| University Institute of Engineering & Technology | | | | |
|--|---|--------------------|--|--|
| (Recognised Under Section 2(f) and 12B of UGC) | | | | |
| Kurukshetra University, Kurukshetra | | | | |
| THEORY EXAMINATION – January 2021 | | TIME – 3 Hrs 15Min | | |
| B.TECH - CSE | SEMESTER – V | M.M 56 | | |
| PAPER- MC-904 | SUBJECT – Energy Resources & Management | | | |

INSTRUCTIONS TO BE FOLLOWED

- Allotted time for examination is 3 hours 15 minutes that includes time for downloading the question paper, writing answers, scanning of answer sheets and E-mailing the PDF files to the designated Email ID.
- For CSE-A Regular Students, the Email ID is:- btech5thcsea@kuk.ac.in
- For CSE-B Regular Students, the Email ID is:- btech5thcseb@kuk.ac.in
- The candidates will be required to attempt 75% of the question paper (maximum) by choosing to their any best questions accumulating 56 marks.
- The PDF files should be saved as Roll No. and Subject Code. Proper attention should be given while sending the email and in the subject line, the Roll Number and Subject Code should be mentioned.
- Maximum Page Limit should be 20 (Twenty) for attempting the question paper on A4 sheets which could be downloaded and printed from the sample sheets given in the Kurukshetra University Examination guidelines.
- Over-attemptation should be avoided.
- Handwriting should be neat and clean and diagrams should be clear and contrasted.
- The candidate should not write their Mobile No. otherwise Unfair Means Case will be made.
- While attempting the paper, the candidate will use blue/black pen only.
- Before attempting the paper, the candidate will ensure that he/she has downloaded the correct question paper. No complaint for attempting wrong question paper by the candidate will be entertained.
- Candidate must ensure that he/she has put his/her signature on each page of the answer sheet used by him/her. Answer sheet without the signature of the candidate will not be evaluated.

Q. No. -1 Answer the following questions.

Differentiate between conventional and non-conventional energy sources.
What are the various factors to be considered for the selection of power plant?
Write short note on bioenergy plants.
How energy can play a role in economic development?
Explain general principle of energy management.

PART-B

| 2 | Discuss the various types of energy in brief. | 5 |
|---|---|---|
| 3 | Draw and explain the layout of thermal power plant. | 5 |
| 4 | Explain the working of tidal power plants. | 5 |
| 5 | Write down the need and types of energy audit. | 5 |

PART-C

| 6 | Describe the various types of energy conversion processes in detail. | 10 |
|----|---|----|
| 7 | Our conventional energy sources are declining. How non-conventional energy sources can meet the load | |
| | demand. Justify your answer. | |
| 8 | Illustrate the general layout of hydro power plant and explain it with working and importance of each part. | 10 |
| 9 | A. Distinguish various advantages and disadvantages of nuclear power plant. | 5 |
| | B. Explain the working of diesel power plant in brief. | 5 |
| 10 | Explain the various methods to utilize the solar energy. Draw and explain PV system in detail. | 10 |
| 11 | What do you mean by wind power? Discuss its conversion in electrical energy with a brief overview. | 10 |
| 12 | As per your branch prospective, what are the modern things that are incorporated in electricity sector and | 10 |
| | how they are effecting overall processing of power system. | |
| 13 | Write short note on 1) power system layout 2) future energy strategy. | 10 |

5x3=15