

EVERYDAY SCIENCE : PHYSICS - NO.4

Time: 30 minutes

Marks: 100

1. The spherical shape of a rain drop is due to
A. density of the liquid B. surface tension C. atmospheric pressure D. gravity
2. The sky appears blue because
A. there is more blue colour in sunlight than any other colour
B. Short waves are scattered more than the long waves by the atmosphere
C. the eye is more sensitive to blue colour
D. the atmosphere absorbs long wavelengths more than short wavelengths.
3. Jupiter is ——— times bigger than the earth.
A. 7 B. 12 C. 9 D. 11
4. The inventor of mercury thermometer
A. Alaxander Fleming B. Gabriel Daniel C. Fahrenheit D. Galileo
5. The electrical energy obtained from ordinary batteries is from
A. Chemical energy B. Light energy C. Magnetic energy D. Soft generated energy
6. Dynamite was invented by
A. Albert Einstein B. Michel Faraday C. Alfred Nobel D. Ottis
7. Why does a rod partly immersed in water appear bent ?
A. Refraction B. Reflection C. Polarization D. Diffraction
8. What scientific phenomenon is responsible for causing winds?
A. Motion of air from low pressure area to high pressure area
B. Motion of air from high pressure area to low pressure area
C. Cooling of air D. Warming of air
9. The burns caused by steam are deeper than those caused by water at the same temperature.
The reason behind it is ——
A. The latent heat of steam is less than that of water
B. The latent heat of steam and water is same
C. The latent heat of steam is more than that of water D. None of these
10. The quantity of matter contained in an object is called
A. Weight B. Mass C. Force D. Impulse
11. Give the full form of the abbreviation, ICBM

- A. International council of Ballistic Missile
 B. International commission for Ballistic Missile
 C. Inter-Continental Ballistic Missile D. None of these
12. Laws of electrical resistance was put forward by
 A. Einstein B. Michel Faraday C. Huygen D. G.S. Ohm
13. Halley's comet will next appear in
 A. 2062 B. 2052 C. 2072 D. 2042
14. The moon takes ——— to complete one revolution of the earth
 A. 27 days 7 hours and 43 minutes B. 23 days 9 hours and 40 minutes
 C. 21 days 5 hours and 33 minutes D. 25 days 3 hours and 16 minutes
15. The particle which is supposed to travel faster than light
 A. plasma B. Tachyon C. positron D. β -particle
16. The rotation of the earth about its axis causes
 A. Change in seasons B. Day and night C. Year D. Earth quake
17. The layer in the atmosphere that protects earth from ultraviolet radiation
 A. Oxygen belt B. Milky way C. Nitrogen layer D. Ozone layer
18. The fourth state of matter is called ———
 A. solid B. liquid C. plasma D. gas
19. With increase of height from the surface of the earth the value of 'g'
 A. increases B. decreases C. remains constant D. fluctuates
20. The first hydroelectric project of Kerala is ———
 A. Pallivasal B. Idukki C. Brahmapuram D. Kuttiyadi
21. Artificial satellites are used for
 A. Space research B. TV transmission C. Detecting minerals D. All of the above
22. 'Mir' is the name of
 A. Reusable shuttle of Soviet Union B. Satellite which was sent to study the Mars
 C. Soviet space station D. None of the above
23. Which mirror is used as a shaving mirror?
 A. Plane mirror B. Concave mirror C. Convex mirror D. None of these
24. The great scientist Thomas Alva Edison belongs to
 A. Great Britain B. Russia C. USA D. West Germany
25. The sun is composed mainly of
 A. Helium B. Oxygen C. Nitrogen D. Hydrogen

