

618-FOOD SCIENCE
(FINAL)

1. Lecithins are structurally like fats but contain
 - (A) sulphuric acid
 - (B) chloric acid
 - (C) phosphoric acid
 - (D) nitric acid

2. The enzyme which improves whipping quality of dried egg white, is
 - (A) carbohydrases
 - (B) proteases
 - (C) pectinases
 - (D) lipases

3. This is a natural toxicant present in potatoes
 - (A) prussic acid
 - (B) safrole
 - (C) cyanide
 - (D) solanine

4. Good source of Linoleic acid is
 - (A) grains
 - (B) pulses
 - (C) vegetables
 - (D) meat

5. Irradiated ergosterol from yeast has served as a source for addition to milk.
 - (A) fat
 - (B) vitamin -A
 - (C) vitamin -D
 - (D) vitamin -E

6. Crystals of salt/ sugar are separated from the suspending liquid by
 - (A) filtration
 - (B) centrifugation
 - (C) fractionation
 - (D) concentration

7. This method extracts caffeine from coffee to produce a decaffeinated product.
- (A) evaporation
 - (B) exchanging
 - (C) super critical fluid
 - (D) static pressure
8. Low acid foods are deteriorated by spp.
- (A) *Shigella*
 - (B) *Vibrio*
 - (C) *Bacillus*
 - (D) *Clostridium*
9. Most of the bacteria present in milk are destroyed by pasteurization at for 30 min.
- (A) 53°C
 - (B) 63°C
 - (C) 73°C
 - (D) 83°C
10. It grows best in high concentrations of sugar
- (A) Halophilic Bacteria
 - (B) Osmophilic yeasts
 - (C) Xerophilic fungi
 - (D) Botrysis
11. The genus *Photobacterium* causes
- (A) spoilage of cheese
 - (B) spoilage of alcoholic beverages
 - (C) stormy fermentation of milk
 - (D) Phosphorescence of meat
12. Freezing prevents
- (A) concentration of solutes
 - (B) microbial growth
 - (C) damage to tissues
 - (D) removal of water

13. Before freezing, more than 50% of moisture from fruits and vegetables are removed through
- (A) freezer burn
 - (B) dehydro freezing
 - (C) sharp freezing
 - (D) flocculation
14. is a term used to label foods treated with low level ionizing radiations.
- (A) Radurization
 - (B) Radicidation
 - (C) Picowaved
 - (D) Roentgen
15. Most of the B vitamins in the grain are present in
- (A) the pericarp
 - (B) the aleurone layer
 - (C) the embryo
 - (D) the scutellum
16. Flax seed is rich in which prevents cancer.
- (A) lignin
 - (B) inulin
 - (C) niacin
 - (D) goitrogen
17. Gerber test is used to determine the percentage of present in milk.
- (A) carbohydrate
 - (B) protein
 - (C) fat
 - (D) vitamin
18. It catalyses the oxidation of aldehydes which are the aroma constituents in fermented dairy products.
- (A) Xanthine oxidase
 - (B) Hexokinase
 - (C) Phosphorylase
 - (D) Pectinase

19. A homogenised product prepared from refined vegetable oil, non-fat milk solids and water.
- (A) Sterilised milk
 - (B) Recombined milk
 - (C) Filled milk
 - (D) Toned milk
20. The highly active proteolytic enzyme in Shrimp is
- (A) Cathepsin
 - (B) Trypsin
 - (C) Ficin
 - (D) Bromelain
21. Mushrooms contain a disaccharide of glucose called
- (A) biose
 - (B) trehalose
 - (C) lactose
 - (D) sucrose
22. This is the major flavonoid of grape fruit.
- (A) Limoninoids
 - (B) Triterpenes
 - (C) Naringin
 - (D) Dilactone
23. It is more hygroscopic than the other sugars.
- (A) Lactose
 - (B) Fructose
 - (C) Glucose
 - (D) Galactose
24. Solid fat crystals and liquid oil moulded into various shapes without breaking is known as fat
- (A) hydrogenated
 - (B) plastic
 - (C) winterized
 - (D) shortened

