TEMPLATE FOR ASSESSMENTS

1. **Read Guidelines – in case of any doubt check with your mentor.**
2. **The final submission will have to be in soft copy in MS word as per template shared below.**
3. **Use Calibri font size 9**
4. **Keep Questions short and crisp. Word count should not exceed 20 words for questions and 8 words for options.**
5. **In the last row – mention the correct option as a) or b)**
6. **The Blooms level has been fixed – so please design question accordingly.**
7. **The rows heights have been fixed, so that the table size is not changed. If you have any problem, use this link to learn how to fix it** [**YouTube**](https://www.youtube.com/watch?v=sP3fDIUO_YY)

<Program Code: **CE**>:

<Course Code: **22447**>:

<Course Name: **Environmental Studies**>:

<Topic Name: **Energy Resources: Unit-2**>:

<Course Experts :**Ms. Swati Ingale and Mr. N U Sulbhewar**>

**Formative assessments: 6 Questions**

* 1 setof 3 questions each at two breaks in the video/ ppt –
* 1 set of 5 MCQ - End of LO quiz in LMS (not in video)

**Practice Worksheets: 10 to 15 Questions**

* Mix of MCQ questions and long answer/ problems requiring pen and paper calculations.
* Minimum 1 Set

**Summative Assessments:**

* 1 set of 10 MCQ questions at end of CO in LMS

<Program Code: **CE**>:<Course Code: **22447**>: <Course Name: **Environmental Studies**>:

<Topic Name: **Energy Resources: Unit-2**>:<**UO2a**>: <Assessments>: <Formative>

<**Ms. Swati Ingale and Mr. N U Sulbhewar**>

**Assessment Type: Formative Assessments: Embedded questions in video**

**(First break after Slide 10)**

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| \_\_\_\_\_% of the Earth's surface is covered with water. | When trees are cut, amount of oxygen | Write example of Non-metallic minerals  Identify the uses of water |
| Recall/ Remembering | Understanding | Application |
| a)20 | a)decreases | a)domestic |
| b)80 | b)increases | b)industrial |
| c)71 | c)both a) and b) | c)agricultural |
| d)100 | d)remains same | 1. All the above |
| Ans: <c> | Ans: <a> | Ans: <d> |

**(Second break after Slide 15)**

| Set 2: Question No 1 | Set 2: Question No 2 | Set 2: Question No 3 |
| --- | --- | --- |
| Land covers up only \_\_\_\_\_% of the earth’s surface | Which metals are used for making Jewellery? | Write example of Non-metallic minerals |
| Recall/ Remembering | Understanding | Application |
| a)10 | a)Sodium, Potassium | a)Lime |
| b)29 | b)Zinc, Tungsten | b)Haematite |
| c)40 | c)Iron, Copper, Aluminium | c)Cuprite |
| d)30 | d)Gold, silver, platinum | 1. Bauxite |
| Ans: <b> | Ans: <d> | Ans: <a> |

* 1 set of 5 MCQ - End of LO quiz in LMS (not in video)UO-2a

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| Energy resources derived from natural organic materials are called \_\_\_\_\_\_\_\_. | Forest is responsible for\_\_\_\_\_\_\_\_\_ | Identify the Metallic minerals from following- |
| Recall/ Remembering | Understanding | Application |
| a) geothermal energy sources | a) water shedprotection | a) Haematite |
| b) fossil fuels | b) land erosion control | b) Bauxite |
| c)biomass | c) providing economic and environmental benefits | c) Both a and b |
| d)All of the above | d)All of the above | d) none |
| Ans: <b> | Ans: <d> | Ans: <c> |

| Set 1: Question No 4 | Set 1: Question No 5 |
| --- | --- |
| \_\_\_\_\_\_\_\_\_area is a land used as a permanent residence, such as a house, apartment, nursing home, schooletc | Conservation of soil and water is which type of function of forest resources? |
| Understanding | Application |
| a) industrial | a)Productive |
| b) agricultural | b)Protective |
| c) residential | c)Regulative |
| d) Landfill | d) none |
| Ans: <c > | Ans: <b> |

