

- 1 The material used in manufacture of lead pencils is –  
 1).graphite                      2).Lead                      3).Carbon                      4). Mica  
**Ans: 1**
- 2 Which is the capital of Indonesia?  
 1).Bandung                      2).Taipei                      3).Jakarta                      4).Sumatra  
**Ans: 3**
- 3 In an aquarium we find-  
 1).Snakes                      2).Birds                      3). Fish                      4). Flowers  
**Ans: 3**
- 4 In computer jargon which of these terms stands for the highest memory capacity?  
 1).Byte                      2).Gigabyte                      3).Kilobyte                      4).Megabyte  
**Ans: 2**
- 5 Which of the following is the sweetest?  
 1).sucrose                      2).Maltos                      3).Glucose                      4).Saccharin  
**Ans: 4**
- 6 Which of the following is the sweetest?  
 1).sucrose                      2).Maltos                      3).Glucose                      4).Fructose  
**Ans: 4**
- 7 Which is the smallest possible unit of a chemical compound?  
 1).atom                      2). Electron                      3). Proton                      4). Molecule  
**Ans: 4**
- 8 Which one of these is not a unit of weight?  
 1).Kg    2).Ounce                      3).Gallon                      4).Ton  
**Ans: 3**
- 9 The power of a machine is defined as the rate of doing –  
 1).couple                      2).Force                      3).Work                      4).Energy  
**Ans: 3**
- 10 After which scientist has the metric unit of power been named?  
 1).James Joule                      2).Blaise Pascal                      3).James Watt                      4).Andra Marie  
**Ans: 3**

11 'Angstrom' is a unit used to measure -

- 1). the wave length of light                      2). The speed of rockets  
 3). energy    4). None ofthese

Ans: 1

12 A pond of clear water appears less deep than it really is. This is due to –

- 1).reflection    2).Refraction  
 3).thetransparencyofwater                      4).Dispersion

Ans: 2

13 With which game is the legendary Maradona associated?

- 1).Badminton                      2).Tennis                      3). Football                      4).Athletics

Ans: 3

14 Where are Toda Tribals live?

- 1).Nilgiris                      2).Sikkim                      3).Himachal                      4).Nagaland

Ans: 1

15 An electric current in a metal is a flow of electrically charged particles, called –

- 1).X-rays                      2).Electrons                      3).Neutrons                      4). Protons

Ans: 2

16 Cloudy nights are warmer because-

- 1). clouds prevent thermal radiation from earth to the outer space                      2). Clouds emit heat rays  
 3).lightning produces heat    4).None of these

Ans: 1

17 Which is the only scalar quantity from the following ?

- 1) Force                      2).Velocity                      3). Energy                      4). Momentum

Ans: 3

18 Audio cassettes are coated with.....

- 1).lead oxide                      2).zinc oxide                      3).copper oxide                      4).iron oxide

Ans: 4

**Note:** Audiocassette tape recording also makes use of electromagnetic phenomena to record and reproduce sound waves. The tape consists of a plastic backing coated with

a thin layer of tiny particles of magnetic powder, usually ferric oxide ( $\text{Fe}_2\text{O}_3$ ) and to a lesser extent chromium dioxide ( $\text{CrO}_2$ ).

Ref. Berg, Richard E.. "Sound recording". *Encyclopedia Britannica*, 19 Jun. 2018, <https://www.britannica.com/technology/sound-recording>. Accessed 7 September 2021.

19 By mistake, the side of a square is measured 5% more. How much percentage will be the increase in its area ?

- 1).11.25%                      2).10.6%                      3). 10.3%                      4). 9.1%

Ans: 1

20 How many sides are there in a rhombus?

- 1).2    2).6                      3). 4                      4). 8

Ans: 3

21 Value of  $\cos 30^\circ \cos 60^\circ - \sin 30^\circ \sin 60^\circ$  is

- 1).1    2).0                      3).-1                      4).1/2

Ans:2

22 When did India accept its constitution?

- 1).1947                      2).1949                      3). 1950                      4). 1951

Ans: 2

23 "Green house effect" is due to-

- 1).Carbon dioxide    2).Sulphurd ioxide    3).Oxygen                      4).rare gases

Ans: 1

24 Atoms of the same element. i.e., having the same atomic number, that differ in mass number ( and hence atomic weight), are called –

