

F.Y.B.Sc SEM-I Physics –II Sample Questions

1) Which Isotopes used for measurement of a.m.u-----

a) oxygen b) Carbon c) Hydrogen d) Nitrogen

2) Einstein Theory gives conservation of -----equivalent Energy

a) B.E b) K.E c) P.E d) Mechanical Energy

3) the value of Impact Parameter b is zero for $\theta =$ -----degree

a) 0 b) 90 c) 180 d) 270

4) Marie Curie had discovered-----

a) Uranium b) Thorium c) Polonium d) Actinium

5) Copper can be converted into gold due to-----

a) natural radioactivity b) Artificial radioactive c) magically) none

6) The Process in which mass number is reduced by 4 and atomic number by 2 is called-----decay

a) α b) λ c) β d) γ

7) The average half life period is always inversely proportional to the-----

a) Boltzmann constant b) Wien's c) Stefan constant d) decay Constant

8) The radius of copper nucleus is to be for $r_0 = 1.4$ fermi-----

a) 4.97 b) 5.97 c) 6.97 d) 7.97

9) In Segree chart the region below the shaded region belongs to-----
element

a) light b) heavy c) radioactive d) Normal

10) According to the Rutherford-----are distributed in free space

a) electron b) Positron c) neutrons d) none of these

11) half life of sulphur is-----days

a) 67 b) 77 c) 87 d) 97

12) The half life period of daughter element is greater than parent nucleus
in-----equilibrium

a) Ideal b) Secular c) Transient d) none of these

13)-----Counter is used in Spectrometer

a) Ionization b) Proportional c) GM d) none of these

14) The energy loss rate in medium through absorber is called-----
Power

a) Stopping b) maximum c) minimum d) load

15) The Projectile combine with Target nucleus is called-----

a) compound b) Direct c) Scattering d) Stripping

16) If the value of Q is positive then this reaction is called-----

a) endothermic b) Exothermic c) nuclear d) Direct

17) In Wien's displacement law If Temp increases then wavelength-----

a) increases b) decreases c) Constant d) none of these

18) -----rays are used for detection of Explosive material

a) gamma b) X c) alpha d) Beta

19) Compton shift depends on-----

a) wavelength b) velocity c) Scattering angle d) nature of target

20) The minimum energy required for pair production is called-----

a) Threshold b) binding c) Electrostatic d) gravitational

21) Colatitude angle produced maximum voltage for-----degree

a) 45 b) 50 c) 60 d) 75

22) Bohr's second postulate based on-----

A) forces b) momentum c) Energy d) none

23) Davisson Germer Experiment shows the effect of -----light

a) Diffraction b) Interference c) reflection d) none

24) -----shift used for measurable for heavy stars

a) blue b) red c) yellow d) violet

25) Ferry's black body is polished by -----crystal

a) Iron b) cobalt c) calcite d) nickel