<Program Code: **CE**>:<Course Code: **22447**>: <Course Name: **Environmental Studies**>:

<Topic Name: **Energy Resources: Unit-2**>:<**UO2b**>: <Assessments>: <Formative>

<**Ms. Swati Ingale and Mr. N U Sulbhewar**>

**Assessment Type: Formative Assessments: Embedded questions in video**

**(First break after Slide 7)**

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| Which energy is converted into electrical energy by a solar cell ? | Renewable source of energy is\_\_\_\_\_ | What unit of solar energy does the earth intercept? |
| Recall/ Remembering | Understanding | Application |
| a) Chemical Energy | a) coal | a)2,200 millionth |
| b) Nuclear Energy | b) petroleum | b)2,000 millionth |
| c)Solar energy | c)plants | c)2,100 millionth |
| d) Magnetic Energy | d) uranium | d)2,300 millionth |
| Ans: <c> | Ans: <c > | Ans: <b> |

**(Second break after Slide 16)**

| Set 2: Question No 1 | Set 2: Question No 2 | Set 2: Question No 3 |
| --- | --- | --- |
| What is LPG? | The resources which can be used again and again after passing through some processes are known as\_\_\_\_  ---- | Which of the following is an example of cyclic resource? |
| Recall/ Remembering | Understanding | Application |
| 1. liquefied petroleum gas | 1. Renewable resources | 1. water |
| 1. Loaded petroleum gas | 1. Non-renewable resources | b) oil |
| 1. liquid petroleum gas | 1. Cyclic resources | c) coal |
| 1. None of the above | 1. All of the above | d) none of the above |
| Ans: <a > | Ans: <c> | Ans: <a > |

* 1 set of 5 MCQ - End of LO quiz in LMS (not in video) UO-2b

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| The energy sources are continuously replenished at a constant rate are called as\_\_\_\_\_\_\_\_\_ | Tidal energy is used to rotate turbines and generate\_\_\_\_\_\_ | \_\_\_\_\_\_produce a number of benefits, such as flood control, irrigation, and water supply. |
| Recall/ Remembering | Understanding | Application |
| a) New Resources | a) Fuel | a) Thermal power |
| b)Renewable Resources | b) Water | b) solar energy |
| c)Renewable Resources | c) Salt | c)Hydropower |
| d) old Resources | d) electricity | d) wind power |
| Ans: <b> | Ans: <d> | Ans: <c> |

| Set 1: Question No 4 | Set 1: Question No 5 |
| --- | --- |
| \_\_\_\_\_\_\_\_\_\_is the heat of interior of the earth present at volcanic regions, geysers or hot springs. | \_\_\_\_\_\_is used as a household and industrial fuel |
| Understanding | Application |
| a)Geothermal energy | a) LPG |
| b)solar energy | b) CNG |
| c)Hydro energy | c)biogas |
| d) wind energy | d)none of the above |
| Ans: <a > | Ans: <a> |

<Program Code: **CE**>:<Course Code: **22447**>: <Course Name: **Environmental Studies**>:

<Topic Name: **Energy Resources: Unit-2**>:<**UO 2c and 2f**>: <Assessments>: <Formative>

<**Ms. Swati Ingale and Mr. N U Sulbhewar**>

**Assessment Type: Formative Assessments: Embedded questions in video**

**(First break after Slide 8)**

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| Resource depletion occurs when the renewable and non renewable resources became \_\_\_\_ because of their faster consumption | The term resource depletion is commonly associated with....... | The causes of depletion of natural resources....... |
| Recall/ Remembering | Understanding | Application |
| a)scare | 1. a)water uses | a)over population |
| b)abundant | b)fossil fuel consumption | b)over consumption |
| c) both a) and b) | c)trees and fishing | c)wastage |
| d)All of the above | d) All of the above | d) All of the above |
| Ans: <a> | Ans: <d> | Ans: <d> |