- 1).isotopes                      2). isomers                      3).isobars                      4). Isohytes

Ans: 1

25 Hubble's law is related with-

- 1).Comet motion                      2).Speed of expanding galaxy    3).Black hole    4).Planetary motion

Ans: 2

- 26 On what principle does the atom bomb work?  
 1). Thermal explosion 2). **Nuclear fission** 3). Nuclear fusion 4). Chemical reaction  
**Ans: 2**
- 27 'Atomic Theory' was devised by-  
 1).Daimler 2). Mosley 3).**Dalton** 4).None ofthese  
**Ans: 3**
- 28 Which is the national flower of India?  
 1).Sunflower 2).Rose 3). **Lotus** 4).Marigold  
**Ans: 3**
- 29 Who invented Deuterium?  
 1).Copernicus 2).**H.G.Urey** 3). Isaac Newton 4).None of the above  
**Ans: 2**
- 30 Which one of the following methods does not suit to retain the fertility of the soil?  
 1).Croprotation 2). Multiple cropping 3).Seed treatment 4).**Single cropping**  
**Ans: 4**
- 31 Ashtapradhan was a council of ministers of the-  
 1).Guptas 2).Cholas 3).Vijayanagar kings 4).**Marathas Empire**  
**Ans: 4**
- 32 Mahatama Gandhi started Satyagraha against the mistreatment of Indians in –  
 1).England 2).USA 3).**South Africa** 4). Fuji islands  
**Ans: 3**
- 33 Which of the following cities, has the nations first Mass Rapid Transport System (MRTS)?  
 1).**Chennai** 2). Bangalore 3).Delhi 4).Hyderabad  
**Ans: 1**
- 34 The oxygen carrier 'Haemoglobin' is found in -  
 1).**blood** 2).bilefluid 3).sweat 4).Noneofthese  
**Ans: 1**

35 IFA stands for-

- 1). International Fencing Association
- 2). International Football Academy
- 3). Indian Football Association

4). International Football Association

Ans: 4

36 What kind of insects have a queen, workers and drones?

- 1). Spiders
- 2). Scorpions
- 3). Ants
- 4). Bees

Ans: 4

37 Which of the following is an affiliate of the International Bank of Reconstruction and Development?

- 1). UNDP
- 2). IMF
- 3). IDA
- 4). UNICEF

Ans: 1

38 'Lactometer' is used to determine-

- 1). hydrogen in water
- 2). purity of petrol
- 3). purity of milk
- 4). purity of vegetable oil

Ans: 3

39 Who invented 'logarithms'?

- 1) Issac Newton
- 2). John Napier
- 3). Mendeleef
- 4). None

Ans: 2

40 Gir National Park is famous for-

- 1). Elephants
- 2). Cheetahs
- 3). Lions
- 4). Tigers

Ans: 3

41 What is the name for things relating to "hearing" ?

- 1). Oral
- 2). Audio
- 3). Video
- 4). None of these

Ans: 2

42 Which of the following material does not burn in fire?

- 1). Naphthalene
- 2). Asbestos
- 3). Plastic
- 4). Paper

Ans: 2

43. The nuclides having the same number of neutrons but different number of protons or mass number are known as:-

- 1). Isotopes
- 2). Isobars
- 3). Isotones
- 4). Isoelectronic

Ans: 2

44. The process or removal of permanent hardness of water is  
 1). Zeolite Process    2). Sedimentation Process  
 3). Filtration Process    4). Boiling Process

Ans: 1

45. Per capita consumption of water is highest in  
 1). Schools    2). Hospitals    3). Offices    4).Factories

Ans: 4

46. Ultraviolet rays used for the treatment of water known as –  
 1). Dechlorination    2) Disinfection    3). Aeration    4). Filtration

Ans: 2

47. Which of these waterfalls, falls with the most water?  
 1). Boyome    2). Niagara    3). Guaira    4). Khone

Ans: 2

48. Which of the following is the lowest unit of measurement of length?  
 1). Kilometer    2). Meter    3). Centimeter    4). Millimeter

