) Liquid  
 (b) Solid  
 (c) Gas  
 (d) None of the above
68. "Eyes" in Swiss cheese are formed as a result of  
 (a) Entrapment of oxygen  
 (b) By the action of rennin  
 (c) Degradation of casein  
 (d) Entrapment of CO<sub>2</sub>
69. Which among the following is a fungal bioagent used for commercial production of an amylase?  
 (a) Trichoderma viridae  
 (b) Rhodotorula sp  
 (c) Aspergillus oryzae  
 (d) Aspergillus niger
70. Which among the following is the actinobacteria used for the production of SCP?  
 (a) Rhodococcus sp  
 (b) Cellulomonas sp  
 (c) Micrococcus sp  
 (d) Corynebacterium sp
71. In a continuous culture system which is the term that denotes the substrate concentration at which the specific growth rate is equal to half of the maximum specific growth rate?  
 (a) Critical dilution constant  
 (b) Specific consumption constant  
 (c) Pasteur specific rate constant  
 (d) Monod saturation constant
72. Which of the following statement is not true with respect to HACCP?  
 1. It is an end product test  
 2. It is a preventive approach  
 3. It is a continuous approach  
 4. Corrective actions are taken at every stage  
 (a) Statement 1  
 (b) Statement 1 and 4  
 (c) Statement 3  
 (d) Statement 1 and 3
73. To which of the following group Giardia lamblia belongs to  
 (a) Fungus  
 (b) Bacteria  
 (c) Protozoa  
 (d) Alga
74. Select the pasteurization temperature used for ice cream mix  
 (a) 71.1°C for 10 sec  
 (b) 82.2°C for 20 sec  
 (c) 65°C for 30 min  
 (d) 71.1°C for 10 min
75. In which of the following food stuff nitrates are used as chemical preservatives?  
 (a) Meat  
 (b) Egg  
 (c) Vegetables  
 (d) Milk
76. A common mold that could be present in insufficiently canned fruit product is  
 (a) Aspergillus niger  
 (b) Byssochlamys fulva  
 (c) Penicillium notatum  
 (d) Phytophthora carotovora
77. To which of the category the toxin Linamarin belongs to  
 (a) Pyrrolizidine alkaloid  
 (b) Carboxylic acid  
 (c) Hydrated polyamine  
 (d) Cyanogenic glycoside
78. The first step in any HACCP programme is  
 (a) To document the procedures  
 (b) To conduct a hazard analysis  
 (c) To establish critical limits  
 (d) To determine critical control points
79. Which is the most common detector in HPLC?  
 (a) ECD  
 (b) FID  
 (c) UV/Vis  
 (d) FTD
80. Which is the starting substrate used for the production of

- white wine?  
 (a) White grapes  
 (b) De-skinned red/black grapes  
 (c) Only (1)  
 (d) Both (1) and (2)
81. Mention the factor responsible for affecting the digestibility of dietary protein in food  
 (a) Pyruvate carboxylase  
 (b) Oxalates  
 (c) Trypsin inhibitor  
 (d) Goiterogens
82. Select the hard cheese among the following  
 (a) Cheddar  
 (b) Camembert  
 (c) Roquefort  
 (d) Parmesan
83. Choose the enzymes that are not present in obligate anaerobic organisms  
 (a) SOD  
 (b) Catalase  
 (c) SOD and catalase  
 (d) Catalase and peroxidase
84. Select the pH range at which the preservative action of sodium benzoate is the maximum  
 (a) 5.6-7.0  
 (b) 7.5-8.0  
 (c) 2.5-4.0  
 (d) 6.5-7.5
85. Which is the symptom of spoilage caused by *Cladosporium herbarum* in meat?  
 (a) Green patches  
 (b) White spot  
 (c) Whiskers  
 (d) Black spot
86. Which is the anaerobic bacterial species that produces a neurotoxin that is found associated with insufficient canning processes?  
 (a) *Bacillus cereus*  
 (b) *Clostridium botulinum*  
 (c) *Desulfovibrio* sp  
 (d) *Desulfotomaculum* sp
87. Which among the following is the spoilage symptom caused by *Erwinia Carotovora* in vegetables?  
 (a) Soft rot  
 (b) Grey spot  
 (c) Angular spot  
 (d) Ropiness
88. Detection of which of the compound in fish would reveal the spoilage occurrence?  
 (a) TMAO  
 (b) TMA  
 (c) PUFA  
 (d) TTX
89. Paralytic shellfish poisoning is caused by  
 (a) Saxitoxin by *Gonyaulax catenella*  
 (b) Neurotoxin by dinoflagellates  
 (c) Serotoxin by diatoms  
 (d) None of the above
90. Which is the chromatographic system that is used for analyzing samples with volatile activity?  
 (a) TLC  
 (b) Paper chromatography  
 (c) GLC  
 (d) Ion exchange chromatography
91. Which is the most probable food poisoning organism that is associated with the complications arising out of the consumption of the Japanese food "sushi"?  
 (a) *Campylobacter jejuni*  
 (b) *Vibrio Cholerae*  
 (c) *Pseudomonas aruginosa*  
 (d) *Vibrio parahaemolyticus*
92. In a chemostat what is the dilution rate, if the flow rate is 50 ml per hr and the volume of the vessel is 500 ml?  
 (a) 0.1 per hr  
 (b) 10.0 per hr  
 (c) 0.01 per hr  
 (d) 25000 per hr
93. Which of the fungus causes ergotism?  
 (a) *Claviceps purpurea*  
 (b) *Rhizopus stolanifer*  
 (c) *Aspergillus flavus*  
 (d) *Fusarium oxysporum*
94. The starting material for the production of "Rum" is  
 (a) Wheat (b) Barley  
 (c) Grapes (d) Molasses
95. Name the process of irradiation process in which viable, non-spore forming, pathogenic bacteria are eliminated from the food  
 (a) Radicidation  
 (b) Radurization  
 (c) Radappertization  
 (d) None of the above
96. Name the amino acid that is usually deficient in the single cell protein of microbial origin  
 (a) L-tryptophan  
 (b) L-methionine  
 (c) L-arginine  
 (d) L-cystine
97. Which is the test that is used for assessing the efficiency of pasteurization of milk?  
 (a) Hydrogenase test  
 (b) Chemiluminescence test  
 (c) Phosphatase test  
 (d) Azide reduction test
98. The number of days to lapse before the pesticide residue get dissipated is designated as  
 (a) Dissipation period  
 (b) Waiting period  
 (c) Harvest duration  
 (d) Lag period
99. One gray in the radiation measurement is  
 (a) 1000 rads  
 (b) 100 erg  
 (c) 100 rads  
 (d) 1000 erg
100. The causative agent for aflotoxicosis is  
 (a) *Fusarium oxysporum*  
 (b) *Aspergillus flavus*  
 (c) *Claviceps fusiformis*  
 (d) *Rhizopus stolanifer*