26. A copper wire cannot be used as a fuse wire because
 - A. It has low melting point
 - B. It has high melting point
 - C. It cannot be drawn into very thin wire
 - D. None of the above
27. An electric motor is a device which converts
 - A. Mechanical energy into electrical energy
 - B. Electrical energy into mechanical energy
 - C. Alternating current into direct current
 - D. Direct current into alternating current
28. In pendulum clocks, if the pendulum is made of ---, temperature changes have no effect on its period.
 - A. Nichrome
 - B. Tungsten
 - C. Invar
 - D. Chromium
29. Rectifiers are used in converting
 - A. D.C to A.C
 - B. A.C to DC
 - C. High voltage to low voltage
 - D. Low voltage to high voltage
30. What does a wheat stone bridge measure?
 - A. Resistance
 - B. Radiations
 - C. Currents
 - D. Densities
31. What is the temperature of the filament of an electric lamp when it glows ?
 - A. About 2700°C
 - B. About 3200°C
 - C. About 3700°C
 - D. About 4000°C
32. Arrange the following according to the order of consumption of electricity.
 - I. TV
 - II. Fan
 - III. Electric Iron
 - IV. Tape recorder
 - A. III, II, I, IV
 - B. III, II, IV, I
 - C. IV, I, II, III
 - D. III, I, II, IV
33. Why does a large ship made of iron float
 - A. Because the upthrust is less than the downward force due to weight of the ship
 - B. Because the upthrust is greater than the downward force due to weight of the ship.
 - C. Both, the weight of the ship and the Buoyant force are equal.
 - D. None of the above
34. If the deformed body does not regain its original form after the removal of the external force, the body is said to be
 - A. plastic
 - B. rigid
 - C. elastic
 - D. None of these
35. Intermolecular force is ————— interatomic force
 - A. weaker than
 - B. Stronger than
 - C. same as
 - D. None of the above
36. If the speed of a car increases four times, the kinetic energy of the car will increase
 - A. four times
 - B. sixteen times
 - C. eight times
 - D. twenty four times
37. For safe driving during rain and fog, a driver should use additional
 - A. milky light
 - B. Blue light
 - C. Yellow light
 - D. Red light

38. The rays which cause sun burn are
 A. Ultra violet B. Infra red C. Visible light D. Cosmic rays
39. A sail boat uses the
 A. Kinetic energy of the wind B. Potential energy of the wind
 C. Upthrust of water D. Friction
40. The ionizing power is maximum for
 A. α -rays B. β -rays C. γ -rays D. None of these
41. The first women who received nobel price in physics is
 A. Madam Curie B. Pierre Curie C. Orville Wright D. None of these
42. Who was the first to observe the magnetic effect of an electric current ?
 A. Faraday B. Thomson C. Newton D. Oersted
43. Which gas is used to estinguish fire ?
 A. Hydrogen B. Oxygen C. Carbondioxide D. Nitrogen
44. Mirages can be explained by
 A. Refraction B. Total internal reflection C. Dispersion D. Reflection
45. When a ray of light enters a glass slab from air, its
 A. wavelength decreases B. wavelength increases
 C. frequency increases D. Neither wavelength nor frequency changes
46. The rate of doing work is called
 A. Energy B. work C. power D. Displacement
47. What happen when a person cups his hands around the mouth while shouting ?
 A. sound increases in volume B. pitch of the sound increases
 C. sound energy is directed in one direction D. None of these
48. Hypodermic syringes are sterilized before use. The best way to do it is
 A. To wash it with alcohol B. To keep it in alcohol for some time
 C. To boil it in a container with lid D. To boil it in a container without lid.
49. The isotope of uranium which is very much radioactive is
 A. U^{235} B. U^{238} C. U^{233} D. All of these
50. If a band is played on the moon, the sound will
 A. Be heard very loudly B. Not be heard at all
 C. Be reflected very much D. None of the above
51. The oldest atomic or nuclear power station in India is

- A. Rana Pratap Sagar B. Tarapur C. Narora D. Kalpakkam
52. If two resistances of 10 ohms each are connected in parallel the resultant resistance will be