**(Second break after Slide 14)**

| Set 2: Question No 1 | Set 2: Question No 2 | Set 2: Question No 3 |
| --- | --- | --- |
| When **'need'** turns to **'greed'** it starts **\_\_\_\_\_\_\_\_\_\_** | One of the Manmade Causes of Landslides s\_\_\_\_\_\_\_\_\_ | What will be the impact of Extinction of species? |
| Recall/ Remembering | Understanding | Application |
| a)overexploitation | 1. a)Rain | a)Cyclones |
| b) conservation | b)Unsafe Mining Activities | b)Earthquakes |
| c)Both a and b | c)Cyclones | c)food web changes |
| d)None of the above | d)Earthquakes | d) Rain |
| Ans: <a> | Ans: <b> | Ans: <c> |

* 1 set of 5 MCQ - End of LO quiz in LMS (not in video) UO-2c, 2f

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| \_\_\_\_\_\_\_\_\_\_\_is major driving force of all of our resource problems | What happens when natural resources become scarce because they are consumed fast? | The wrong Agricultural practices contaminates the land resources and make it unsuitable for\_\_\_\_\_\_\_ |
| Recall/ Remembering | Understanding | Application |
| a)Overconsumption | a) resource depletion | a) residence |
| b)Population growth | b) resource creation | b) industrialization |
| c)Wastage | c)resourceends | c)crop production |
| d) all the above | d) none | d) landfill |
| Ans: <d > | Ans: <a> | Ans: <c> |

| Set 1: Question No 4 | Set 1: Question No 5 |
| --- | --- |
| Over exploitation of fertile soil particularly in areas of low rainfall by cultivating \_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_ is one of the Solutions for Conserving Natural Resources |
| Understanding | Application |
| a) complex crops | a) forestation |
| b)cash crops. | b) deforestation |
| c) simple crops | c) mining |
| d) seasonal crops | d) extinction |
| Ans: <b > | Ans: <a > |

<Program Code: **CE**>:<Course Code: **22447**>: <Course Name: **Environmental Studies**>:

<Topic Name: **Energy Resources: Unit-2**>: <**UO 2d**>: <Assessments>:<Formative>

<**Ms. Swati Ingale and Mr. N U Sulbhewar**>

**Assessment Type: Formative Assessments: Embedded questions in video**

**(First break after Slide 11)**

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| Nuclear energy plant has potential of high risk / disaster like\_\_\_ | Heat is the flow of thermal energy from\_\_\_ temperature to \_\_\_\_temperature. | Solar energy is clean, noise free and renewable form of energy which causes \_\_\_\_\_\_\_ |
| Recall/ Remembering | Understanding | Application |
| a)Hiroshima | a)High to low | a)pollution |
| b)Nagasaki | b)low to high | b)no pollution |
| c)Chernobyl | c) Both a and b | c) Both a and b |
| d)Minamata | d) None of the above | d) None of the above |
| Ans: <c> | Ans: <a> | Ans: <b> |

**(Second break after Slide 19)**

| Set 2: Question No 1 | Set 2: Question No 2 | Set 2: Question No 3 |
| --- | --- | --- |
| The heat of the interior of the earth present at volcanic regions, geysers or hot springs is called as\_\_\_\_\_ | \_\_\_\_\_\_\_problem is usually associated with wind mills. | Tidal energy is environment friendly energy as it doesn't produce \_\_\_\_ |
| Recall/ Remembering | Understanding | Application |
| a) Tidal energy | a)Air pollution | a)greenhouse gases. |
| b) Solar energy | b)Noise pollution | b)green ground gases |
| c)geothermal energy | c)water pollution | c) Both a and b |
| d) none of the above | d)none of the above | d) None of the above |
| Ans: <c> | Ans: <b> | Ans: <a> |

