DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE Department of Chemical Engineering

2nd Semester B.Tech in Electrical/Electronics & Telecom./Computer Engineering and Information Technology

Subject: Energy and Environment Engineering

Time: 3 hrs.

Max. Marks: 60

INSTRUCTIONS TO THE STUDENTS

- 1. Each question carries 12 Marks.
- 2. Attempt all the questions (there may be internal choice).
- 3. Illustrate your answers with neat sketches, diagrams etc. where ever necessary.
- 4. Necessary data is given in the respective questions. If such data is not given, it means that the knowledge of that data is a part of the examination.
- 5. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly.

Q1. Explain nuclear power plant using following points:

12M

- Schematic arrangement
- working
- Disadvantages
- Selection of sites

Q2. Attempt any two of the following:

42M

- A. Describe in brief: sun energy as a source of renewable power generation
- B. B. Explain OTEC with Schematic arrangement, Working.
- C. C. Explain production of Biogas from biomass its diagram, working, advantages and disadvantages
- Q3. What are benefits of energy conservation?

12M

OR

- Q3.Explain methods and techniques of energy conservation in <u>any two</u> of the following: (2x6=12M)
 - 1. Compressor
 - 2. Electric furnace
 - 3. Fans and blower
 - 4. Pumps

Q4. What is water pollution? Explain its sources, effects and control measure?

12M

Q5. Explain noise pollution, its sources, effects and control measures?

12M

Q5. Write notes on any two of the following:

12M

- Environment protection act.
- Rainwater harvesting.
- Watershed management.
- Disaster management.

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