25. The initial rise of batters and doughs subject to oven heat is known as
- (A) oven spring
 - (B) kneading
 - (C) leavening
 - (D) Flaky
26. This taste is mainly detected by the taste buds along the side of the tongue.
- (A) Sweet
 - (B) Salt
 - (C) Sour
 - (D) Bitter
27. This instrument is used to measure viscosity under controlled temperature and when the sample is subjected to shearing forces of different magnitudes.
- (A) Consistometer
 - (B) Viscometer
 - (C) Amylograph
 - (D) Tensiometer
28. When ice is subjected to vacuum and then heated, it is converted into vapour without going through the liquid phase. This is known as
- (A) fusion
 - (B) vaporization
 - (C) freeze drying
 - (D) sublimation
29. It contains glucose, fructose and two galactose units.
- (A) Stachyose
 - (B) Raffinose
 - (C) Amylase
 - (D) Dextrin
30. To control the unwanted effects of natural ethylene gas, acid may be added to the external storage environment of fruits and vegetables.
- (A) aspartic
 - (B) glutamic
 - (C) gibberellic
 - (D) ascorbic

31. Pectinases are used in food industries to
- (A) enhance flavour
 - (B) clarify fruit juices
 - (C) enhance colour of juices
 - (D) retain freshness of juices
32. Sweet curdling occurs at an early stage of
- (A) proteolysis
 - (B) souring
 - (C) lipolysis
 - (D) curdling
33. Low levels of simple nitrogenous compounds, which ties up riboflavin in egg.
- (A) conalbumin
 - (B) ovotransferrin
 - (C) apoprotein
 - (D) avidin
34. An acid that delays spoilage of smoked or salted fish
- (A) acetic acid
 - (B) boric acid
 - (C) sorbic acid
 - (D) capric acid
35. Lowering of the pH of the fish flesh results from the conversion of muscle glycogen to
- (A) mucic acid
 - (B) lactic acid
 - (C) pyruvic acid
 - (D) acyl-CoA
36. Mullet and Salmon are composed, to a great extent, of unsaturated fatty acids and hence are subject to rancidity.
- (A) hydrolytic
 - (B) oxidative
 - (C) catalytic
 - (D) autolytic

37. It is used as the inside layer of food packages that are subject to higher temperatures of sterilization.
- (A) Polyethylene
 - (B) Ethyl vinyl acetate
 - (C) Polypropylene
 - (D) Polystyrene
38. These provide barriers useful in controlling oxygen, water vapour, and light transmission and provide good burst strength.
- (A) Laminates
 - (B) Resins
 - (C) Foil
 - (D) Burlap
39. Sodium benzoate inhibits mold and yeast growth in
- (A) wines
 - (B) vinegar
 - (C) meat
 - (D) condiments
40. It is a nutrient and coloring agent
- (A) phosphates
 - (B) ferrous gluconate
 - (C) calcium pantothenate
 - (D) tocopherol
41. Glucose oxidase is added to in order to prevent the Maillard browning.
- (A) egg white
 - (B) egg yolk
 - (C) cheese
 - (D) glycine
42. Evaporators that use heated steam, which is injected into the food and later removed, along with water vapour from the food.
- (A) Flash
 - (B) Thin – film
 - (C) vacuum
 - (D) Ohmic

43. Milk contains the enzymes, both of which are denatured during pasteurization.
- (A) protease and phosphatase
 - (B) phosphatase and lipase
 - (C) pectinase and protease
 - (D) lipase and protease
44. These cakes are prepared with beaten egg white.
- (A) Shortened
 - (B) Sponge
 - (C) Angel
 - (D) Chocolate
45. Precipitation of sugar from a supersaturated solution by adding new sugar crystals is known as
- (A) nuclei
 - (B) seeding
 - (C) carmelization
 - (D) inversion
46. The specifications for food commodities for internal purchase and procurement is prepared by
- (A) Food Corporation of India
 - (B) Public Distribution System
 - (C) Bureau of Indian Standards
 - (D) Army Supply Corporation
47. Cereals are deficient in
- (A) vitamin-C
 - (B) vitamin-B
 - (C) iron
 - (D) calcium
48. The is the number of degrees required for a specific thermal death time curve to pass through one log cycle.
- (A) D-value
 - (B) F-value
 - (C) Z-value
 - (D) T-value