* 1 set of 5 MCQ - End of LO quiz in LMS (not in video) UO-2d

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| Fossils fuel is an important source of energy for | Biomass means all materials which come from \_\_\_\_\_ | when the water is ejected from earth’s interior in the form of hot water it is called |
| Recall/ Remembering | Understanding | Application |
| a)transport | a)Living organisms. | a) ice caps |
| b)homes | b) non-living things | b) hot springs |
| c)industries | c) both a and b | c) both( a) and (b) |
| d)all of them | d) none | 1. None of the above |
| Ans: <d > | Ans: <a > | Ans: <b> |

| Set 1: Question No 4 | Set 1: Question No 5 |
| --- | --- |
| Efficiency of \_\_\_\_\_\_is far greater as compared to coal, solar or wind energy. | \_\_\_\_\_\_\_\_\_\_ doesn't  pollute the air like  power  plants  that burn  fossil fuels |
| Understanding | Application |
| a) tidal power | a) coal |
| b)Horse power | b) petroleum oil |
| c) Man power | c)Hydropower |
| d) none | d)natural gas |
| Ans: <a> | Ans: <c > |

<Program Code: **CE**>:<Course Code: **22447**>: <Course Name: **Environmental Studies**>:

<Topic Name: **Energy Resources: Unit-2**>:<**UO 2e**>: <Assessments>: <Formative>

<**Ms. Swati Ingale and Mr. N U Sulbhewar**>

**Assessment Type: Formative Assessments: Embedded questions in video**

**(First break after Slide 7)**

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| World primary on an average energy demand increase by \_\_\_\_\_\_ per year | The demand of oil in 2040 will be increase from | The demand of coal increase in 2040 is |
| Recall/ Remembering | Understanding | Application |
| a)1.60 % | a)65 million barrel to 165 million barrel per day | a)20 % |
| b)2.60 % | b)95 million barrel to 195 million barrel per day | b)22 % |
| c)3.60 % | c)85 million barrel to 106 million barrel per day | c)26 % |
| d)4.60 % | d)105 million barrel to 205 million barrel per day | d)40 % |
| Ans: <a > | Ans: <c> | Ans: <c> |

**(Second break after Slide 12)**

| Set 2: Question No 1 | Set 2: Question No 2 | Set 2: Question No 3 |
| --- | --- | --- |
| Why there is a need of energy conservation? | At personal level how we conserve the energy? | Which is not an energy strategy for a sustainable world |
| Recall/ Remembering | Understanding | Application |
| a)limited resources | a) switch off fans and lights when not in use | a)Immediate term strategy |
| b)continuous increase in demands | b) always switch on fans and lights | b)Medium term strategy |
| c)exhausted of the energy | c) switch on street lights in day time | c)long term strategy |
| d) All of the above | d) switch on energy appliances at public places | d) ultimate strategy |
| Ans: <d> | Ans: <a> | Ans: <d> |

* 1 set of 5 MCQ - End of LO quiz in LMS (not in video) UO-2e

| Set 1: Question No 1 | Set 1: Question No 2 | Set 1: Question No 3 |
| --- | --- | --- |
| The demand of oil in \_\_\_\_\_ will be increase from 85 million barrel to 106 million barrel per day | \_\_\_and\_\_\_are the most used **energy** fuels for generating **electricity.** | Promoting of energy efficiency & emission standards is a\_\_\_\_\_strategy for sustainability. |
| Recall/ Remembering | Understanding | Application |
| a)2020 | a)Coal and natural gas | a)Medium-term strategy |
| b) 2030 | b) wind and hydro power | b)Long – term strategy |
| c) 2040 | c) tidal and hydro power | c)Immediate term strategy |
| d) 2050 | d) solar and wind power | d) none |
| Ans: <c> | Ans: <a > | Ans: <b> |

| Set 1: Question No 4 | Set 1: Question No 5 |
| --- | --- |
| \_\_\_\_\_\_\_increases national, personal and financial security. | Necessary condition for socio-economic changeto lead to a sustainable world must include\_\_\_\_\_\_\_\_\_  **to lead to a sustainable world must include** |
| Understanding | Application |
| a) money conservation | a)Harmony with the environment |
| b)Energy conservation | b)Economic viability |
| c)time conservation | c)Satisfaction of basic needs of the peoples |
| d) none | d) all the above |
| Ans: <b> | Ans: <d> |