Ans: 4

49. Which of the following is not a computer language?  
 1). COBOL    2), MS-DOS    3). FORTAN    4). PASCAL

Ans: 2

50. Which one of these is not a measure of distance?  
 1). Inch    2). metre    3). Mile    4). Fahrenheit

Ans: 4

51. The instrument used to measure voltages, currents and resistances is called as:  
 1). Wattmeter    2). Potentiometer    3). Multimeter    4). Ohm-meter

Ans: 3

52. TNT is –  
 1). Thermonuclear thorium    2). Total neutron transition  
 3). Thermal neutrons treatment    4). Trinitro toluene

Ans: 4

53. The period of oscillation of a simple pendulum depends upon -  
 1). Mass of the bob    2). Diameter of the bob  
 3). Density of the pend    4). Length of the pendulum

Ans: 4

54. The joining of two similar metals by heating to a temperature of melting of base metals with or without the use of a filler is called  
 1) Welding    2). Riveting    3). Splicing    4). None of the above

Ans: 1

55. The earth's atmosphere is occupied by (volume)  
 1) 78% of nitrogen    2). 78% of oxygen  
 3). 78% by nitrogen and rare gases    4). 60% of oxygen and rest other gases

Ans: 1

56. Acceleration due to gravity on moon is 0.166 times than on the earth. How much would a man weigh if he weighs 60 kg on earth?  
 1). 27.5 kg    2). 96 kg    3). 9.96 kg    4). 36 kg

Ans: 3

57. .... are ductile metal pins often used for joining structural members as in the case of trusses, girders, cylindrical sheets etc.?  
 1). Nuts    2). Bolts    3). Rivets    4). None of these

Ans: 3

58. Sound cannot travel through  
 1). Solid    2). Liquid    3). Vacuum    4). Gas

Ans: 3

59. Beta rays are  
 1). fast protons  
 2). high-speed electrons  
 3). able to penetrate heavy armour plate  
 4). electromagnetic waves

Ans: 2

60. Kaleidoscope is based a principle of  
 1). Refraction    2). Multiple reflection  
 3). Total internal reflection    4). None of these

Ans: 2

61. What was the name of the son of King Ashoka who was sent to Sri Lanka to spread Buddhism?  
 1). Narendra    2). Mahendra    3). Harsha    4). Kanishka

Ans: 2

62. Octal system uses the base equal to –  
 1). 7    2). 6    3). 5    4). 8

Ans: 4

63. The smallest possible unit of chemical compound is –  
 1). Proton    2). Atom    3). Electron    4). Molecule

Ans: 4

64. Which of the following utilizes Newton's third law of motion?  
 1). Archery    2). Space-rocket  
 3). Venturimeter    4). Internal combustion engine

Ans: 1

65. What are IC chips for computers usually made of?  
 1). Silicon                      2). Lead                      3). Copper                      4). Chromium  
 Ans: 1
66. What is a clandestine hiding place for weapons called?  
 1). Cache                      2). Hothouse                      3). Armoury                      4). Holster  
 Ans: 3
67. The following device converts light energy into electric energy  
 1). Coolidge tube.                      2). Photoelectric cell  
 3). Voltaic cells.                      4). CRO  
 Ans: 2
68. The instrument used to measure the altitude of the Sun is –  
 1). Pyrometer                      2). Sextant                      3). Telstar                      4). None of these  
 Ans: 2
69. If 8% of x = 4% of y, then 20% of x is:  
 1). 10% of y                      2). 16% of y                      3). 80% of y                      4). None of these  
 Ans: 1
70.  $(x^{6/5})^0 =$   
 1). 0                      2).  $x^{5/6}$                       3).  $x^{6/5}$                       4). 1  
 Ans: 4
71.  $\cos\frac{\pi}{6} \times \cos\frac{\pi}{3} - \sin\frac{\pi}{6} \times \sin\frac{\pi}{3} = ?$   
 1). 1                      2). -1                      3). 0                      4). -1/2  
 Ans: 3
72. Who invented a system of reading for the blind?  
 1). Louis Braille                      2). Robert Patch  
 3). Yehudi Menuhin                      4). Shirley Temple  
 Ans: 1
73. Which of the following is not an computer operating system?  
 1). Windows                      2). Linux                      3). Flash                      4). DOS  
 Ans: 3
74. Which of the following element is the most abundant on earth's crust?  
 1). C                      2). Si                      3). Ge                      4). Sn  
 Ans: 2
75. Horse-power is the unit of -  
 1). Power                      2). Electric current                      3). Three-horses                      4). Electricity  
 Ans: 1
76. The structural members which are under compression and are in vertical position, are called **struts/columns**.



