

Time: One Hour

Max. Marks: 25

Instructions

Solve any 25 questions from Q.1 to Q.30

- 1 Biomass is considered as ..... source of energy.  
 (A)Renewable (B)Non renewable (C)Conventional (D)None of these
- 2 The ocean level difference caused due to tides contains large amount of .....  
 (A)Kinetic energy (B)Nuclear energy (C)Solar energy (D)Potential energy
- 3 Conventional energy sources .....  
 (A)Are renewable (B)Are non renewable (C)Are environment friendly (D)Never finish up
- 4 ..... is primarily responsible for generation of biomass energy.  
 (A)Coal (B)Photosynthesis (C)fossils (D)Air
- 5 The sun produces enormous amount of heat and light through sustained .....  
 (A)Nuclear fusion reactions (B)Nuclear fission reactions (C)Both of these (D)Other than these
- 6 The disadvantage of biomass energy is ....  
 (A)Labor intensive (B)Land intensive (C)Low energy density (D)All of these
- 7 Both power and manure is provided by .....  
 (A)Hydraulic plants (B)Nuclear plant (C)Thermal plant (D)Biogas plant
- 8 The power available in the winds flowing over the earth surface is estimated to be .....  
 (A)1.6 X 10<sup>-7</sup> MW (B)1.6 X 10<sup>7</sup> MW (C)0.16 X 10<sup>7</sup> MW (D)16 X 10<sup>7</sup> MW
- 9 An electrolyte used in lead acid battery is .....  
 (A)Hard water (B)Dilute sulphuric acid (C)Acetic acid (D)Soft water
- 10 A module in a solar panel refers to .....  
 (A)Series arrangement of solar cells (B)Parallel arrangement of solar cells (C)Series and parallel arrangement of solar cells (D)None of the above.
- 11 The output power of solar cell is product of .....  
 (A)Current and charge (B)Current and voltage (C)Current and resistance (D)None of these
- 12 The potential barrier formed in a PN junction exerts a ..... force on mobile charge carriers.  
 (A)Attractive (B)Repelling (C)Random force (D)No
- 13 One of the major disadvantage of solar cell is.....  
 (A)Non reliability (B)Non durability (C)Non compatibility (D)Low conversion efficiency
- 14 Which of the following is an intrinsic semiconductor?  
 (A)Pure Si (B)N – type Si (C)P – type Si (D)None of these
- 15 Which of the following material is electrically neutral?  
 (A)All of the following (B)Pure Si (C)N – type Si (D)P – type si
- 16 A battery converts ..... energy into electrical energy.  
 (A)Chemical (B)Thermal (C)Heat (D)Sound
- 17 In optical fiber, the concept of Numerical aperture is applicable in describing the ability of.....  
 (A)Light Scattering (B)Light Dispersion (C)Light Collection (D)Light Polarization
- 18 The cladding material for HPSIR optical fiber is .....  
 (A)polymer (B)doped silica (C)plastic (D)glass
- 19 Source of light for optical fiber is .....  
 (A)LED (B)PIN Diode (C)Photodiode (D)None of these
- 20 Optical fibers are most useful in.....

## Examination October 2020

- (A) Communication systems    (B) Illumination systems    (C) Decoration systems    (D) None of these
- 21 Multimode optical fibers have the core diameter ..... that of single mode optical fibers
- (A) Larger than    (B) Smaller than    (C) Equal to    (D) None of these
- 22 Optical fibers work on the principle of ..... of light.
- (A) Total internal reflection    (B) Refraction    (C) Scattering    (D) Interference
- 23 Guided transmission of light takes place in.....
- (A) Coaxial cable    (B) Optical fiber    (C) PVC pipes    (D) None of these
- 24 In optical fiber fabrication ECVD stands for.....
- (A) Extreme chemical vapor deposition    (B) External chemical vapor dilution    (C) Extreme chemical vapor dilution    (D) External chemical vapor deposition
- 25 Which of the following is not a fabrication technique of optical fiber?
- (A) Thermal CVD    (B) Plasma CVD    (C) External CVD    (D) Internal CVD
- 26 Rate of chemical vapor deposition in external CVD technique is .....
- (A) 1 – 2 kg/min    (B) 1 – 2 gm/min    (C) 1– 2 gm/sec    (D) 1 – 2 gm/hour
- 27 This fiber is used for getting the maximum amount of power from a poor quality laser
- (A) Halide fiber    (B) Tapered optical fiber    (C) Chalcogenide fiber    (D) HPSIR
- 28 What type of optical fibers can be drawn from solid form?
- (A) Multimode SI    (B) Multimode GI    (C) Single mode    (D) All of these
- 29 As per the norms OFC should be laid at a depth of .....
- (A) 1 meter    (B) 1 foot    (C) 1.5 meter    (D) 1.5 feet
- 30 Outer jacket of OFC is generally made up of .....
- (A) Copper    (B) PVC    (C) Steel    (D) Rubber