

PPSC Physics Topic 7 Modern Physics

| Sr | Questions | Answers Choice |
|----|--|--|
| 1 | In n-p-n transistor the current flows in the direction from | A. Emitter to base B. emitter to collector C. Base to emitter D. Base to collector |
| 2 | A transistor can be used as | A. Oscillator B. Amplifier C. Switch D. Both a and c |
| 3 | The value of principal quantum number for an ionized atom is. | A. 13.6 eV B. 27.2 eV C. 54.4 eV D. 100 eV |
| 4 | The exitance of more than one distinct state with the same energy is called. | A. Exigency B. Degeneracy C. Normally D. Emergency |
| 5 | Most widely used types of gas LASER are | A. Neon B. Argon ion C. Helium D. All of these |
| 6 | Base current of a transistor is 1 mA and collector current is 99 mA What is emitter current. | A. 1 mA B. 100 mA C. 98 mA D. 110 mA |
| 7 | When a platinum wire is heated of 1600 °C, it becomes | A. orange B. Cherry red C. Dull red D. White |
| 8 | Which uranium isotope having the atomic weights as given below is easily fissionable. | A. 234 B. 235 C. 236 D. 238 |
| 9 | 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 |
| 10 | A logic circuit whose output signal is '1' when inputs are different is. | A. NAND gate B. NOR gate C. Exclusive OR gate D. Exclusive NOR gate |
| 11 | Which one of the following is a convenient energy unit to express the energy of sub atomic particles. | A. Joule B. electron volt C. Watt D. Curie |
| 12 | In potential for the material of cathode pure metals are rarely used because of their | A. Low reflecting power B. High reflecting power C. Low resolving power D. High resolving power |
| 13 | Which one the following is not a component of a Bipolar junction Transistor | A. Base B. Emitter C. Collector D. Grid |
| 14 | If the base emitter junction is forward biased and base collector junction is reverse biased the BJT is in. | A. cut of mode B. Amplification mode C. Saturation mode D. Inversion mode |
| 15 | Which of the following describes that the time interval between two events may be different in different of references | A. Simultaneously B. Time dilation C. Length contraction D. Mass variation |

| | | |
|----|--|--|
| 16 | 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 |
| 17 | Which one of the following is a neutron absorber | A. Pb B. Cd C. Cu D. Ag |
| 18 | The SI unit of radioactivity is. | A. Becquerl B. Curie C. Joule D. rutherford |
| 19 | Which of the following radiations can penetrate 20 cm thick steel. | A. Alpha particles B. Beta particles C. Gama particles D. Neutrons |
| 20 | X-rays travel with | A. The speed of light B. The speed of sound C. The speed of 3,000 m s ⁻¹ D. The speed of 3,500 m s ⁻¹ |