

1. Which of the following does not match:
  - (A) Decibel: unit of the of sound
  - (B) Horse power: unit of the power
  - (C) Nautical mile: unit of the distance
  - (D) Celsius: unit of the heat
  
2. "If a body be in rest or motion and continues to maintain its position until an external force operates it is likely to change its state", is the statement of:
  - (A) Newton's 1st law of motion
  - (B) Newton's 2nd law of motion
  - (C) Newton's 3rd law of motion
  - (D) Galileo's law of motion
  
3. If the temperature of the water be lowered from  $9^{\circ}\text{C}$  to  $3^{\circ}\text{C}$  then in the volume of the water:
  - (A) No change will take place
  - (B) First it will increase and later it will decrease
  - (C) First it will decrease and later it will increase
  - (D) Water would freeze
  
4. A piece of ice is floating on the surface of the water kept inside the beaker. If this piece melts, then the level of the water in the beaker:
  - (A) Would increase
  - (B) Would decrease
  - (C) Would be the same
  - (D) Would firstly increase, then it would decrease
  
5. At higher altitudes, the water boils at the temperature lower than  $100^{\circ}\text{C}$  because
  - (A) Due to lesser atmospheric pressure the boiling point of the water lowers
  - (B) The gravitational pull is lesser here
  - (C) The wind on the mountains are stormy
  - (D) None of these
  
6. At what temperature the indicator of Celsius and Fahrenheit thermometers would indicate the same reading?
  - (A)  $-40^{\circ}$
  - (B)  $212^{\circ}$
  - (C)  $40^{\circ}$
  - (D)  $100^{\circ}$

7. A healthy man has a body temperature:  
(A)  $37^{\circ}\text{C}$   
(B)  $37^{\circ}\text{F}$   
(C)  $98.4^{\circ}\text{C}$   
(D)  $98.4^{\circ}\text{K}$
8. Cryogenics are used in:  
(A) Space journey, surgical works and magnetic resonance  
(B) Surgical works, magnetic resonance and remote sensing  
(C) Space journey, surgical works and remote sensing  
(D) Space journey, magnetic resonance and remote sensing
9. The steam is more painful than boiled water because:  
(A) In the steam there exists latent heat of vaporization  
(B) The steam penetrates inside the body  
(C) The steam has more attacking power  
(D) The steam is light
10. When through a compact disc (CD), the sunlight is seen, then a combination of colours like rainbow appears. This can be explained as:  
(A) It occurs due to the optical reflection and diffraction  
(B) It occurs due to the optical reflection and refraction  
(C) It occurs due to the optical diffraction and refraction  
(D) It occurs due to the optical reflection, refraction and diffraction
11. Consider the statements:  
1. All electromagnetic radiation travels at the speed of light  
2. The speed of light is approximately  $300,000,000\text{ m/s}$  in vacuum  
(A) Only 1 is correct  
(B) Only 2 is correct  
(C) Both are correct  
(D) Both are incorrect
12. The Sea looks like blue, because of:  
(A) Larger depth  
(B) The reflection of light and scattering of the light  
(C) The blue colour of the water  
(D) The uppermost layer of the water
13. The air bubble in the water acts like a:  
(A) Convex mirror  
(B) Convex lens  
(C) Concave mirror  
(D) Concave lens
14. The alternating current (ac) is transformed into direct current (dc) by:  
(A) Dynamo  
(B) Transformer  
(C) Rectifier  
(D) Motor
15. In the electrical wiring, a wire is made grounded or earthed because:  
(A) During the occurrence of short circuit the current goes to the ground  
(B) The electric power doesn't waste in it  
(C) The electric circuit is completed  
(D) The electric fluctuation is removed

