

General Science Model Test Questions 20 With Answers [Physics - 5]

1. The smallest planet in the solar system is
(A) Venus (B) Earth (C) Uranus **(D) Pluto**
2. The device used to measure voltage, current and resistance is called
(A) An A.F. Amplifier (B) A detector
(C) A galvanometer **(D) A multimeter**
3. The radio isotope used for locating brain tumor is
(A) Phosphor (B) Cobalt **(C) Iodine** (D) Sodium
4. Electric bulbs are filled with the gas
(A) Oxygen (B) Carbon di oxide **(C) Argon** (D) Nitrogen
5. X-rays travel with the velocity of
(A) Light (B) Sound (C) Positive rays (D) Alpha rays
6. A loudspeaker converts
(A) Electrical energy into sound energy
(B) Sound energy into electrical energy
(C) Small sound into a large sound
(D) None of these
7. The transverse wave nature of light was proved by
(A) Interference (B) Diffraction **(C) Polarisation** (D) Refraction
8. Electric iron takes a long time to cool because of
(A) Greater emissivity **(B) Lesser emissivity**
(C) Less absorptive power (D) More absorptive power
9. Density of the matter is defined as
(A) Mass / Volume (B) Mass x volume
(C) Volume / mass (D) None of these
10. The resultant upthrust on a body partly immersed in liquid acts through

- (A) The centre of gravity (B) The metacentre
(C) The centre of pressure (D) None of these
11. A transverse wave travel along z – axis. The particles of the medium must move along
(A) z – axis (B) x – axis (C) y – axis (D) in x-y plane
12. Joule – Thomson cooling is
(A) Temperature dependent
(B) Temperature independent
(C) Dependent on the molecular weight of the gas
(D) Dependent on the total mass of the gas
13. The principle of action of points is used in
(A) Capacitors (B) Inductors (C) Resistors (D) Lightning arresters
14. A jet engine works under the principle of
(A) Mass (B) Energy (C) Linear momentum (D) Angular momentum
15. To find the temperature of the sun, the following law is used
(A) Charles law (B) Stefan's fourth power law of radiation
(C) Boyle's law (D) Kirchhoff's law
16. The blood circulation in muscles is due to
(A) Thin density of blood (B) Viscosity of blood
(C) Capillary action (D) Absorption
17. Radio carbon dating is used
(A) Find diseases (B) Find the age of relics
(C) Find the carbon in the atmosphere (D) None of these
18. Frequency modulation is more advantageous than amplitude modulation because
(A) There will be no distortion (B) Distortion will be maximum
(C) No internal noises produced (D) Internal noises can be filtered
19. A thin film of liquid is enclosed between two glass plates. It is difficult to separate the plates on account of

- (A) Viscosity (B) Fraction **(C) Surface tension** (D) Atmospheric pressure
20. Sound is not audible in moon. Why?
- (A) There is no plantation in moon **(B) Moon does not have atmosphere**
- (C) Moon is smaller than earth (D) None of these
21. Transmission of heat from the sun to the earth is by
- (A) Conduction (B) Convection **(C) Radiation** (D) Absorption
22. The output of a microphone is
- (A) A.C. Signal **(B) D.C. Current** (C) Sound (D) Speech
23. Breeder reactor is in
- (A) Trombay (B) Rajasthan **(C) Kalpakkam** (D) Tarapur
24. Electrons carry
- (A) A negative charge** (B) A positive charge
- (C) No charge (D) Both charge
25. An electric fan working at constant speed consumers electric energy because
- (A) Of induction** (B) Of its inertia (C) Of friction (D) None of these
26. The defect of short sight is corrected by
- (A) Concave lens** (B) Convex lens (C) Spherical lens (D) Cylindrical lens
27. Mirage is due to the phenomenon of
- (A) Reflection (B) Refraction
- (C) Total internal reflection** (D) Diffraction
28. A person can jump higher at the moon's surface than on the earth's surface. Since,
- (A) The moon's surface is rough
- (B) The temperature of the moon is less
- (C) The moon has no atmosphere
- (D) The value of acceleration due to gravity on the moon's surface is less**
29. Rising or setting sun appears reddish due to the fact that

- (A) The sun is colder at sunrise and sunset
(B) Diffraction causes red to reach the earth at sunrise and sunset
(C) Reflection of light rays takes place at sunrise and sunset
(D) Scattering of light rays takes place at sunrise and sunset
30. The nature of fuse wire is
(A) High resistance and low melting point (B) High resistance and high melting point
(C) Low resistance and high melting point (D) Low resistance and low melting point
31. Heat waves are otherwise known as
(A) Infra – red rays (B) Ultra – violet waves
(C) Solar radiation (D) X-rays
32. The time taken by the light from the nearest star α - centauri to reach the earth is
(A) 4.3 years (B) 3.1 years (C) 2.2 years (D) 1 year 2 months
33. When an object is transferred from the moon to the earth
(A) Its weight decreases and the its mass increases on the earth
(B) Its weight increases and the its mass decreases on the earth
(C) Its weight and mass remain constant on the earth
(D) Its weight increases and its mass remains constant on the earth
34. On adding salt to water, the boiling point and freezing point of water will
(A) Increase **(B) Increase and decrease respectively**
(C) Decrease (D) Decrease and increase respectively
35. Vehicle tyres are inflated properly
(A) To ensure smooth running
(B) To allow the vehicle to take more load
(C) To avoid skidding and to minimize friction
(D) To go fast and save fuel
36. Discovery of x – ray was made by