49. Eggs in the shell tend to lose moisture as well as
- (A) oxygen
 - (B) carbon
 - (C) carbon monoxide
 - (D) carbon dioxide
50. Genetic modification of oil yields low levels of saturated fatty acids.
- (A) canola oil
 - (B) soya bean oil
 - (C) rapeseed oil
 - (D) cotton seed oil
51. This product does **NOT** require extrusion technology.
- (A) Cheese ball
 - (B) Flaked cereal
 - (C) Crispy snacks
 - (D) Pies
52. Palak paneer and fish curries are packed in this way and are available in the market.
- (A) Retort
 - (B) Laminate
 - (C) Edible film
 - (D) Paper cart
53. It should be light in weight, less in volume and possess the property of resistance to crumbling.
- (A) Engineered foods
 - (B) Space foods
 - (C) Energy foods
 - (D) Bite foods
54. This is used to describe micronutrient malnutrition.
- (A) Kwashiorkor
 - (B) Marasmus
 - (C) Hidden hunger
 - (D) Overnutrition

55. Small diced and fancy shapes of toasted bread used for garnishing soups.
- (A) Crouton
 - (B) Bouillon
 - (C) Croquette
 - (D) Gratin
56. The reference protein for the calculation of chemical score is
- (A) meat protein
 - (B) fish protein
 - (C) milk protein
 - (D) egg protein
57. The essential aminoacid limiting in rice
- (A) methionine
 - (B) tryptophane
 - (C) lysine
 - (D) histidine
58. Protein part of the functional enzyme is known as
- (A) apoenzyme
 - (B) holoenzyme
 - (C) chym-enzyme
 - (D) exoenzyme
59. Hydrocooling refers to
- (A) use of cold water spray
 - (B) spraying of liquid nitrogen
 - (C) ice crystal formation
 - (D) explosive cooling
60. The storage time of loosely packed small fresh fruits are doubled by exposing them to
- (A) ozone
 - (B) calcium dioxide
 - (C) oxygen
 - (D) nitrogen

61. Patulin is a toxin present in
- (A) Pine apple
 - (B) Cashew apple
 - (C) Apple
 - (D) Custard apple
62. The water activity (a_w) of most fresh foods is above
- (A) 0.78
 - (B) 0.85
 - (C) 0.96
 - (D) 0.99
63. Germinated foods have enhanced activity of the enzyme
- (A) Amylase
 - (B) Protease
 - (C) Lipase
 - (D) Nuclease
64. Microbial cultures for commercial production of antibiotics are grown in large-scale
- (A) Respirators
 - (B) Fermentors
 - (C) Chambers
 - (D) Incubators
65. The characteristic fishy odour is due to the production of
- (A) Methylamine
 - (B) Dimethylamine
 - (C) Trimethylamine
 - (D) Tetramethylamine
66. Citric acid for food industry usage is produced by the mould
- (A) *Aspergillus niger*
 - (B) *Neurospora crassa*
 - (C) *Rhizopus stolonifer*
 - (D) *Rhizopus oryzae*

67. Water activity = $100 \times \dots\dots\dots$
- (A) Equilibrium moisture content
 - (B) Equilibrium relative humidity
 - (C) Equilibrium vapour pressure
 - (D) Equilibrium solute concentration
68. QuornTM is a meat substitute derived from the fungus
- (A) Fusarium
 - (B) Rhizopus
 - (C) Penicillium
 - (D) Mucor
69. Tuberculosis is a/an
- (A) Food borne disease
 - (B) Air borne disease
 - (C) Water borne disease
 - (D) Arthropod borne disease
70. The Anti-Egg white injury factor is
- (A) Avidin
 - (B) Pantothenic acid
 - (C) Biotin
 - (D) Folacin
71. Braising is a cooking method which is a combination of
- (A) Roasting and frying
 - (B) Frying and sautéing
 - (C) Roasting and stewing
 - (D) Frying and toasting
72. The estimation of the degree of unsaturation in fats can be deduced by
- (A) Acid value
 - (B) Iodine value
 - (C) Saponification value
 - (D) Supplementary value

73. The lipoprotein possessing the highest quantity of phospholipid is
- (A) HDL
 - (B) LDL
 - (C) VLDL
 - (D) Chylomicron
74. A colloidal dispersion of one liquid in another immiscible liquid is called as
- (A) Foam
 - (B) Sol
 - (C) Emulsion
 - (D) Gel
75. Salt iodisation is promoted to prevent
- (A) Cancer
 - (B) Blindness
 - (C) Anaemia
 - (D) Goitre
76. The richest source of protein among the following plant foods is
- (A) Soya bean
 - (B) Faba bean
 - (C) Double bean
 - (D) Broad bean
77. The synthesis of glucose from non carbohydrate sources is called
- (A) Glycolysis
 - (B) Gluconeogenesis
 - (C) Glycogenesis
 - (D) Glycogenolysis
78. The antinutrient which interferes with protein digestion is
- (A) Phytic acid
 - (B) Tannin
 - (C) Trypsin inhibitors
 - (D) Saponin