16. The potential difference of the two ends of the electric conductor is proportional to the electric current passed through the conductor, is the statement of:
- (A) Coulomb's law
  - (B) Faraday's law
  - (C) Gauss's law
  - (D) Ohm's law
17. One unit electricity is the amount:
- (A) Equivalent to a 100 watt bulb burnt up to 10 hours
  - (B) Equivalent to a 1000 watt bulb burnt up to 10 hours
  - (C) Any of the above
  - (D) None of these
18. The transformer is an electrical device which converts/regulates:
- (A) AC into DC
  - (B) AC voltage up or down
  - (C) DC into AC
  - (D) Electrical energy into the mechanical energy
19. The use of thermostat is:
- (A) To measure the temperature
  - (B) To increase the temperature
  - (C) To make the temperature remain constant
  - (D) To convert the temperature into the electricity
20. In the isobaric and isochoric thermodynamical processes:
- (A) Pressure and volume remain constant
  - (B) Volume and pressure remain constant
  - (C) Pressure and temperature remain constant
  - (D) None of these
21. In the adiabatic process, which of the following remains constant:
- (A) Heat
  - (B) Entropy
  - (C) Both of these
  - (D) None of these
22. Two most popular semiconductors which are frequently utilised in solid state electronic devices are:
- (A) Germanium and Silicon
  - (B) Germanium and Carbon
  - (C) Silicon and Carbon
  - (D) Any of these
23. The basic composition of micro processors and computers are based upon:
- (A) Digital, IC Electronics
  - (B) Logic circuits only
  - (C) Electronics based upon Non-Boolean Algebra
  - (D) None of these
24. The device employed to measure the diameters of the star and our galaxy (milky way) is called:
- (A) Photometer
  - (B) Barometer
  - (C) Viscometer
  - (D) Interferometer

25. The sky appears black on the moon because:
- (A) Lack of atmosphere
  - (B) Lack of cloud
  - (C) Lack of oxygen and carbon dioxide
  - (D) None of these
26. The astronaut who landed or stepped down first on the surface of moon was:
- (A) Neil Armstrong
  - (B) Uri Gagarin
  - (C) Dennis Pearl
  - (D) None of these
27. The penetrating power of which of the following invisible radiations emitting from the nucleus has its maximum value:
- (A) X-rays
  - (B)  $\beta$ -rays
  - (C)  $\gamma$ -rays
  - (D) None of these
28. The isotope of any atomic nucleus is in which:
- (A) Number of neutrons be same but number of protons be different
  - (B) Number of protons be same but the number of neutrons be different
  - (C) Number of protons and neutrons both are same
  - (D) Number of protons and neutrons both are different
29. The group displacement law is propounded by:
- (A) Age of the human being
  - (B) Age of the fossils
  - (C) Disease of the human body
  - (D) Purity of the metals
30. The hydrogen burning process is directly associated with:
- (A) Hydrolysis
  - (B) Reduction
  - (C) Oxidation
  - (D) Hydrogenation
31. In the galvanic cell, the process that takes place is:
- (A) Transformation of the electrical energy into the chemical energy
  - (B) Transformation of the chemical energy into the electrical energy
  - (C) Transformation of light energy into the electrical energy
  - (D) Transformation of electrical energy into the light energy
32. In the endothermic reaction:
- (A) Heat is absorbed
  - (B) Heat is evolved
  - (C) Heat doesn't change
  - (D) Temperature remains constant
33. In the context of an alternative source of energy, a practical bio-fuel ethanol can be obtained from which of the following?
- (A) Potato
  - (B) Paddy
  - (C) Sugarcane
  - (D) Wheat

34. The anti-knocking properties of any fuel exhibit:
- (A) Golden number
  - (B) Natural number
  - (C) Octane number
  - (D) Mach number
35. Which of the following statements is true regarding Aluminium:
- (A) Aluminium hydroxide is amphoteric in nature
  - (B) Aluminium exists in the free state in nature
  - (C) Nitric acid does not react with Aluminium
  - (D) Hot and concentrated  $H_2SO_4$  directly reacts with oxygen in which  $SO_2$  gas is released
36. The Permanent hardness of water appears due to the:
- (A) Carbonates of Calcium and Magnesium
  - (B) Bicarbonates of Calcium and Magnesium
  - (C) Chloride and Sulphate of Calcium and Magnesium
  - (D) None of these
37. Which of the following gas is utilised to fill up the balloon, specially when weather related prediction and reporting is to be done:
- (A)  $C_2$
  - (B)  $CO_2$
  - (C)  $CH_4$
  - (D) He
38. The gases employed for the respiratory activities of sailors (divers) are:
- (A) Oxygen and Nitrogen
  - (B) Oxygen and Helium
  - (C) Oxygen and Argon
  - (D) Oxygen and Neon
39. Which of the following substance is utilised in the form of solder in the soldering process of electronics?
- (A) Aluminium and Iron
  - (B) Lead and Tin
  - (C) Aluminium and Lead
  - (D) Iron and Tin
40. The process of transformation of the complex higher hydrocarbons of less volatile and high boiling point into the simpler hydrocarbons of less boiling point is called:
- (A) Polymerisation
  - (B) Condensation
  - (C) Fractional distillation
  - (D) Fermentation
41. In heavy vehicles, diesel is used as fuel because:
- (A) It gives more mileage and is safe for the engine
  - (B) It uses high-voltage spark ignition
  - (C) It has high power and economic savings
  - (D) It is cheaper in comparison to petrol
42. An explosion occurs in the mines through:
- (A) The mixture of nitrogen with oxygen
  - (B) The mixture of acetylene with oxygen
  - (C) The mixture of air with methane
  - (D) The mixture of  $CO_2$  with ethane

