



3). Photoelectric emission

4). Secondary emission

Ans: 2

13. Which of the following is a unit of frequency?

1). Hertz

2). Cycle

3). Weber

4). Tesla

Ans: 1

14. Electric fuses provide protection against

1). Sparking

2). Overloads

3). Single-phasing

4). High current and voltage

Ans: 4

15. Electric current in a wire consists of –

1). Flow of electrically charged fluid.

2). Flow of electrons.

3). Flow of molecules.

4). None of these.

Ans: 2

16. Which one of these is a super cooled liquid?

1). Glass

2). Mica

3). Gold

4). Iron

Ans: 1

17. The most fertile soil is -

1). Alluvium

2). Black soil

3). Laterite soil

4). Red soil

Ans: 1

18.  $(81)^{-1/4}$  is

1). 3

2). 1

3).  $1/3$

4).  $3^{-4}$

Ans: 3

19. After which river does India get her name?

1). Ganges

2). Indus

3). Irrawaddy

4). Sutlej

Ans: 2

20. A byte consists of –

1). 8 bits

2). 6 bits

3). 4 bits

4). 7 bits

Ans: 1

21. Solar cells are made of

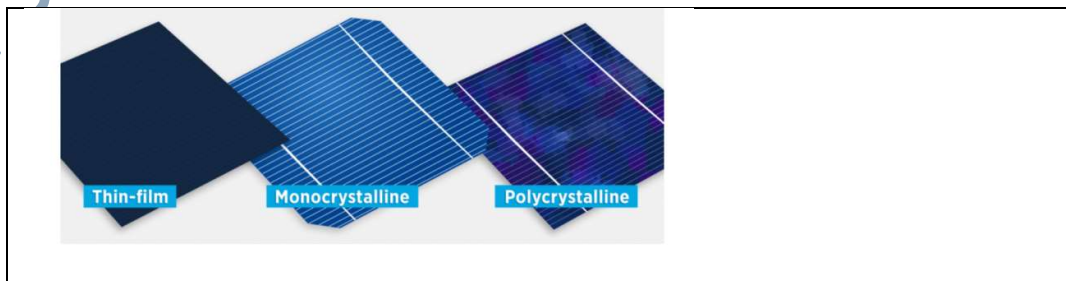
1). Silicon

2). Germanium

3). Silver

4). Aluminum

Ans: 1.







37. The factors of  $x^2 - 64$  are  
 1.  $(x+8)$                       2.  $(x+6)$                       3.  $(x+4)$                       4.  $(x+2)$   
 Ans: 1
38. Which of the following instruments can be used for measuring horizontal and vertical angles from earth surface?  
 1). Magnetic compass.                      2). Alidade.  
 3). Level.                      4). Theodolite.  
 Ans: 4
39. In which (man drawn form of) transport, did royal women of ancient India travel?  
 1). Chariot                      2). Rickshaw                      3). Palanquin                      4). Throne  
 Ans: 3
40. The average salinity of an ocean is  
 1). 2.0 per cent                      2). 2.5 per cent                      3). 3.0 per cent                      4). 3.5 per cent  
 Ans: 4
41. Rainfall is measured in  
 1). cubic metre                      2). centimeter                      3). Square metre                      4). None of these  
 Ans: 2
42. At what temperature do both the Centigrade and Fahrenheit thermometers show the same reading?  
 1).  $20^\circ$                       2).  $-40^\circ$                       3).  $42^\circ$                       4).  $0^\circ$   
 Ans: 2
43. The steel used for cutting tools is known as –  
 1). Mild steel                      2). High carbon steel  
 3). Medium carbon steel                      4). None of these  
 Ans: 2
44. If  $\frac{a}{3} = \frac{b}{4} = \frac{c}{7}$ , then the value of  $\frac{a+b+c}{2}$  is  
 1).  $\frac{1}{\sqrt{7}}$                       2). 2                      3).  $\sqrt{2}$                       4). 7  
 Ans: 2
45. Who is the constitutional head of the Republic of India?  
 1). Lok Sabha Speaker                      2). Prime Minister  
 3). President                      4). Chief Justice  
 Ans: 3
46. The errors in the program are called  
 1). PROLOG                      2). Bubbling                      3). Bugs                      4). YIG  
 Ans: 3
47. What is the maximum number of digits in binary number system?  
 1). 10                      2). 4                      3). 2                      4). 1  
 Ans: 3