- (A) Madam Curie (B) William Bragg
(C) Michael Faraday (D) **Roentgen**
37. When a body is negatively charged by friction, it
(A) Loses electrons (B) Loses neutrons
(C) **Gains electrons** (D) Gains neutrons
38. The unit of electrical conductivity is
(A) **Mho** (B) Ohm (C) Faraday (D) Coulomb
39. Find the odd man out
(A) Hayley (B) **Hale – Bopp** (C) Huyakutake (D) Shoemaker – Levy
40. If the diameter of a blood vessel is halved, then the speed of blood flow will increase by
(A) **2** (B) 3 (C) 4 (D) 6
41. What is the value of 0° absolute in Fahrenheit scale?
(A) -40° (B) **-459.4°** (C) -100° (D) -300°
42. Analyse the statements and choose the correct answer.
Assertion (A): A particle moves along a circle.
Reason (R-I): Speed is uniform.
(R-II): Velocity is changing.
(A) R-I is correct, R-II is wrong
(B) R-I is wrong, R-II is correct
(C) R-I and R-II are wrong
(D) **Both are correct**
43. Force = mass x acceleration is got from
(A) **Newton's IInd law** (B) Faraday's law
(C) Joule's law (D) Coulomb's law
44. A sensitive balance has an object on left pan and equal weights on its right pan. Now air is blown fast below the left pan. Then the left pan will
(A) Come down (B) Go up (C) Not be disturbed (D) **Oscillate at first**

45. Neighboring two planets to our earth are
(A) **Venus and Mars** (B) Mars and Jupiter
(C) Mercury and Saturn (D) Uranus and Neptune
46. Our earth while it revolved round the sun, moves in one hour, a distance of
(A) **1 lakh km** (B) 10,000 km (C) 1,000 km (D) 1000 miles
47. The full shape of a rainbow is
(A) Arc of a circle (B) Circle (C) Ellipse (D) **Parabola**
48. When light enters a lens (glass) there is a change in
(A) Wave length (B) Frequency (C) Velocity (D) **Both A and C**
49. Atom bomb works on the principle of
(A) **Nuclear fission** (B) Nuclear fusion (C) Newton's law (D) Faraday's law
50. Hydrogen bomb involves the principle of
(A) Nuclear fission (B) **Nuclear fusion** (C) Newton's law (D) Coulomb law
51. The oil in the wick of an oil lamp rises up due to
(A) Pressure difference (B) **Capillary action**
(C) Low viscosity (D) Gravitational force
52. Name the lightest particle
(A) Newton (B) **Electron** (C) Proton (D) Radon
53. Which of the following substances has the highest specific heat?
(A) Iron (B) Copper (C) Mercury (D) **Water**
54. The surface tension of a liquid with increase of temperature
(A) Increases (B) **Decreases** (C) Remains constant (D) None of these
55. A 100 watt bulb will consume one unit of electrical energy in
(A) 1 hour (B) **10 hours** (C) One day (D) 60 hours
56. When a common salt is mixed with ice, the freezing point
(A) **Is lowered** (B) Is raised

- (C) Remains unaffected (D) First is lowered and then raised
57. Current always flows from
(A) High potential to low potential (B) Low potential to high potential
(C) Both of these (D) None of these
58. For a simple pendulum, the graph between I and T will be a
(A) Circle (B) Parabola **(C) Straight line** (D) None of these
59. A solar eclipse occurs when the
(A) Earth comes between the sun and the moon
(B) Moon is at right angle to earth
(C) Moon comes between the sun and the earth
(D) None of these
60. Recording of sound waves on tapes was first invented by
(A) Ampere (B) Bacquerel (C) Fleming **(D) Poulson**
61. A transformer is used to
(A) Increase DC voltage **(B) Increase or decrease AC voltage**
(C) Decrease DC voltage (D) Convert DC into AC
62. The surface temperature of sun is
(A) 2,000 K **(B) 6,000 K** (C) 4,000 K (D) 10,000 K
63. The unit of moment of force is
(A) Joule (B) Watt (C) Metre **(D) Newton-metre**
64. Which one of the following is a unit of energy?
(A) Watt **(B) Joule** (C) Newton (D) Newton/metre
65. The substance used as a semi-conductor is
(A) Carbon (B) Boron **(C) Germanium** (D) Oxygen
66. Orbital velocity of a satellite close to the earth is
(A) 8 km/sec (B) 10 km/sec (C) 11 km/sec (D) 12 km/sec