A. 5 ohms B. 10 ohms C. 20 ohms D. 100 ohms
53. What does superconductivity of metals imply?
A. High conductivity B. Low conductivity
C. Zero resistance to electricity D. High resistance to electricity
54. Earth's magnetic field is effective ——
A. Upto a distance of 32,000 km B. Upto a distance of 6400 km
C. At the centre of the earth only D. None of the above
55. The extreme colours in a rainbow are———
A. Red and Blue B. Indigo and Red C. Red and violet D. None of these
56. Geostationary satellites are located of a height of nearly —— km above the earth.
A. 35000 B. 45000 C. 55000 D. 65000
57. The speed of sound in air is —— m/s
A. 230 B. 330 C. 360 D. 400
58. —— is the nearest star to earth.
A. sun B. proxima century C. venus D. cirus
59. When was the International Astronomical Union down graded Pluto from planetary status?
A. 2007 August 16 B. 2006 August 26 C. 2008 August 18 D. 2005 August 25
60. At the equator, days and nights of earth occur—— through out the year.
A. with day larger than night B. equally C. with night larger than day D. none of these
61. Who invented electric bulb ?
A. Fraklin B. Maxwell C. Edison D. Grahambell
62. When an alpha particle is emitted from an atom, then
A. Only number of electrons changes B. Only number of neutrons changes
C. Both mass number and atomic number changes D. Only number of protons changes
63. The asteroid belt lies between
A. Jupiter and Saturn B. Mars and Jupiter
C. Mercury and Venus D. Saturn and Uranus
64. Which one is not a non-conventional energy source?

- A. Nuclear energy B. wind energy C. Tidal power D. solar energy
65. What will happen to a balloon filled with hydrogen ?
 A. It will reach a particular height and remain floating
 B. It will burst after gaining some height
 C. It will continue going upward uninterrupted D. None of the above
66. Name the first Indian who won Nobel Prize in Physics
 A. S. Chandrasekhar B. C.V. Raman
 C. K.S. Krishnan D. Venkataraman Ramakrishnan
67. The tides in the ocean are caused due to _____
 A. Gravitational attraction of moon B. Rotation of earth
 C. Salinity of sea water D. None of the above
68. The enormous energy released in an atomic explosion is due to the conversion of
 A. Mass into energy B. Chemical energy into heat energy
 C. Neutron into proton D. None of the above
69. In diesel engines, ignition takes place by _____
 A. Compression B. Electric spark C. Dynamo D. Battery
70. Sound waves are
 A. Longitudinal waves B. Transverse waves
 C. Electromagnetic waves D. Stationary waves
71. A wave in which the particles of the medium vibrate back and forth in the “same direction” in which the wave is moving is called _____.
 A. Longitudinal wave B. Transverse wave
 C. Electromagnetic wave D. None of the above
72. Which of these is the earliest invention ?
 A. Thermometer B. Microphone C. Lighting rod D. Zip fastener
73. At nearly 4°C, a given mass of water has maximum
 A. Energy B. Specific heat C. Volume D. Density
74. The transfer of heat by the physical movement of matter is called
 A. conduction B. Convection C. Radiation D. None of these
75. The process of heat flow from one place to the next via collisions is called
 A. conduction B. convection C. Radiation D. None of these

76. Atomes are electrically
 A. negative B. positive C. neutral D. none
77. Why does the water in an earthen pot cool in summer
 A. It is due to the phenomenon of vaporization
 B. It is due to the phenomenon of radiation
 C. It is due to the phenomenon of evaporation
 D. The mud is bad conductor of heat
78. As we go up in the atmosphere the heights of the various regions are in the order of
 A. Troposphere > Ionosphere > stratosphere
 B. Stratosphere > Troposphere > Ionosphere
 C. Ionosphere > Troposphere > Stratosphere
 D. Ionosphere > Stratosphere > Troposphere
79. Shadows are formed due to ——— of light rays.
 A. Reflection B. Refraction C. Dispersion D. Polarisation
80. When the temperature of an organ pipe is increased its pitch will
 A. Decrease B. Increase C. Remain the same
 D. Increase of Decrease
81. The power of a lens is +2.5 Diopter. What kinds of lens is it ?
 A. Concave lens B. Convex lens C. Any ordinary lens D. Both A & B
82. Thumba Equatorial Rocket Launching station (TERLS) was formally dedicated to UN in
 A. 1963 B. 1968 C. 1969 D. 1975
83. 'Aryabhata' was launched in
 A. 1969 B. 1971 C. 1973 D. 1975
84. Tip of the nib of a pen is split
 A. So that ink may come in contact with the air of atmosphere
 B. So that surface tension of ink can act on the periphery of nib.
 C. So that ink may rise by capillary action D. None of the above
85. If the force of gravity suddenly disappears
 A. Man will sink to the bottom of the earth
 B. The earth will break into many pieces to form different planets
 C. The whole universe will collapse D. Nothing will happen

