Physics ICS Part 2 Chapter 19 Online MCQ's Test

Sr	Questions	Answers Choice
1	Which one of the following paved the way for modern physics	A. Newtonian mechanics B. Theory of relativity C. Quantum theory D. All of above
2	The concept of direction is purely	A. Relative B. Absolute C. Relative to the motion D. None of these
3	Which one of the following physical quantities change with relativistic speed?	A. Length B. Time C. Mass D. All of above
4	Question Image	A. Wien's constant B. Planck's constant C. Davison constant D. Lumber's constant
5	The uncertainty principle was given by	A. De-Broglie B. Heisenberg C. Einstein D. Max Planck
6	The photoelectric effect predicts that light is made of	A. Photons B. Neutrons C. Protons D. None of these
7	The unit of work function is	A. Electron volt B. Ampere C. Volt cell D. Hz
8	If the energy of photon is 10 eV and work function is 5 eV, then the a value of stopping potential will be	A. 50 V B. 2 V C. 5 V D. 15 V
9	In the equation if f_2 > then	
10	Einstein photoelectric equation is	D. None of these
11	The Compton effect is associated with	A. X-rays B. y-rays C. Positive rays D. ß-rays
12	The numerical value of Compton wavelength is equal to	A. 3.43 x 10⁻¹² m B. 1.43 x 10⁻¹²m C. 2.43 x 10⁻¹²m D. 0.43 x 10⁻¹²m
13	Unit of Stephen's constant is	A. W m K⁻² B. W m⁻² K⁻⁴ C. W m K⁻⁴ D. None
14	Compton shift is maximum for scattering angle of photon	A. 0^o B. 90^o C. 180^o D. 45^o
15	When platinum is heated is become dull red at:	A. 900°C B. 500°C C. 800°C D. 1100°C
16	A block body is an ideal:	A. Absorber B. Radiator C. Both a & b D. None of above

17	The value of Wien's constant:	A. 2.9x10⁻³mk B. 2.19x10⁻⁷mk C. 3.18 x10⁶ km⁻¹ D. 6.21 x 10⁻⁹m²wk³
18	The value of Stefan is constant is:	A. 4.57 x 10⁻⁸ m²k² B. 5.67 x10⁻⁸ wm⁻²k⁻⁴ C. 6.67x 10⁻¹¹ wm²k⁴ D. 7.45 x 10⁻⁹ m² wk³
19	Max planck received noble prize in:	A. 1927 B. 1932 C. 1918 D. 1914
20	The unit for Plank's constant is:	A. Js⁻¹ B. Jm C. Js D. Jm²
21	The emission of electrons from metal surface when exposed to light is called:	A. Compton effect B. Pair production C. Photoelectric effect D. None of above
22	The minimum frequency needed to emit an electron form metal surface is called:	A. Work function B. Threshold frequency C. Quanta frequency D. All of above
23	Minimum energy needed to escape an electron ofrm metal surface is called:	A. Threshold energy B. Threshold frequency C. Work function D. Work ability
24	Albert Einstein got noble prize for service in:	A. Pair production B. Annihilation of matter theory C. Compton effect D. Photoelectric effect
25	Albert Einstein got noble prize in:	A. 1926 B. 1921 C. 1918 D. 1931
26	When a very high energy modeules such as y radiation interact with matter, the phenomenon arising will be.	A. Photoelectric effect B. Compton effect C. Pair production D. Annihilation of matter
27	The minimum energy required for occurrence of pair production is:	A. 1.022eV B. 1.02keV C. 1.02Me.V D. 1.04MeV
28	The converses of annihilation of matter is:	A. Photoelectric effect B. Relativistic effect C. Pair production D. Compton effect
29	The existence of positron was discovered in:	A. 1929 B. 1928 C. 1931 D. 1933
30	The most refined form of matter is:	A. Smoke B. Light C. Ice D. Fog
31	Wave nature of particle was given by:	A. Clemensen B. Louis de Broglie C. Laster H. Germer D. Clinton S. Davisson
32	If the kinetic energy of a free electron doubles, its de Broglie wavelength changes by the factor.	A. √2 B. 1/√<span style="font-family:

		arial, sans-serif; font-size: 16px; color: rgb(34, 34, 34);">2 C. 2 D. 1/2
33	Eintein's Photoelectric equation is E_k= hf -⌀ in this equation E_1, refers to:	A. K.E of al the emited electrons B. Mean K.E of emited electrons C. Maximum K.E of emited electrons D. Minimum K.E of emited electrons
34	De-Broglie waves are associated with	A. Moving charged particles only B. Moving neutral particles only C. All moving particles D. All parties whether in motion or at rest
35	A perfect absorber must also be perfect	A. Cavity B. Sources of radiation C. Radiator D. None of these
36	Pair production occurs only when energy of photon is at least equal in:	A. 1.02keV B. 1.02 eV C. 1.02 MeV D. 1.02 GeV
37	Pair production cannto take place in vacuum because :	A. Mass in not conserved B. Momentum is not conserved C. Energy is not conserved D. Charge is not conserved
38	The position has charge which is in magnitude equal to the charge on	A. Electron B. Proton C. β particle D. All
39	We can never accurately describes all aspects of sbatomic particles simulatanously. It is correct according to:	A. Uncertainity Priciple B. De-broglie Theory C. Einstin Theory D. Photo electric effect
40	An electron miroscope emplys which to one of the following particles?	A. Electron ahve a wave nature B. Electrons can be focused by an electric field C. Electrons can be focused by a magnetic field D. All of the above
41	Using relativistic effects the location of an air craft after an hour fight can be predicated about	A. 20 m B. 50 m C. 760 m D. 780 m
42	All motions are	A. Absolute B. Uniform C. Relative D. Variable
43	Internal frame is a frame is which	A. 1st law holds B. 2nd law holds C. 3rd law holds D. Kelvin's law holds
44	In 1905, the special theory of relativity was proposed by	A. Einstein B. Bohr C. Maxwell D. De Broglie
45	If an object moves with speed of light, its mass will be.	A. Zero B. Maximum C. Minimum D. infinity
46	Earth orbital speed is.	A. 10 km/s B. 20 km/s C. 30 km/s D. 40 km/s
47	The mass of an object will be doubled at speed.	A. 2.6 x 10⁸ m/s B. 1.6 x 10⁸m/s C. 2.6 x 10⁷m/s D. 3.6 x 10⁷ m/s
48	The special theory of relativity based on.	A. One postulate B. Two postulates C. Three postulates D. Four postulates

49	1 kg mass will be equivalent to energy.	A. 9 x 10⁸ J B. 9 X 10¹² J C. 9 X 10¹⁶ J D. 9 X 10¹⁹ J
50	By modern system of NAVSTAR, the speed any where on the earth can be determined to accuracy about.	A. 20 ms-1 B. 10 ms-1 C. 2 cms-1 D. 2 ms-1
51	Platinum wire becomes yellow at a temperature of.	A. 900^oC B. 1300^oC C. 1600^oC D. 500^oC
52	When platinum is it becomes orange at	A. 500^oC B. 900^oC C. 1100^oC D. 1300^oC
53	When platinum is it becomes orange at.	A. 500^oC B. 900^oC C. 1100^oC D. 1300^oC
54	Platinum wire becomes white at a temperature of.	A. 1600^oC B. 1300^oC C. 1100^oC D. 900^oC
55	Energy of Black body radiation depends upon	A. Nature of surface of body B. Nature of material of body C. Shape and size of body D. Temperature of the body
56	When platinum wire is heated, it changes to cherry red at temperature.	A. 500^oC B. 900^oC C. 1100^oC D. 1300^oC
57	The dimensions of Plank's constant is same as that of.	A. Energy B. Power C. Acceleration D. Angular momentum
58	Joule second is the unit of.	A. Energy B. Wein's constant C. Planck's constant D. Boyle's law
59	unit of Plank's constant is same as that of.	A. Acceleration B. Angular momentum C. Linear momentum D. Entropy
60	The unit of Plank's constant 'h' is.	A. JC B. J/C C. JS D. J/S
61	The maximum kinetic energy of emitted photo electrons depends upon.	A. The intensity of incident light B. Frequency of the incident light C. Metal surface D. Both frequency of incident light and metal surface.
62	Who explained the photo electric effect.	A. Max Plank B. Einstein C. Henry D. Rutherford
63	The energy of photon is givne by	A. mv2/2 B. hf C. Va e D. mac¹
64	When the K.E. of photoelectric is zero, the frequency of incident photon is.	A. Less than B. greater than C. Equal to D. Much greater
65	The number of electrons emitted depends upon	A. Colour of target surface B. Shape of surface C. Frequency of incident light D. Intensity of incident light
66	Potassium Cathodes in photocell emit electrons for a light	A. Visible B. Infra red