**Summative Assessments:**

* 1 set of 10 MCQ questions at end of CO in LMS

**Assessment Type: Summative: End of CO: in LMS**

| Summative: Q 1 | Summative: Q 2 | Summative: Q 3 | Summative: Q 4 | Summative: Q 5 |
| --- | --- | --- | --- | --- |
| Resources that can be replenished naturally in the course of time are called \_\_\_\_\_\_\_\_ | Solar energy is \_\_\_\_\_\_\_\_\_ form of energy | Productive functions of forest includesavability of \_\_\_\_ | nuclear fission, nuclear decay and nuclear fusion are\_\_\_\_\_\_\_\_ | Minerals such as Gasoline, Copper, and Zinc production are estimated to decline in the next \_\_\_\_\_years. |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)cyclic resources | a)conventional | a)timber | a)general processes | a)5 |
| b)Renewable Resources. | b)nonconventional | b)bamboo | b)special processes | b)10 |
| c)non-renewable Resources. | c)both a and b | c)medicines | c)nuclear processes | c)15 |
| d)none | d)none | d)all the above | d)none | d)20 |
| Ans: <b > | Ans: <b > | Ans: <d > | Ans: <c > | Ans: <d > |

| Summative: Q 6 | Summative: Q 7 | Summative: Q 8 | Summative: Q 9 | Summative: Q 10 |
| --- | --- | --- | --- | --- |
| About \_\_\_\_\_% of the earth’s water is strong saline. | Private companies misuse \_\_\_\_\_\_\_\_\_\_ for getting more profit. | In 2018 the total world energy came from \_\_\_% fossil fuels | Deregulation and privatization of energy sector is a \_\_\_\_\_strategyfor sustainability. | Dams are constructed across the river is used for generating \_\_\_\_ |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)50 | a)Natural resources | a)64 | a)Medium-term strategy | a)Thermal power |
| b)25 | b)money | b)60 | b)Long – term strategy | b) wind power |
| c)97 | c)manpower | c)74 | c)Immediate term strategy | c)tidal power |
| d)100 | d)none | d)70 | d) none | d)Hydro electricity |
| Ans: <c> | Ans: <a > | Ans: <a > | Ans: <b > | Ans: <d > |

**Assessment Type: Practice Worksheets: End of CO: in LMS/ downloadable PDF**

| Summative: Q 1 | Summative: Q 2 | Summative: Q 3 | Summative: Q 4 | Summative: Q 5 |
| --- | --- | --- | --- | --- |
| Which one among the following covers the highest percentage of forest area in the world? | Plants get their nitrogen from– | Pollination by wind is called– | Forest is responsible for | --- is the perpetual source of energy. |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)Temperate Coniferous forests | a)rain | a)Autogamy | a)water shedprotection | a)nuclear reactor |
| b)Temperate Deciduous forest | b)the soil | b)Entomophily | b)land erosion control | b)hydropower |
| c)Tropical Monsoon forests | c)the air | c)Anemophily | c)providing economic and environmental benefits | c)solar energy |
| d)Tropical Rain forests | d)the bed rock | d) Ornithophily | d)All of the above | d)None of the above |
| Ans: <a> | Ans: <b> | Ans: <c> | Ans: <d> | Ans: <c> |

| Summative: Q 6 | Summative: Q 7 | Summative: Q 8 | Summative: Q 9 | Summative: Q 10 |
| --- | --- | --- | --- | --- |
| which of the following is not renewable resources? | The main causes of deforestation is | water logging and soil salinity are the outcomes of... | Wind energy is harnessed as----------------- energy with the help of windmill . | Any material that can be transform into more valuable and useful product for all service is called as |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)coal | a)overgrazing | a)over- irrigation | a)mechanical | a)resource |
| b)wind power | b)Agriculture industry and other evelopmental project | b)mining | b)solar | b)minerals |
| c)Geo thermal energy | c)Timber extraction | c)soil erosion | c)electrical | c)product |
| d)thermal energy | d)all of the above | acid rain | d)heat | 1. None of the above |
| Ans: <a> | Ans: <d> | Ans: <a> | Ans: <a> | Ans: <a> |