86. Man is able to see both distant and near objects because
 A. The size of the pupil can be adjusted
 B. There are different parts in the lens to see near and distant objects
 C. Lens is movable
 D. The lens can change its focal length
87. A boat filled with some stones is floating in water. If the stones are dropped into the water, the level of water will
 A. Rise
 B. fall
 C. Remain the same
 D. Date inadequate
88. Sun light reaches the earth in
 A. 2 minutes
 B. 4 minutes
 C. 6 minutes
 D. 8 minutes
89. Addition of impurities to a semi-conductor is called —
 A. Cleavage
 B. Doping
 C. Basing
 D. Dissociation
90. Transistors are made from
 A. Metal
 B. Metalloids
 C. Insulators
 D. Semi-conductors
91. The number of images formed when an object is placed between two parallel plane mirrors is
 A. One
 B. Two
 C. None
 D. Infinite
92. The filament of an electric bulb is generally made of
 A. Manganin
 B. Nichrome
 C. Tungsten
 D. Platinum
93. Fish can survive inside a frozen lake because water near the bottom _____
 A. Is pure
 B. Is salty
 C. Does not freeze
 D. Produces oxygen
94. Who was the first to measure the velocity of light ?
 A. Newton
 B. Einstein
 C. Romer
 D. Faraday
95. Why birds swell their feathers in winter ?
 A. Because swelled feathers entrap air between them, so less of body heat of bird is conducted to surrounding cold air
 B. To prepare their body to fly swiftly
 C. To avoid lethargy
 D. None of the above
96. The penetrating power is maximum in
 A. α - rays
 B. β -rays
 C. γ - rays
 D. Cathode rays
97. The nucleus of an atom consists of
 A. Protons only
 B. Neutrons only
 C. Protons and Neutrons
 D. Neither protons nor neutrons

98. The source of solar energy is
 A. Nuclear fission B. Nuclear fusion c. Radioactivity D. Scattering
99. Communication satellites are
 A. Moving satellites B. Geostationary satellites
 C. Natural satellites D. None of the above
100. Fuses are connected
 A. Parallel to the live wire B. Series to the live wire
 C. Either parallel or series to the live wire D. Both parallel and series

Answers

1 B	2 B	3 D	4 C	5 A	6 C	7 A	8 B
9 C	10 B	11 C	12 D	13 A	14 A	15 B	16 B
17 D	18 C	19 B	20 A	21 D	22 C	23 B	24 C
25 D	26 B	27 B	28 C	29 B	30 A	31 A	32 B
33 B	34 A	35 A	36 B	37 C	38 A	39 A	40 A
41 A	42 D	43 C	44 B	45 A	46 C	47 C	48 C
49 A	50 B	51 B	52 A	53 C	54 A	55 C	56 A
57 B	58 A	59 B	60 B	61 C	62 C	63 B	64 A
65 A	66 B	67 A	68 A	69 A	70 A	71 A	72 A
73 D	74 B	75 A	76 C	77 C	78 D	79 C	80 B
81 B	82 B	83 D	84 C	85 C	86 D	87 B	88 D
89 B	90 D	91 D	92 C	93 C	94 C	95 A	96 C
97 C	98 B	99 B	100 B				