

Gondwana University, Gadchiroli.

Practical exam sem-V (Winter-2020)

Shivaji Mahavidyalaya, Gadchiroli.

Subject: Physics

Time: 6 hrs

Marks: 30

Date: / / 2021

Name of Student:

- 1) A crystal diode has
 - a) one pn junction
 - b) two pn junctions
 - c) Three pn junctions
 - d) none of the above.
- 2) A crystal diode is used as.....
 - a) an amplifies
 - b) an oscillator
 - c) a Sertifiez
 - d) a voltage regulator
- 3) A Zenez diode is.....device.
 - a) a non-linear
 - b) a linear
 - c) an amplifying
 - d) none of the above.
- 4) Photoelectric effect was explained by.....
 - (a) Einstein
 - b) faznday
 - c) plank
 - d) Hertz.
- 5) The planck's constant h has the dimensions....
 - a) ML^2T^{-1}
 - b) MLT^{-1}
 - c) MLT^{-2}
 - d) MLT .
- 6) The ionization potential of mercury is approximately,
 - a) 5.4 V
 - b) 8.4 V
 - c) 10.4 V
 - d) 16.4 V

7) Hydrogen atom in ground state is excited by a monochromatic radiation of $\lambda = 975 \text{ \AA}$. The number of spectral lines in the Resulting spectrum emitted will be:

- a) 3 b) 2 c) 6 d) 10.

8) E/m ratio of cathode rays was determined by:.....

- a) Faraday b) Rutherford c) Cavendish d) J.J. Thomson

9) Cathode ray consists of

- a) electron b) Proton c) Neutron d) none of these

10) X-rays are produced when strikes on:.....

- a) Non-metal b) metal c) material d) none of these

10) Atomic packing factor is

- a) Distance between two adjacent atoms
b) projected area fraction of atoms in cell
c) vol. fraction of atoms in cell.
d) none.

11) coordination no in simple cubic crystal Structure.

- a) 1 b) 2 c) 3 d) 4

12) The atomic diameter of an BCC crystal is

- a) a b) $a/2$ c) $a/(4/\sqrt{3})$ d) none of these

13) coordination number for closest packed crystal structure

- a) 16 b) 12 c) 8 d) 4

14) magnetic permeability has units as

- a) Wb/m^2 b) Wb/A.m c) A/m d) Tesla /m^2

15) magnetic field strength's units are....

- a) Wb/m^2 b) Wb/A.m c) A/m d) Tesla /m^2