

# Malaviya National Institute of Technology Jaipur

## Centre for Energy and Environment

PhD Admission 2021-22 (Odd Semester)

### Model questions

**Q1. The principle of zero energy building to..... and on fossil fuels so that net energy consumption will be zero.**

- a) increase carbon emission and reduce dependence
- b) reduce carbon emission and reduce dependence
- c) reduce carbon emission and increase dependence
- d) a, b option is wrong

**Q2. 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.

**Q3. Production of bio-ethanol is through fermentation of \_\_\_\_\_ and starch components**

- (a) alcohol
- (b) sugar
- (c) milk
- (d) acid

**Q4. The house heats up during summer due to heating up of the walls and roof. We can reduce this heating process economically by?**

- 1) Using light coloured walls and painting the roof with reflecting paints
- 2) Covering the roof with insulating materials and planting trees to provide shades
- 3) Using more electricity energy to cool the house
- 4) Spraying cool water

**Which of the above statements are correct?**

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

**Q5. Smart Grid Technology comprises the following:**

- a. AMI, PLM, OMS, Renewable Integration, Microgrid
- b. DR/DSM, Distribution Automation, Energy Efficient Systems
- c. All of the above
- d. None of the above