43. In order to lower the temperature below  $0^{\circ}\text{C}$ , the substance mixed with ice is:  
(A) Sodium carbonate  
(B) Sodium chloride  
(C) Magnesium  
(D) Lime
44. In the hooch tragedy (casualty occurring due to the wine poisoning), sometimes blindness occurs due to the poisonous substance:  
(A) Ethyl alcohol  
(B) Methyl alcohol  
(C) Amyl alcohol  
(D) Benzyl alcohol
45. A rectified spirit is:  
(A) The mixture of ethyl alcohol and methyl alcohol  
(B) Purified ethyl alcohol  
(C) The ethyl alcohol employed as fuel  
(D) 95.57% ethyl alcohol and 4.43% water
46. The mixture of antifreezer substances are used in the radiators especially in the automobiles of cold countries, this mixture has:  
(A) Water and ethyl alcohol  
(B) Water and glycerol  
(C) Water and ethylene glycol  
(D) None of these
47. The Vinegar is the solution of:  
(A) 5% acetic acid solution in water  
(B) 25% acetic acid solution in water  
(C) 50% acetic acid solution in water  
(D) 40% acetic acid solution in water
48. Sodium bicarbonate is useful as a fire extinguisher because:  
(A) It decomposes on heating to give  $\text{CO}_2$ , which extinguishes the fire  
(B) It serves as a blanket for the fire  
(C) It releases  $\text{H}_2\text{O}$  which extinguishes the fire  
(D) It emits a foam which extinguishes the fire
49. Which of the following in chronological order of the density of the various substances is true ?  
(A) Steel > mercury > gold  
(B) Gold > mercury > steel  
(C) Steel > gold > mercury  
(D) Gold > steel > mercury
50. Which of the following would exhibit useful working correlation between fungi and roots of the higher plants:  
(A) Bio-fertilizers  
(B) Coreloid root  
(C) Lichen  
(D) mycorrhiza
51. Consider the following:  
(A) Camphor  
(B) Chicory  
(C) Vanilla

In the above which of the following is/are Plant Product?

- (A) Only 1 and 2
- (B) Only 3
- (C) Only 1 and 3
- (D) 1, 2 and 3

52. Which of the following pairs is wrong:
- (A) Conical root - onion
  - (B) Fusiform root - radish
  - (C) Napiform root - turnip
  - (D) Pneumatophores - mangrove plant
53. If in the bisexual flower androecium and gynoecium's develop in adult forms at the different time, then the process is called:
- (A) Decogamy
  - (B) Hercogamy
  - (C) Heterogamy
  - (D) Monogamy
54. The fibres of the cotton are:
- (A) The fibre extracted and drawn from stem
  - (B) The semi-skinned soft root of the seeds
  - (C) The semi-skinned soft root of the fruits
  - (D) The fibre extracted and drawn from root
55. Which of the following crops supply the surplus nitrogen to the soil:
- (A) Potato
  - (B) Sweet potato
  - (C) Sun flower
  - (D) Pea
56. Which of the following vitamins is pronounced by the name of riboflavin:
- (A) Vitamin B1
  - (B) Vitamin B2
  - (C) Vitamin B6
  - (D) Vitamin B12
57. Which of the following hormones of the human body regulate the blood calcium and phosphate?
- (A) Glucogan
  - (B) Growth hormone
  - (C) Parathyroid hormone
  - (D) Thyroxine
58. The most photosynthetic activities occur in the:
- (A) Red and blue area of the light
  - (B) Green and yellow area of the light
  - (C) blue and orange area of the light
  - (D) Violet and orange area of the light
59. Phytotron is a facility, through which:
- (A) Plants are grown up in the disease-less circumstances
  - (B) Species of the extinct plants are conserved
  - (C) Plants become available to grow up in the controlled conditions
  - (D) Mutation; is affected

