

11. A fast moving neutron can eject from nitrogen

A. α = rays

B. β = rays

C. γ = rays

D. electrons

Answer: Option B

12. Rutherfords planet like structure was defective and unsatisfactory because

A. Moving e- accelerate towards the nucleus

B. Continuous spectrum

C. behavior of electron remain unexplained

D. all

Answer: Option D

13. The relationship between energy of a photon of light and its frequency is given by

A. de-Broglie dual nature of matter

B. Bohrs model

C. Plancks Quantum theory

D. Rutherfords atomic model

Answer: Option C

14. Splitting of spectral lines when atom is subjected to magnetic field is called

A. Zeemans effect

B. Starks effect

C. Photo electric effect

D. Compton effect

Answer: Option A

15. The velocity of the photon

A. Is independent of wavelength

B. Depends upon source

C. Depends upon its frequency

D. Equals to the square of amplitude

Answer: Option A

16. Which one of the following explain the shape of orbitals

- [A.](#) Principal of quantum number [B.](#) Azimuthal quantum number
[C.](#) Magnetic quantum number [D.](#) Spin quantum number

Answer: Option B

17. Atom cannot be divided into simple units theorized by

- [A.](#) Rutherford [B.](#) Dalton
[C.](#) Bohr [D.](#) Schrodinger

Answer: Option B

18. Pressure in gas discharge tube was kept

- [A.](#) 10 torr [B.](#) 1 torr
[C.](#) 0.1 torr [D.](#) 0.01 torr

Answer: Option D

19. The number of fundamental particles in an atom of the lightest isotope carbon are

- [A.](#) 6 [B.](#) 12
[C.](#) 18 [D.](#) 20

Answer: Option C

20. Angle of deflection was studied by

- [A.](#) Hitorff [B.](#) Stoney
[C.](#) William Crookes [D.](#) J.Perrin

Answer: Option D