67. The period of revolution of a satellite close to the earth is
(A) 200 sec (B) 400 sec (C) 500 sec (D) **5000 sec**
68. The unit of co-efficient of viscosity is
(A) **$N s m^{-2}$** (B) $N m^{-2}$ (C) J (D) W
69. Osmotic pressure of dilute solutions can be compared to
(A) Gas law (B) Newton laws
(C) Laws of reflection (D) **Laws of Diffusion**
70. Radiometer is used
(A) In radios (B) **To detect Infra-red radiations**
(C) In radiology department (D) To detect radium
71. TV-waves are otherwise known as
(A) Micro waves (B) **Radio waves** (C) UV-waves (D) Cosmic waves
72. Voltmeter is
(A) **Voltage measuring Instrument** (B) Used to measure current
(C) Used to measure resistance (D) An electrolytic device
73. In nuclear reactors graphite rods are used
(A) To absorb neutrons (B) **To reduce the speed of neutrons**
(C) As fuel (D) To arrest the radiation
74. Which of the following does not fit in to the group?
(A) **Fatman** (B) Kamini (C) Purnima (D) Apsara
75. Find the odd man out
(A) Newton (B) Einstein (C) Young (D) **Little Boy**
76. The engine power of the glides plane is
(A) **0 H.P** (B) 100 H.P (C) 1000 H.P (D) 10,000 B.H.P
77. Laws of planetary motion was given by
(A) Newton (B) Galileo (C) Aristotle (D) **Kepler**

78. Which of the following devices is used for digital display in electronic calculator?
(A) Photo diodes (B) Zenes diodes **(C) LEDs** (D) None of these
79. 27°C can be expressed as
(A) 250 k (B) 200 k (C) 400 k **(D) 300 k**
80. Which one of the following is used as the moderation in Nuclear reactor?
(A) Platinum (B) Thorium (D) Uranium **(D) Graphite**
81. Ultrasonic waves have frequency
(A) Above audible range (B) Below audible range
(C) Equal to audible range (D) None of these
82. A simple microscope has
(A) Concave lens (B) Plano concave lens
(C) Convex lens (D) None of these
83. There is no atomic power station at
(A) Kalpakkam (B) Narora (C) Tarapur **(D) Trombay**
84. Kilowatt is the unit of
(A) Energy **(B) Power** (C) Charge (D) Voltage
85. The radiation with highest energy is
(A) UV-ray (B) IR-ray **(C) X-ray** (D) Visible ray
86. An electric motor is a device which
(A) Converts electrical energy into mechanical energy
(B) Converts mechanical energy into electrical energy
(C) Converts mechanical energy into potential energy
(D) None of these
87. Tesla is the unit of
(A) Magnetic intensity (B) Magnetic moment
(C) Magnetic induction (D) None of these

88. The electro magnetic radiation travel with a velocity of
(A) 3×10^0 m/s **(B) 3×10^8 n** (C) 330 m/s (D) None of these
89. Filament of an electric bulb is made of
(A) Iron **(B) Tungsten** (C) Copper (D) None of these
90. The device that is used to determine the depth of the sea is
(A) Radar (B) Sonar **(C) Fathometer** (D) Hydrometer
91. Absolute zero is the temperature of
(A) 0°C (B) 0°F (C) 372°C **(D) -273°C**
92. The discovery of electricity is attributed to
(A) Michael Faraday (B) W. Gilbert
(C) A.M. Ampere (D) G.S. Ohm
93. If the surface water lake is just going to freeze, what will be the temperature of water at the bottom?
(a) 0°C (B) More than 4°C **(C) 4°C** (D) More than 4°C
94. The flying of birds is a consequence of Newton's
(A) First law (B) Second law
(C) Third law (D) Both Second and Third law
95. Who discovered that the earth moves round the sun?
(A) Newton (B) Galileo (C) Aristotle **(D) Copernicus**
96. The value of gravitational constant is
(A) $3.766 \times 10^{-11}\text{Nm}^2$ **(B) $6.673 \times 10^{-11}\text{Nm}^2\text{kg}^{-2}$**
(C) 9.8ms^{-2} (D) 980Nm^2
97. The element that has same atomic number and atomic weight is
(A) Hydrogen (B) Oxygen (C) Nitrogen (D) Helium
98. Which one of the following is non-divisible?
(A) Nucleus (B) Photon **(C) Proton** (D) Atom
99. Gas Law was given by

(A) Boyle

(B) Ostwald

(C) Coulomb

(D) Motor

100. Alternating current is converted into direct current by

(A) Rectifier

(B) Dynamo

(C) Transformer

(D) Motor