

## PPSC Physics Full Book

Sr	Questions	Answers Choice
1	Why FET amplifiers are called voltage controlled devices.	A. Input is a current signal B. Output is a current signal C. Input is a voltage signal D. Output is a voltage signal
2	Which of the following configuration of BJTs gives both voltage gain and current gain.	A. common Base B. Common Emitter C. Common collector D. All of the above
3	An emitter follower has	A. High input impedance and high output impedance B. High input impedance and low output impedance C. Low input impedance and low output impedance D. Low input impedance and high output impedance
4	Lissajou's figures are used in a Cathode Ray Oscilloscope while measuring.	A. Time period B. Frequency C. Voltage gain D. phase angle
5	In a resistor, when base width decreases with increasing $V_{bc}$ , this phenomenon is called.	A. Tunneling B. Thermal runaway C. Pinch off D. Early effect
6	How many terminals does a BJT have.	A. 1 B. 2 C. 3 D. 4
7	The average energy released per fission of U is about	A. 200 eV B. 2 keV C. 2 MeV D. 200 MeV
8	Which of the following has greatest binding energy per nucleon.	A. Normal hydrogen B. Deuterium C. Tritium D. Helium-4
9	One particle having zero mass and zero charge is.	A. Positron B. Electron C. Neutrino D. Neutron
10	A deuteron is	A. A type of proton B. A proton neutron bounded to gather. C. A type of beta particle D. A type of neutron
11	Deuterium is	A. A transuranic element B. A type of cosmic particle C. An isotope of hydrogen D. An isotope of helium
12	The half life of a radioactive substance depend on.	A. Pressure B. Temperature C. Amount of substance D. No external influences
13	The loss of mass in a.m.u in a nuclear change can be calculated from energy involved in MeV by	A. Dividing by 931 B. Multiplying by 931 C. Diving by 391 D. Multiplying by 391
14	Nuclear force as compared to electrostatic force is.	A. Weaker and long range B. Weaker and short range C. Stronger and longer range D. Stronger and short range

15	A slow neutron can cause fission in	A. Uranium -238 B. Uranium-235 C. Hydrogen-1 D. Thorium -232
16	The critical mass of fissionable uranium -235 can be reduced by	A. Adding impurities to it B. Heating the material C. surrounding it by neutron reflecting material D. Surrounding it by neutron absorbing material
17	When a positron is emitted it causes.	A. Mass number to increase by one B. mass number to decrease by one C. Atomic number to decrease by one D. Atomic number to increase by one
18	Neutrino is a particle with	A. Charge less property and has no spin B. Charge less property and has spin C. Charge less like electron and has spin D. The same property as neutron
19	Tracer techniques make use of.	A. Neutron scattering B. Electron beams C. LASER D. Radioactive isotopes
20	The critical mass of a fission reaction is.	A. The mass to start a nuclear fission reaction B. The minimum mass for chain reaction C. The size of the reactor core D. The size of fuel plus the size of moderator
21	Which of the following is formed by decay of a free neutron.	A. A number of electrons B. Two protons C. A proton and an electron D. An alpha particle
22	Which of the following particles leave no trail in a cloud chamber.	A. Electrons B. Protons C. Alpha particles D. Neutrons
23	Which of the following is not a mode of radioactive decay.	A. Positron emission B. Electron capture C. Fusion reaction D. A decay
24	Which of the following can be used as an arrester in a nuclear reactor.	A. Graphite B. heavy water C. Uranium D. Cadmium
25	Which of the following is believed to be carrier of nuclear forces.	A. Lepton B. Meson C. Baryon D. Baryon
26	In fission reaction, heavy water is used as a	A. Coolant B. Moderator C. Heat exchanger D. Controller of reaction rate
27	Which of the following is the most massive particle.	A. Deuteron B. Alpha particle C. Neutron D. positron
28	In a nuclear reactor chain reaction is controlled by introducing.	A. Iron rods B. Cadmium rods C. Graphite rods D. Platinum rods
29	The process by which nuclei emit $\alpha$ , $\beta$ and gamma rays in order to attain stability is called.	A. Radioactive disintegration B. Radio activity C. $\beta$ decay D. Radioactive transmutation
30	Sub atomic particles which does not experience strong nuclear force are.	A. hadrons B. Photons C. Leptons D. Nucleons