| Summative: Q 11 | Summative: Q 1 2 | Summative: Q 13 | Summative: Q 14 | Summative: Q 15 |
| --- | --- | --- | --- | --- |
| Burning of fossil fuels | All forms of water that comes down on Earth, including rain, show, hail  etc. is  known as------------------ | when the water is ejected from earth’s interior in the form of hot water it is called | Green revolution is associated with --------------- | Pollination by wind is called– |
| Recall/ Remembering | Understanding | Application | Recall/ Remembering | Application |
| a)decreases green house gases | a)precipitation | a)Geyser | a)sericulture | a)Autogamy |
| b)increases green house gases | b)Calcification | b)hot springs | b)agriculture | b)Entomophily |
| c)increase level of oxygen | c)Fixation | c)both( a) and (b) | c)fish culture | c)Anemophily |
| d)increase level of ethane | d)None of the above | 1. None of the above | d)None of the above | d)Ornithophily |
| Ans: <b> | Ans: <a> | Ans: <b> | Ans: <b> | Ans: <c> |

| Summative: Q 16 | Summative: Q 17 | Summative: Q 18 | Summative: Q 19 | Summative: Q 20 |
| --- | --- | --- | --- | --- |
| Which gas is likely to be reduced in the atmosphere by deforestation? | Which of the following enhances soil fertility ? | Forest is an example of | The resources that can be replaced by natural ecological cycle is called | Area X represents |
| Recall/ Remembering | Recall/ Remembering | Understanding | Understanding | Application |
| a) Carbon dioxide | a) Improved methods of agriculture | a) Marine ecosystem | a) renewable | a)coal |
| b) Nitrogen | b) crop rotation | b)Limnic ecosystem | b) non renewable | b)solar |
| c)oxygen | c) Using new seed verities | c) Artificial Ecosystem | c) exhaustible | c)nuclear |
| d)All of the above | d) Irrigation | d)Terrestial Ecosystem | d)natural | d) oil |
| Ans: <c> | Ans: <b> | Ans: <d> | Ans: <a> | Ans: <a> |

| Summative: Q 21 | Summative: Q 22 | Summative: Q 23 | Summative: Q 24 | Summative: Q 25 |
| --- | --- | --- | --- | --- |
| The primary producers in a forest ecosystem are: | The amount of oil that may become available foruse is called oil \_\_\_\_\_\_\_\_. | A coal deposit that is not economical to mine today would be considered part of our \_\_\_\_\_\_\_\_\_\_ | Area W represents | What is the leading source of energy used in the UnitedStates today? |
| Recall/ Remembering | Understanding | Recall/ Remembering | Application | Recall/ Remembering |
| a)Chlorophyll containing trees and plants | 1. a)reserves | a)coal reserves | a)coal | a)coal |
| b)Herbivores | b)reservoir | b)coal resources | b)solar | b)oil resources |
| c)Carnivores | c)resources | c)coal reservoir | c)nuclear | c)natural gas |
| d)Bacteria and other micro-organism | d)trap | d)None of the above | d) oil | d)nuclear power |
| Ans: <a> | Ans: <c> | Ans: <b> | Ans: <d> | Ans: <b> |

| Summative: Q 26 | Summative: Q 27 | Summative: Q 28 | Summative: Q 29 | Summative: Q 30 |
| --- | --- | --- | --- | --- |
| Energy resources derived from natural organic materials are called \_\_\_\_\_\_\_\_. | All oil traps contain \_\_\_\_\_\_\_\_\_\_\_. | Area Y represents | The world has the least amount of which of the following fuel types. | Area Z represents |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a) geothermal energy sources | a)an impermeable layer | a)coal | a)oil | a)coal |
| b) fossil fuels | b)an anticline | b)solar | b)coal | b)solar |
| c)biomass | c)a fault | c)nuclear | c)urenium | c)nuclear |
| d)All of the above | d) All of the above | d) oil | d)there are roughly equal amounts of each of these fuels | d) oil |
| Ans: <b> | Ans: <a> | Ans: <c> | Ans: <a> | Ans: <b> |