48. The steel used for drawing wires is:  
 1). Malleable steel    2) **Ductile Steel**    3). Brittle Steel    4). Hard steel  
**Ans: 2**
49. Which of the following groups of substances consists of mixtures only?  
 1). Aluminum, brass, sodium, Sulphur  
 2). **Vinegar, ink, paint**  
 3). Ethyl alcohol, water, hydrogen chloride, Sulphur dioxide  
 4). Bronze,  
**Ans: 2**
50. The radiation that is not affected by electric or magnetic fields are -  
 1). Alpha rays    2). Beta rays    3). **Gamma rays**    4). Cathode rays  
**Ans: 3**
51. In a structure generally wires and cables are used as  
 1). Compression member    2). **Tension member**  
 3). Torsion member    4). None of these  
**Ans: 2**
52. Which of the following mechanical properties of metals gives resistance to pulling forces?  
 1). Toughness    2). Ductility    3). Hardness    4). **Tensile strength**  
**Ans: 4**
53. Unit of brightness is  
 1). **Candela**    2). Diopter    3). Weber    4). Tesla  
**Ans: 1**
- The candela (cd)** is the standard unit of luminous intensity or brightness of a light in a specific direction.
54. Neutrons are  
 1). Positively charged particles    2). Negatively charged particles  
 3). **Neutral particles**    4). None of these  
**Ans: 3**
55. Hydrophobia is caused by a  
 1). Acute virus    2). Bacteria    3). **Rabies virus**    4). Varoa virus  
**Ans: 3**
56. The human heart-beat per minute at an average is -  
 1). 60    2). **72**    3). 80    4). 90  
**Ans: 2**

57. Dry ice is –  
 1). Ice which never melts  
 2). A term used for insensitive persons  
 3). **Solid carbon dioxide**  
 4). Frozen heavy water

Ans: 3

58. How old are the Khajuraho Temples?  
 1). 2000 years  
 2). **1000 years**  
 3). 1200 years  
 4). 1500 years

Ans: 2

59. Where is the 'Shore Temple located?  
 1). Kanyakumari  
 2). **Mamallapuram**  
 3). Tiruchendur  
 4). Tranquebar

Ans: 2

60. Avogadro number N is a –  
 1). Constant at constant temperature  
 2). Constant at constant pressure  
 3). Constant at constant volume  
 4). **Universal constant**

Ans: 4

**Avogadro's number**, number of units in one mole of any substance (defined as its molecular weight in grams), equal to  $6.02214076 \times 10^{23}$ . The units may be electrons, atoms, ions, or molecules, depending on the nature of the substance and the character of the reaction (if any).

61. Which of the following state in India is relatively rich in coal deposits?  
 1). Rajasthan  
 2). U.P  
 3). **Bihar**  
 4). Andhra Pradesh

Ans: 3

Jharkhand – 83.15 billion tonnes. ...  
 Odisha – 79.30 billion tonnes. ...  
 Chhattisgarh – 57 billion tonnes. ...  
 West Bengal – 31.67 billion tonnes. ...  
 Madhya Pradesh – 27.99 billion tonnes.

<https://www.nsenergybusiness.com/features/states-india-largest-coal-reserves/>

62. If most of the children of a particular village suffered from night blindness, the nutritional supplement they need be provided with would include –

- 1). Pulses  
 2). Fruits like guava  
 3). **Carrots**  
 4). Radish





- 1). Goods/Freight traffic  
 2). Passenger earning  
 3). Catering  
 4). None of these

Ans: 1

74. A number is increased by 10% and then reduced by 10%. After this operation, the number

- 1). Does not change  
 2). Decreases by 1%  
 3). Increases by 1%  
 4). Increases by 0.1%

Ans: 2

75. What is the general name of a figure with more than four faces called?

- 1). Polygon  
 2). Hexagon  
 3). Pentagon  
 4). Tetrahedron

Ans: 2

76. Watt = volt x \_\_\_

- 1). ohm  
 2). Ampere  
 3). Metre  
 4). Hz

Ans: 2

77. Which of the following areas are preferred for installation of solar thermal electric power plants?

- 1). Mountain tops  
 2). Hot arid zones  
 3). Coastal areas  
 4). High rain fall zones