66	Potassium Cathodes in photocell emit electrons for a light.	C. Ultra violet D. X rays
67	Einstein was awarded Nobel prize in physics in	A. 1905 B. 1911 C. 1918 D. 1921
68	Number of electros emitted in photo electric effect depend upon.	A. Intensity of incident light B. Frequency of incident light C. Energy of incident light D. Wavelength of incident of light
69	The stopping potential for a certain metal is 10 volts. Thus work function for the cathode is.	A. 10 J B. 1.6 X 10⁻¹⁸ J C. 1.6 X 10⁻¹⁹ J D. 1.6 X 10³⁰ J
70	The energy of the photon of wavelength 500 nm is.	A. 3.10 eV B. 2.49 eV C. 1.77 eV D. 1.52 eV
71	Light of 4.5 eV is incident on a Cesium surface and stopping potential is 0.25 eV, maximum K.E. of emitted electron is.	A. 4.5 eV B. 4.25 eV C. 4.75 eV D. 0.25 eV
72	Pair production can take place only when energy of radiation is equal and greater than 1.02 MeV, thus correct option is.	A. X rays B. Gama rays C. Heat Radiation D. Ultraviolet rays
73	Photo electrons are emitted y using visible light when the metal is.	A. sodium B. Copper C. Nicked D. Cobalt
74	Compton effect proves.	A. Wave nature of radiation B. Wave nature of particle C. Dual nature of particle D. Particle nature of radiations
75	The quantity/factor h/m_oc has the dimensions of.	A. Length B. Time C. Mass D. Energy
76	Maximum Compton shift is observed at.	A. 30^oC B. 90^oC C. 45^oC D. 180^oC
77	In Compton scatting, the value of shift is equal to Compton's wavelength, when X-rays is scattered at the angle of.	A. 90^oC B. Zero C. 120^oC D. 45^oC
78	In Compton effect the photon behaves as a.	A. Wave B. Particle C. Nucleon D. Both a and b
79	Compton's effect is associated with	A. gamma rays B. Beta rays C. X rays D. Positive rays
80	The physical quantity related to photon, that does not change in Compton scattering is.	A. Energy B. Speed C. Frequency D. Wavelength
81	Disintegration of photon on striking a nucleus into an electron and positron is known as.	A. Annihilation of matter B. Compton effect C. Pair production D. Photo electric effect
82	The photon with energy greater than 1.02 MeV can interact with matter as.	A. Photoelectric effect B. Compton effect C. Pair production D. annihilation of matter
83	The materialization of energy take place in the process of.	A. Photo electric effect B. Compton Effect C. Pair production D. Annihilationof matter

84	A positron is an anti particle of.	A. Proton B. Electron C. Neutron D. Photon
85	Antiparticle of electron is.	A. proton B. Photon C. Positron D. Neutron
86	A positron is an anti particle of.	A. Proton B. Electron C. Neutron D. Photon
87	Anti particle of electron is	A. Proton B. Photon C. Neutron D. Positron
88	The existence of positron in 1928 was predicted by	A. Anderson B. Dirac C. Chadwick D. Plank
89	In an nihilation emitted photons moves in opposite directions to conserve.	A. Mass B. Charge C. Energy D. Momentum
90	Wave nature of light appears in	A. Pair production B. Compton effect C. Photo electric D. Interference
91	Which is the most refined form of matter.	A. Smoke B. Fog C. Light D. Electron
92	The wavelength associated with the protons moving at speed of 40 m/s is.	A. 7.20 nm B. 9.02 C. 15.7 nm D. 17.3 nm
93	Photodiode is used for wave nature of.	A. Light B. Thermal radiation C. Radi waves D. Sound waves
94	The principle regarding the dual nature of light was first discovered by	A. Heisenberg B. Compton C. J.J.Thomson D. De-Broglie
95	Application of wave like nature of particle is	A. Photodiode B. Optical microscope C. Electron microscope D. Compound microscope