| Summative: Q 31 | Summative: Q 32 | Summative: Q 33 | Summative: Q 34 | Summative: Q 35 |
| --- | --- | --- | --- | --- |
| Burning of which of the following fuels produces the least amount of carbon dioxide per unit of energy? | Nuclear energy is derived by \_\_\_\_\_\_\_\_\_\_\_. | Solar energy stored in material such as wood, grain, sugar, and municipal waste is called \_\_\_\_\_\_\_\_\_\_. | Which of the following energy sources does not produce carbon dioxide? | The most nuclear fuel used in the world is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)coal | a)combustion of atoms of U 235 | a)fossil fuels | 1. a)oil | a)Thorium – 232 |
| b)oil | b)fission of atoms of U 235 | b)biomass | b)uranium | b)Uranium – 238 |
| c)natural gas | c)fusion of atoms of U 235 | c)geothermal energy | c)coal | c)Uranium – 235 |
| d)all of these produce the same amount of carbon dioxide. | d)the breaking of U 235 bonds | d)natural gas | d)natural gas | d) Plutonium – 239 |
| Ans: <c> | Ans: <b> | Ans: <b> | Ans: <b> | 1. Ans: <c> |

| Summative: Q 36 | Summative: Q 37 | Summative: Q 38 | Summative: Q 39 | Summative: Q 40 |
| --- | --- | --- | --- | --- |
| What type of energy is derived from heated groundwater? | The world faces an energy crisis because \_\_\_\_\_\_\_\_\_ | Fossil fuels are rich in carbon and | Wind is beneficial resource of energy as it doesn't cause | Earth emits heat by eruptions of |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)solar | a)world demand for energy will increase | a)nitrogen | 1. a)pollution | 1. a)volcano |
| b)geothermal | b)world oil production will peak and begin to decline | b)hydrogen | b)echo | b)hot springs |
| c)hydro electrical | c)hortages and the resulting escalation of prices can shock the economic and political order | c)oxygen | c)noise | c)geysers |
| d)nuclear | d)All of the above | d)nitrite | d)sound | d) All of the above |
| Ans: <b > | Ans: <d> | Ans: <b> | Ans: <a> | 1. Ans: <d> |

| Summative: Q 41 | Summative: Q 42 | Summative: Q 43 | Summative: Q 44 | Summative: Q 45 |
| --- | --- | --- | --- | --- |
| Fossils fuel is an important source of energy for | Energy is released from fossil fuels when they are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Black painted panels which are hanged at roofs to trap heat and energy from sun, are | As per energy outlook 2019 world energy consumption will grow by nearly \_\_\_\_ between 2018 to 2050. | What are necessary conditions for socio-economic change for sustainable world |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)transport | a)pumped | a)solar cell | 1. a)50 % | 1. a)satisfaction of basic needs |
| b)homes | b)cooled | b)solar heater | b)60 % | b)economic viability |
| c)industries | c)burnt | c)solar furnace | c)70 % | c)harmony with environment |
| d)all of them | d)Pressurized | d)solar battery | d)80 % | d) All of the above |
| Ans: <d > | Ans: <c> | Ans: <b> | Ans: <a> | 1. Ans: <d> |