Ans: 2

78. The semiconductors which are doped with suitable impurity atoms so as to increase its conductivity are called as:

- 1). Intrinsic semiconductors  
 2). Extrinsic semiconductors  
 3). Pure semiconductors  
 4). Impure semiconductors

Ans: 2

79. Energy is measured in the same units as -

- 1). work done  
 2). Power  
 3). Momentum  
 4). Inertia

Ans: 1

80. Ozone layer on the top of stratosphere is important to mankind because it -

- 1). releases hydrogen in the atmosphere  
 2). maintains the temperature of the earth  
 3). It a protective layer against ultra violet rays entering into earth atmosphere from sun  
 4). None

Ans: 3

81. Which of the following operation produces highest noise level?

- 1). Welding  
 2). Riveting  
 3). Machining  
 4). Pressing

Ans: 2 (Next press work)

82. Which sheet metal is used for highly corrosive acid tanks?

- 1). Black Iron  
 2). Galvanized Iron  
 3). Stainless Steel  
 4). Lead

Ans: 4

83. Which is the second largest beach in the world?  
 1). Miami                      2). Florida                      3). **Marina**                      4). Elliots  
**Ans: 3 (The first longest beach is Reo de generio beach in Brazil)**
84. The blotting paper absorbs liquids quickly because -  
 1). **it has got small pores**                      2). it is white  
 3). an absorbing chemical is mixed                      4). None of these  
**Ans: 1 (due to capillary action)**
85. The element which glows in the dark is –  
 1). Sodium                      2). Copper  
 3). **White phosphorus**                      4). Carbon  
**Ans: 3**
86. Watt-second is the unit of –  
 1). Force                      2). Momentum                      3). Power                      4). **Energy**  
**Ans: 4**
87. Which of the following is used to hold work pieces?  
 1). Hammer                      2). Scribe                      3). **Vice**                      4). None of these  
**Ans: 3**
88. The oxygen required for gas welding is stored in  
 1). **Bottle-shaped cylinder**                      2). Rectangular containers  
 3). Ceramic cylinders                      4). Glass cylinders  
**Ans: 1**
89. Bottoming cycle is common in  
 1). Cement plants                      2). Sugar mills                      3). Paper mills                      4). **All of the above**  
**Ans: 4**
90. Which of the following can be used to protect the weld from atmospheric contamination?  
 1). Flux                      2). Inert Gas shielding  
 3). Metal cover                      4). **Both 1 and 2**  
**Ans: 4**
91. The face of the hammer is -  
 1). **Convex**                      2). Concave  
 3). Flat                      4). Concave or convex depending on size  
**Ans: 1**
92. Sundari tree is prominently distributed in the forests of India in  
 1). Evergreen forests                      2). **Tidal forests**  
 3). Coniferous forests                      4). Monsoon forests  
**Ans: 2(Sundarbans)**
93. The nature of saliva is –

- 1). Neutral                      2). Basic                      3). Amphoteric                      4). Acidic  
**Ans: 4**

94. Which one of the following diseases is genetically linked?

- 1). Epilepsy                      2). AIDS  
 3). Colour blindness                      4). Leukoderma

**Ans: 3**

95. Who established the Theosophical Society in Chennai?

- 1) Lady Annie Besant                      2). Rukmani Devi Arundale  
 3). Dr. Muthiah                      4). Non of these

**Ans: 3**

96. Marsh gas, formed from decaying organic matter and in coal mines, is –

- 1). Carbon monoxide                      2). Ethane  
 3). Methane                      4). Carbon dioxide

**Ans: 3**

97. Which of these flowering plants is a creeper?

- 1). Rose                      2). Jasmine                      3). Hibiscus                      4). Sunflower

**Ans: 2**

98. Which of these fills the bone cavity?

- 1). Calcium                      2). Marrow                      3). Blood                      4). Plasma

**Ans: 2**

99. Which one of the following is an instrument that records or displays the electrical activity of the brain?

- 1). Electrocardiograph                      2) Electroencephalograph(EEG)  
 3). Echoencephalography                      4). Electromyography

**Ans: 2**

100. In people suffer from anemia due to the lack of

- 1) Iron                      2). Iodine                      3). Calcium                      4). Potassium

**Ans: 1**