60. The water pollution in the rivers are measured by:
- (A) The amount of Dissolved chlorine
  - (B) The amount of dissolved ozone
  - (C) The amount of Dissolved nitrogen
  - (D) The amount of dissolved oxygen
61. The bio organism used to prevent the water pollution spread through the industrial flowing waste substances is:
- (A) Parthenium
  - (B) Elephant grass
  - (C) Water plant
  - (D) Both (A) & (B)
62. Which of the following pair is not correct:
- (A) Joseph Lister - remedial measures of Tetrady
  - (B) John E. Shalk - anti oculation of the polio
  - (C) Alexander Fleming - the invention of penicillin
  - (D) None of these
63. Which of the following is not the residual human organs:
- (A) Nocateting screen
  - (B) Ear drum muscles of the tympanic membrane
  - (C) Fore flattened teeth
  - (D) Appendix
64. The instinct parts (organs) of the reptiles are explained on the basis of theory of evolution as which of the following:
- (A) Form the uses and non use of the organs
  - (B) From the adaptation to dwell in tunnel
  - (C) From the natural selection
  - (D) From the heredity of appeared characters
65. The fishes are assumed to be healthy and more nourishable with comparison to the another animals flesh; because in the fish :
- (A) There exists multi unsaturated acid
  - (B) There exists saturated fatty acid
  - (C) There exists necessary vitamins
  - (D) There exists more carbohydrate and protein
66. A popular windowing Environment, windows - 3 was introduced in :
- (A) 1985
  - (B) 2000
  - (C) 1995
  - (D) 1990
67. The super computers Deep Blue and Blue Gene are developed and fabricated by:
- (A) IBM Co. USA
  - (B) Cambridge University, UK
  - (C) BASC, Mumbai
  - (D) None of these
68. The main component in the fifth generation computer is:
- (A) Integrated circuit (IC)
  - (B) Largely Integrated Circuit (LIC)
  - (C) Optical fiber
  - (D) None of these



69. The Central Processing Unit (CPU) which is called the brain of the computer, is sometimes also called :
- (A) Micro Processor
  - (B) Processor
  - (C) Mini Processor
  - (D) Mini Computer
70. The food and mouth disease in the animals occurs due to:
- (A) Bacteria
  - (B) Fungi
  - (C) Protozoa
  - (D) Virus
71. The Name of Sargasso sea appeared due to :
- (A) Fungi
  - (B) Angiosperm
  - (C) Algae
  - (D) Bryophyta
72. Digestion process do not involve
- (A) Ingestion
  - (B) Digestion
  - (C) Adsorption
  - (D) Assimilation
73. Silk fibers are made of
- (A) Protein
  - (B) Vitamin
  - (C) Minerals
  - (D) Salt
74. Excretory system of human consist of
- (A) Two kidneys
  - (B) Two Urethras
  - (C) Urinary Bladder and Urethra
  - (D) All of above
75. Acid rain mainly contains
- (A) Hydrochloric acid
  - (B) Carbon mono oxide
  - (C) Carbon dioxide
  - (D) Nitric and Sulphuric acid
76. Centre for cellular and molecular biology is located in
- (A) Chennai
  - (B) Hyderabad
  - (C) Mumbai
  - (D) Delhi
77. Otolaryngologist is specialist who treats
- (A) Heart
  - (B) Lungs
  - (C) Nose, throat and ear
  - (D) None of the above

78. Study of tissue of living body is called  
(A) Biopsy  
(B) Autopsy  
(C) Vivrillgy  
(D) Exo-biology
79. World telecommunication day is observed on  
(A) 17 April  
(B) 17 May  
(C) 17 June  
(D) 17 July
80. Guard cells are found in  
(A) Stomata  
(B) Nucleus  
(C) Vacuoles  
(D) Leaves
81. Rumination is a process of digestion in  
(A) Grass eating animals  
(B) Human beings  
(C) Insects  
(D) Amphibians
82. Ant sting consist of which acid  
(A) Acetic acid  
(B) Formic acid  
(C) Lactic acid  
(D) Oxalic acid
83. Colloidal solution is a type of mixture  
(A) homogenous  
(B) Heterogenous  
(C) Partially homogenous and partially heterogenous  
(D) None of the above
84. Select the correct statements  
(A) Mammals are warm blooded animals with four chamber heart  
(B) Aves cold blooded animals with 4 chamber heart  
(C) Reptiles warm blooded animals  
(D) Pisces breath through lungs
85. Twinkling of stars is due to  
(A) Reflection  
(B) Refraction  
(C) Adsorption  
(D) Dispersion
86. Tyndall effect is due to  
(A) Scattering of light due to colloidal particles  
(B) Reflection of light  
(C) Refraction of light  
(D) Dispersion of light

