## BITT POLYTECHNIC, RANCHI

#### DEPARTMENT OF ELECTRICAL ENGG.

# Power System-I

# SEM-4<sup>TH</sup> (EE)

Objective type question.

## 1-Which of the following is (are) released on fossil fuels?

- (A) Nitrogen
- (B) Carbon dioxide
- (C) Water vapor
- (D) All of the above

### 2-Dynamo converts the

- (A) Mechanical energy into electrical energy
- (B) Chemical energy into electrical energy
- (C) Heat energy into electrical energy
- (D) None of the above

# 3-Which is the major constituent of Bio-gas?

- (A) Carbon dioxide
- (B) Methane
- (C) Hydrogen
- (D) Hydrogen sulphide

#### 4-Which country is called the country of 'winds'?

- (A) Sweden
- (B) Norway
- (C) Denmark
- (D) France

## 5-Following is (are) the use(s) of Wind energy

- (A) In water lifting pump
- (B) To generate electricity
- (C) both (A) and (B)
- (D) None of the above

6-In wind mill, the wind speed should be higher than \_\_\_\_ to maintain the required speed of the turbine.

- (A) 5 km/hr
- (B) 8 km/hr
- (C) 12 km/hr
- (D) 15 km/hr

# 7-Following material is used to make solar cell

- (A) Germanium
- (B) Silicon
- (C) Indium
- (D) All of the above

## 8-Following is responsible for tidal energy

- (A) difference in sea level
- (B) winds blowing from sea
- (C) temperature difference of sea and land
- (D) none of the above

### 09-Hydrogen bomb is based on

- (A) Nuclear Fission reaction
- (B) Nuclear Fusion reaction
- (C) both (A) and (B)
- (D) None of the above

## 10-Which of the following energy source creates more pollution

- (A) CNG
- (B) Fossil fuel
- (C) Solar cells
- (D) Geothermal energy

### **Short Type Question and Answer.**

- 1. Why is electrical energy preferred over other forms of energy?
- 2. What is steam power station?
- 3. Discuss the advantages and disadvantages of steam power station.
- 4. Write the name of all thermal power plants in Jharkhand with their capacity.
- 5. What is boiler? Write types of boiler.
- 6. What is condenser?
- 7. What is superheater? Write the function of superheater.
- 8. What is steam turbine? Write types of turbine.
- 9. Write a short note on the generation of electrical energy.
- 10. What is a power generating station?

# **Long type Question and Answer**

- 11. Discuss the different sources of energy available in nature.
- 12. What factors are taken into account while selecting the site for a steam power station?
- 13. Explain the important component of steam power station.
- 14. Discuss the factors for the choice of site for a nuclear power plant.
- 15. Draw the schematic diagram of a modern steam power station and explain its operation

# **Answers of Objective Questions**

1-(D), 2-(A), 3-(B), 4-(C), 5-(C), 6-(D), 7-(B), 8-(A), 9-(B), 10-(B).