79. The artificial sweetener which promotes oral health is
- (A) Xylitol
 - (B) Aspartame
 - (C) Saccharin
 - (D) Stevia
80. About 60 mg of tryptophan can be converted to 1 mg of
- (A) Folacin
 - (B) Niacin
 - (C) Thiamine
 - (D) Riboflavin
81. Oats are good sources of the fibre component namely
- (A) β -glucan
 - (B) Pectin
 - (C) Gums
 - (D) Mucilage
82. Aflatoxin is common in
- (A) Almonds
 - (B) Pistachio
 - (C) Cashew nuts
 - (D) Ground nuts
83. The fruit which is a good source of fat is
- (A) Avocado
 - (B) Custard apple
 - (C) Cashew apple
 - (D) Chickoo
84. The Milk sugar is
- (A) Maltose
 - (B) Lactose
 - (C) Fructose
 - (D) Sucrose

85. The toxic amino acid β -oxalyl amino alanine is present in
- (A) *Lens culinaris*
 - (B) *Vicia faba*
 - (C) *Lathyrus sativus*
 - (D) *Cicer arietinum*
86. The transition of a substance directly from solid to gaseous state is called
- (A) Condensation
 - (B) Evaporation
 - (C) Polarisation
 - (D) Sublimation
87. The non-digestible substances that stimulate the growth of beneficial bacteria in gut
- (A) Antibiotics
 - (B) Synbiotics
 - (C) Prebiotics
 - (D) Probiotics
88. Pulses are limiting in the amino acid
- (A) Lysine
 - (B) Leucine
 - (C) Methionine
 - (D) Phenylalanine
89. The catalyst used in the hydrogenation process of fats is
- (A) Copper
 - (B) Iron
 - (C) Cobalt
 - (D) Nickel
90. The mineral essential for the absorption of carbohydrates and proteins is
- (A) Sodium
 - (B) Potassium
 - (C) Chlorine
 - (D) Calcium

91. Gluten is the protein which is present in
- (A) Rice
 - (B) Wheat
 - (C) Oats
 - (D) Barley
92. Non-enzymatic browning is also called
- (A) Maillard reaction
 - (B) Single replacement reaction
 - (C) Redox potential reaction
 - (D) Decomposition reaction
93. The colour of meat is due to the presence of
- (A) Hemoglobin
 - (B) Cathepsins
 - (C) Myoglobin
 - (D) Metamyoglobin
94. The processing method which leads to synthesis of ascorbic acid in cereals and pulses
- (A) Soaking
 - (B) Germination
 - (C) Extrusion
 - (D) Popping
95. Golden rice is fortified with
- (A) α -carotene
 - (B) β -carotene
 - (C) Cryptoxanthin
 - (D) Retinol
96. The blood component which is essential for blood coagulation
- (A) Red blood cells
 - (B) White blood cells
 - (C) Blood platelets
 - (D) Lymphocytes

97. The storage form of iron is
- (A) Ferritin
 - (B) Hemosiderin
 - (C) Transferrin
 - (D) Hydroxyapatite
98. The Glucose Tolerance Factor is
- (A) Iron
 - (B) Iodine
 - (C) Chromium
 - (D) Zinc
99. The aroma of vegetables belonging to the genus *Allium* and *Brassica* is due to the presence of
- (A) Iron pigment
 - (B) Sulphur compounds
 - (C) Calcium salts
 - (D) Tannic acid
100. The soluble fibre most essential for the setting of jam and jelly is
- (A) Pectin
 - (B) Xanthan gum
 - (C) Arabin
 - (D) Carrageenan
101. 'Hydrogen swell' is a food spoilage related to foods which are
- (A) Pickled
 - (B) Canned
 - (C) Frozen
 - (D) Dehydrated
102. Papain is used in
- (A) Meat tenderization
 - (B) Whey separation
 - (C) Milk curdling
 - (D) Homogenisation

103. The antibiotic which is used as a food preservative is

- (A) Ampicillin
- (B) Subtilin
- (C) Chloromycin
- (D) Streptomycin

104. Clarification of fruit juices is done by the use of

- (A) Amylases
- (B) Glucosidases
- (C) Proteases
- (D) Pectinases

105. Syneresis is a common problem encountered in

- (A) Jelly
- (B) Cordial
- (C) Ready to serve beverages
- (D) Carbonated beverages