87. Two modes of reproduction in plants
- (A) Sexual and asexual
  - (B) Asexual only
  - (C) Sexual only
  - (D) Bisexual
88. Secondary cells are
- (A) Which can be recharge
  - (B) Voltaic cell
  - (C) Dry cell
  - (D) None of the above
89. The ergot is extracted through:
- (A) Rizhobium
  - (B) Calliviseps
  - (C) Phytomonas
  - (D) Albuego
90. Which of the following is edible fungi:
- (A) Múcer
  - (B) Pencillium
  - (C) Agaricus
  - (D) Rizopus
91. I S D is obtained through:
- (A) Bacteria
  - (B) Fungi
  - (C) 2,4-D
  - (D) Alcohol
92. Which of the following pairs is NOT correctly matched?
- (A) Chloroform- James Harrison
  - (B) Germ Theory-Louis Pasteur
  - (C) Blood Transfusion- Joseph Lister
  - (D) Bacteria- Leeuwenhoek
93. Consider the following statements:
1. A person Jumping out of a moving train is carried forward in the direction of the train due to the Newton's First law of motion.
  2. Recoil of a gun, Motion of rocket & Swimming are all the examples of Newton's Second law of motion.
- Which of the above statements is/are correct?
- (A) Only is 1 correct
  - (B) 1 & 2 are correct
  - (C) Only 2 is correct
  - (D) 1 & 2 are wrong
94. Consider the following statements:
1. WBCs are formed in bone marrow, while RBC's are formed in liver & Spleen.
  2. WBCs count is higher in females, whereas RBC count is higher in males.
- Which of the above statements is /are correct
- (A) 1 is correct
  - (B) 2 is correct
  - (C) Both 1 and 2 are correct
  - (D) Both 1 and 2 are wrong

95. Which of the following statements are correct?
1. India is the sixth largest country in the world
  2. India is the seventh nation to have gone into outer space
  3. India accounts for 2.4 percent of the world surface area
  4. India houses 16.7 percent of the world population
- Codes:
- (A) 1 and 2
  - (B) 2 and 3
  - (C) 3 and 4
  - (D) 1 and 4
96. Which of the following countries has announced itself to become the world's first carbon neutral country by 2020?
- (A) Maldives
  - (B) Fiji
  - (C) Tuvalu
  - (D) Brazil
97. In the 59th Miss World final, Kaiene Aldorino won the 2009 Miss World crown defeating 111 contestants from across the world. She belongs to which of the following countries?
- (A) South Africa
  - (B) Mexico
  - (C) Jamaica
  - (D) Gibraltar
98. A huge magnitude 8.8 earthquake struck Chile recently killing at least 122 people. The South American country is the
- (A) World's No.1 Copper Producer
  - (B) World's No.1 Tin producer
  - (C) World's No.2 Copper producer
  - (D) World's No.2 Tin producer
99. The SARS is:
- (A) An organization
  - (B) Bacteria-borne disease
  - (C) War tank
  - (D) Communication system

## Answers

Q1	D	Q21	C	Q41	C	Q61	D	Q81	A
Q2	A	Q22	A	Q42	C	Q62	A	Q82	B
Q3	C	Q23	A	Q43	B	Q63	C	Q83	B
Q4	C	Q24	D	Q44	B	Q64	A	Q84	A
Q5	A	Q25	A	Q45	D	Q65	A	Q85	B
Q6	A	Q26	A	Q46	C	Q66	B	Q86	A
Q7	A	Q27	C	Q47	A	Q67	A	Q87	A
Q8	C	Q28	B	Q48	A	Q68	C	Q88	A
Q9	A	Q29	B	Q49	B	Q69	A	Q89	B
Q10	B	Q30	C	Q50	D	Q70	D	Q90	C
Q11	C	Q31	B	Q51	D	Q71	C	Q91	B
Q12	B	Q32	A	Q52	A	Q72	C	Q92	C
Q13	D	Q33	C	Q53	A	Q73	A	Q93	A
Q14	C	Q34	C	Q54	C	Q74	D	Q94	C
Q15	A	Q35	B	Q55	D	Q75	A	Q95	C
Q16	D	Q36	C	Q56	B	Q76	B	Q96	B
Q17	A	Q37	D	Q57	C	Q77	C	Q97	D
Q18	B	Q38	B	Q58	A	Q78	A	Q98	A
Q19	C	Q39	B	Q59	C	Q79	B	Q99	B
Q20	A	Q40	C	Q60	D	Q80	A		