77. Which of the following is a permanent body of Indian Parliament?  
 1). **Rajya Sabha** 2). Legislative Assembly  
 3). Lok Sabha 4). None of these  
**Ans: 1**
78. What is the name of another hill range in Madhya Pradesh, apart from Vindhyas?  
 1). Western Ghats 2). **The Satpuras**  
 3). Aravali 4). Elephanta  
**Ans: 2**
79. To an astronaut, the outer space appears as –  
 1). Crimson 2). Deep Blue 3). **Black** 4). White  
**Ans: 3**
80. Which poisonous gas is exhausted from motor vehicles?  
 1). Carbon Dioxide 2) Sulphur Dioxide  
 3). Silicon Dioxide 4). **Carbon Monoxide**  
**Ans: 4**
81. The unit of couple is  
 1). Newton 2).  $Nm^2$  3). **Nm** 4). Watt  
**Ans: 3**
82. Periscope is based an the principle of  
 1). Refraction 2). **Multiple reflection**  
 3). Total internal reflection 4). None of these  
**Ans: 2**
83. Which of these is made of coral reef?  
 1). Furrow 2). Plateau 3). Valley 4). **Atoll**  
**Ans: 1**
84. One thousand Bytes represent a  
 1). Megabyte 2). Gigabyte 3) **Kilobyte** 4). None of the  
 above  
**Ans: 3**
85. The principle involved in the absorption of ink or water by a piece of blotting paper is  
 1). Suction action 2). Principle of absorption  
 3). **Capillary action** 4). Offset procedure  
**Ans: 3**
86. Unit of power of a lens is measured in  
 1). **Diopter** 2). Huygens 3). Weber 4). Metres  
**Ans: 1**
87. Hitler ordered the mass killing of  
 1). Muslims 2). Blacks 3). Russians 4). **Jews**

Ans: 4

88. How many zeros are there in ten million?  
 1). 7 zeros                      2). 9 zeros                      3). 6 zeros                      4). 8 zeros  
 Ans: 1

89. Who among the following had founded the Arya Samaj?  
 1). Swami Dayanand Saraswati                      2). Swami Vivekanand  
 3). Raja Ram Mohan Roy                      4). Ramakrishna Paramahansa.  
 Ans: 1

90. Acidic solution is one which has pH value  
 1). Greater than 7                      2). Less than 7                      3). Equal to 7                      4). None of the above  
 Ans: 2

91. "Euclid" is associated with –  
 1). Law of heredity                      2). Atomic Theory  
 3). Geometry                      4). None of these  
 Ans: 3

92. Who discovered sea route from Western Europe to India?  
 1). Alexander                      2). Marco Polo                      3). Vasco da Gama                      4). Columbus  
 Ans: 3

93. The number of oscillations per second is known as –  
 1). Time period                      2). Phase difference  
 3). Frequency                      4). Amplitude  
 Ans: 3

94. Which gas is known as laughing gas?  
 1). Nitrous Oxide                      2). Carbon Dioxide  
 3). Sodium Hydroxide                      4). Nitrogen Sulphate  
 Ans: 1

95. ULFA is a terrorist organisation operating in –  
 1). Assam                      2). Mizoram  
 3). Arunachal Pradesh                      4). Nagaland  
 Ans: 1

96. The force of friction acting between two surfaces when one surface is in steady motion over the called  
 1). Limiting friction                      2). Kinetic friction  
 3). Static friction                      4). Hydrodynamic friction  
 Ans: 2

97. Which of these substances is used for making glass?  
 1). Wood                      2). Silica Sand                      3). Marble                      4). Slate  
 Ans: 2

98. The value of complex number  $i^2$   
1).  $i$                       2).  $-i$                       3).  $1$                       4).  $-1$   
Ans: 4.
99. In a N-type semiconductor, \_\_\_\_\_ are majority carriers.  
1). **Electrons**              2). Holes                      3). Atoms                      4). None of the  
above  
Ans: 1
100. Which of the following is the lightest?  
1). Molecule              2). Atom                      3). Neutron                      4). **Electron**  
Ans: 4

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