106. The instrument used to measure TSS is

- (A) Spectrophotometer
- (B) Chromameter
- (C) Texturometer
- (D) Refractometer

107. A high fibre diet is essential to prevent

- (A) Constipation
- (B) Diarrhoea
- (C) Indigestion
- (D) Flatulence

108. Blue revolution is aimed to increase the production of

- (A) Milk
- (B) Meat
- (C) Fish
- (D) Egg

109. Selenium is an important constituent of the enzyme
- (A) Glutathione peroxidase
 - (B) Co-carboxylase
 - (C) Tri-iodothyronine
 - (D) Peptidase
110. Increase in calorie intake has to be complemented by increase in intake of the vitamin
- (A) Thiamine
 - (B) Riboflavin
 - (C) Folic acid
 - (D) Cyanocobalamin
111. Protein synthesis takes place in the
- (A) Cytoplasm
 - (B) Endoplasmic reticulum
 - (C) Golgi bodies
 - (D) Ribosomes
112. Chitosin which is used in edible coating is derived from
- (A) Goat skin
 - (B) Crustaceans
 - (C) Leather
 - (D) Egg shell
113. Bread is leavened with
- (A) Sugar
 - (B) Baking soda
 - (C) Egg
 - (D) Yeast
114. Chelating agents are also called as
- (A) Sequesterants
 - (B) Emulsifiers
 - (C) Stabilisers
 - (D) Clarificants

115. The major volume of frozen ice cream is composed of
- (A) Water
 - (B) Milk
 - (C) Cream
 - (D) Air
116. Addition of a nutrient to a food that is not originally present in it is termed as
- (A) Enrichment
 - (B) Enhancement
 - (C) Fortification
 - (D) Nourishment
117. *Clostridium botulinum* infection leads to
- (A) Gastroenteritis
 - (B) Typhoid
 - (C) Botulism
 - (D) Paratyphoid
118. Spoilage of fats and oils is called
- (A) Dewaxing
 - (B) Rancidity
 - (C) Winterisation
 - (D) Hydrolysis
119. Monosodium glutamate is a
- (A) Colour enhancer
 - (B) Flavour enhancer
 - (C) Taste enhancer
 - (D) Texture enhancer
120. The enzyme used to hydrolyse sucrose to fructose and glucose is
- (A) Hydrolase
 - (B) Hydrogenase
 - (C) Invertase
 - (D) Lipase

121. Changes in starch granules due to dry heating
- (A) Gelatinisation
 - (B) Retrogradation
 - (C) Dextrinisation
 - (D) Crystallisation
122. Parboiling is an essential step in the processing of
- (A) Paddy
 - (B) Pulses
 - (C) Wheat
 - (D) Millets
123. Higher amount of calcium is present in
- (A) Kodo millet
 - (B) Pearl millet
 - (C) Small millet
 - (D) Finger millet
124. Uniform distribution of fat throughout the product is promoted by
- (A) Cream of tartar
 - (B) Emulsifiers
 - (C) Humectants
 - (D) Stabilizers
125. The pretreatment of steaming or boiling fruits and vegetables prior to further processing is called
- (A) Scalding
 - (B) Parboiling
 - (C) Blanching
 - (D) Scorching
126. 'Sauerkraut' is a fermented food made from the vegetable
- (A) Carrot
 - (B) Cauliflower
 - (C) Beans
 - (D) Cabbage

127. Crushing grapes to obtain juice in wine making is called
- (A) Must
 - (B) Puree
 - (C) Fruit pulp
 - (D) Beverage
128. The food preservation technique which adopts a combination of preservation methods is
- (A) Minimal processing
 - (B) High pressure processing
 - (C) Hurdle technology
 - (D) Food irradiation
129. The end products of fat digestion combine with apoproteins to form
- (A) Phospholipids
 - (B) Lipoproteins
 - (C) Lecithin
 - (D) Cephalin
130. The process of preventing the entry of micro-organisms in the food system is
- (A) Asepsis
 - (B) Filtration
 - (C) Pasteurization
 - (D) Sterilisation
131. A food additive made from sugary materials by fermentation is
- (A) Alcohol
 - (B) Formic acid
 - (C) Acetic acid
 - (D) Ethanol
132. The natural toxicant present in cotton seed is
- (A) Alkaloid
 - (B) Gossypol
 - (C) Ochratoxin
 - (D) Citrulin

