



Name:

Enrolment No:

**UPES**

**End Semester Examination, December 2023**

**Course: Energy Sector Structure & Functioning**

**Program: BBA OGM**

**Course Code: OGET 1001**

**Semester: I**

**Time : 03 hrs.**

**Max. Marks: 100**

**Instructions: All questions are mandatory**

**Read the questions carefully before trying to answer.**

**SECTION-A**  
**10Qx2M=20 Marks**

|    |  |   |     |
|----|--|---|-----|
| Q1 | Wind can be used to:<br>1. Generate Electricity<br>2. Operate flour mills<br>3. Draw underground water<br>4. All of the above              | 2 | CO1 |
| Q2 | The electricity produced by the force of water is known as<br>1. Thermal<br>2. Nuclear<br>3. Photo<br>4. Hydro                             | 2 | CO1 |
| Q3 | Charcoal is obtained from<br>1. Coal<br>2. Petroleum<br>3. Rubber<br>4. Wood   | 2 | CO1 |
| Q4 | What are greenhouses gases responsible for<br>1. Global warming<br>2. Depletion of Ozone Layer<br>3. Climate change<br>4. All of the above | 2 | CO1 |
| Q5 | Burning of which fossil fuels is considered to be cleanest<br>1. Natural gas<br>2. Crude oil<br>3. Coal<br>4. None of the above            | 2 | CO1 |
| Q6 | The ultimate source of energy on the earth is<br>1. Electricity<br>2. Water<br>3. Sun<br>4. Plants   | 2 | CO1 |

|   |  |   |     |
|---|--|---|-----|
| Q7  | The property of petroleum that defines its resistance to flow at given operating conditions is known as<br>1. Viscosity<br>2. Gravity<br>3. Miscibility<br>4. Pour point   | 2 | CO1 |
| Q8  | India is the third-largest producer and consumer of electricity in the world with a generation capacity of<br>1. 415.00 GW<br>2. 420.50 GW<br>3. 423.35 GW<br>4. 425.50 GW | 2 | CO1 |
| Q9  | The share of thermal power in total installed capacity is<br>1. 56.25%<br>2. 30.91%<br>3. 11.06%<br>4. 1.76%   | 2 | CO1 |
| Q10   | Distillation is the separation of crude oil into groups of hydrocarbon compounds based on molecular size and boiling point range<br>1. True<br>2. False                    | 2 | CO1 |
| <b>SECTION-B</b><br><b>4Qx5M= 20 Marks</b>  |  |   |     |
| Q1  | Explain the concept of EEE.  | 5 | CO2 |
| Q2  | What are the benefits of using nuclear energy?   | 5 | CO2 |
| Q3  | Write the steps involved in E&P process.   | 5 | CO2 |
| Q4  | What is the status of the solar energy market in India, and what factors contribute to its growth?   | 5 | CO3 |
| <b>Section C</b><br><b>3Q*10M= 30 Marks</b> |  |   |     |
| Q1  | Describe the strategies adopted by Indian government to promote power market.  |   | CO3 |
| Q2  | How is petroleum formed, and what are the key geological processes involved in its creation?   |   | CO4 |
| Q3  | How is coal classified, and what are the main types of coal based on their carbon content and energy value?  |   | CO3 |
| <b>Section D</b><br><b>2Q*15M= 30 Marks</b> |  |   |     |
| Q1  | Explain the concept of energy transition. How quest for energy transition can benefit India in long run?   |   | CO3 |

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| Q2 | What is the current energy mix in India, and how has it evolved over the past decade? |  | <b>CO4</b> |
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