133. During the smoking of fat, glycerol breaks down to form free fatty acids and
- (A) Acrolein
 - (B) Oxygen
 - (C) Carbon monoxide
 - (D) Carbon dioxide
134. The pigment present in beet root is
- (A) Betalain
 - (B) Curcumin
 - (C) Lycopene
 - (D) Carotene
135. Sugar undergoes hydrolysis by the addition of
- (A) Acid
 - (B) Alkali
 - (C) Salt
 - (D) Water
136. Zein refers to the protein present in
- (A) Rice
 - (B) Wheat
 - (C) Maize
 - (D) Rye
137. Hygrometer is used to measure
- (A) Moisture
 - (B) Water activity
 - (C) Protein
 - (D) Sedimentation value
138. Rigor calories are changes associated with
- (A) Milk cookery
 - (B) Egg cookery
 - (C) Meat cookery
 - (D) Fish cookery

139. The acid which renders milk more digestible
- (A) Ascorbic acid
 - (B) Citric acid
 - (C) Lactic acid
 - (D) Oxalic acid
140. The non thermal method of food preservation is
- (A) Microwave processing
 - (B) Retort pouch processing
 - (C) Ohmic heating
 - (D) High pressure processing
141. The most important global issue with international trade and public health implementation is
- (A) Food quality
 - (B) Food safety
 - (C) Food selection
 - (D) Food Law
142. The fruit which is a natural prebiotic
- (A) Sapota
 - (B) Banana
 - (C) Kiwi
 - (D) Grapes
143. The vitamin also known as the 'Sunshine vitamin' is
- (A) Ascorbic acid
 - (B) Cholecalciferol
 - (C) Alpha-tocopherol
 - (D) Gamma-tocopherol
144. 'The disease of the 3 Ds' caused by niacin deficiency is called
- (A) Beri beri
 - (B) Pellagra
 - (C) Scurvy
 - (D) Angular stomatitis

145. The safe moisture content for food grain storage is
- (A) 14 percent
 - (B) 18 percent
 - (C) 20 percent
 - (D) 24 percent
146. The enzyme used in the production of cheese
- (A) Rennet
 - (B) Pectinase
 - (C) Amylase
 - (D) Protease
147. The bioactive compounds present in plant foods with potential health benefits
- (A) Phytochemicals
 - (B) Omega-3 fatty acids
 - (C) Bio-chemicals
 - (D) Zoochemicals
148. Fermented apple beverage
- (A) Cider
 - (B) Beer
 - (C) Apple Fizz
 - (D) Feni
149. Mushroom is a/an edible
- (A) Bacterium
 - (B) Fungus
 - (C) Alga
 - (D) Yeast
150. The chemical name of Baking Soda is
- (A) Sodium carbonate
 - (B) Sodium bicarbonate
 - (C) Tartaric acid
 - (D) Cream of tartar

FINAL ANSWER KEY

Subject Name: 618 FOOD SCIENCE

SI No.	Key	SI No.	Key	SI No.	Key	SI No.	Key	SI No.	Key
1	C	31	B	61	C	91	B	121	C
2	D	32	A	62	D	92	A	122	A
3	D	33	C	63	A	93	C	123	D
4	A	34	C	64	B	94	B	124	B
5	C	35	B	65	C	95	B	125	C
6	B	36	B	66	A	96	C	126	D
7	C	37	C	67	B	97	A	127	A
8	D	38	A	68	A	98	C	128	C
9	B	39	D	69	B	99	B	129	B
10	B	40	B	70	C	100	A	130	A
11	D	41	A	71	C	101	B	131	C
12	B	42	A	72	B	102	A	132	B
13	B	43	B	73	A	103	B	133	A
14	C	44	C	74	C	104	D	134	A
15	D	45	B	75	D	105	A	135	D
16	A	46	A	76	A	106	D	136	C
17	C	47	A	77	B	107	A	137	B
18	A	48	C	78	C	108	C	138	C
19	C	49	D	79	A	109	A	139	C
20	A	50	C	80	B	110	A	140	D
21	B	51	D	81	A	111	D	141	B
22	C	52	A	82	D	112	B	142	B
23	B	53	B	83	A	113	D	143	B
24	B	54	C	84	B	114	A	144	B
25	A	55	A	85	C	115	D	145	A
26	C	56	D	86	D	116	C	146	A
27	B	57	C	87	C	117	C	147	A
28	D	58	A	88	C	118	B	148	A
29	A	59	A	89	D	119	B	149	B
30	C	60	A	90	A	120	C	150	B