| Summative: Q 46 | Summative: Q 47 | Summative: Q 48 | Summative: Q 49 | Summative: Q 50 |
| --- | --- | --- | --- | --- |
| In the production of wave energy which form of energy is used? | A tidal barrage is a barrier built over a\_\_\_\_\_\_\_ | The blades in wind turbines are connected to\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | In hydroelectricity power\_\_ | In order to produce solar energy during sunlight, where the energy is stored in the batteries? |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)potential | a)River bed | a)Nacelle | a)Kinetic energy is transferred to potential | a)Nickel Sulfur |
| b)kinetic | b)River estuary | b)Tower | b)Potential energy is transferred to kinetic | b)Zinc Cadmium |
| c)solar | c)Rver end | c)foundation | c)Solar energy is transferred to wind energy | c)Nickel Cadmium |
| d)wind | d)River starting | d)string | d)Wind energy is transferred to solar energy | d) Nickel Zinc |
| Ans: <b> | Ans: <b> | Ans: <a> | Ans: <b> | 1. Ans: <c> |

| Summative: Q 51 | Summative: Q 52 | Summative: Q 53 | Summative: Q 54 | Summative: Q 55 |
| --- | --- | --- | --- | --- |
| Energy in the form of heat and light is obtained by\_\_\_\_\_ | Trapped heat inside the earth is known as\_\_\_ | SI unit for energy is\_\_\_ | Common energy source in Indian villages is: | Which among the following is not an adverse environmental impact of tidal power generation? |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)Biomass | a)Heat energy | a)joule | a)Electricity | a)Interference with spawing and migration of fish |
| b)fossil fuel | b)geo thermal energy | b)watt | b)coal | b)Pollution and health hazard in the estuary due to blockage of flow of polluted water into the sea |
| c)sun | c)kinetic energy | c)kilogram | c)sun | c)Navigational hazard |
| d)wind | d)thermal energy | d)Newton | d)Wood and animal dung | d) None of the above |
| Ans: <c> | Ans: <b> | Ans: <a> | Ans: <d> | 1. Ans: <d> |

| Summative: Q 56 | Summative: Q 57 | Summative: Q 58 | Summative: Q 59 | Summative: Q 60 |
| --- | --- | --- | --- | --- |
| Photovoltaic cell converts solar energy into | Biomass can be converted to | In which of the following region winds are stronger and constant | Which of the following is a disadvantage of renewable energy? | The difference, in temperature between the core of the planet and its surface, is known as |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a)heat energy | a) methane gas | a) deserts | a) High pollution | a) geothermal coefficient |
| b)mechanical energy | b) ethanol | b) offshore | b) Available only in few places | b) geothermal gradient |
| c)electrical energy | c) biodiesel | c) low altitudes site | c) High running cost | c) eothermal constant |
| d)chemical energy | d)All of the above | d)All of the above | d) Unreliable supply | d) None of the above |
| Ans: <c > | Ans: <d> | Ans: <b> | Ans: <d> | 1. Ans: <b> |

| Summative: Q 61 | Summative: Q 62 | Summative: Q 63 | Summative: Q 64 | Summative: Q 65 |
| --- | --- | --- | --- | --- |
| A Solar cell is an electrical device that converts the energy of light directly into electricity by the \_\_\_ | The main composition of biogas is \_\_\_ | In hydroelectric power, what is necessary for the production of power throughout the year? | Which Ministry is mainly responsible for research and development in renewable energy sources such as wind power, small hydro, biogas and solar power? | Which among the following have a large amount of installed grid interactive renewable power capacity in India? |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a) Photovoltaic effect | a) methane gas | a) Dams filled with water | a) Human Resource Development | a) Wind power |
| b) Chemical effect | b) Carbon dioxide | b) High amount of air | b) Agriculture and Farmers Welfare | b) Solar power |
| c) Atmospheric effect | c) nitrogen | c) High intense sunlight | c) Ministry of New and Renewable Energy | c) Biomass power |
| d)Physical effect | d)hydrigen | d) Nuclear power | d) Health and Family Welfare | d) Small Hydro power |
| Ans: <a > | Ans: <a> | Ans: <a> | Ans: <c> | 1. Ans: <a> |

| Summative: Q 66 | Summative: Q 67 | Summative: Q 68 | Summative: Q 69 | Summative: Q 70 |
| --- | --- | --- | --- | --- |
| The most abundantly available fossil fuel in India is \_\_ | Hydroelectric power produces electricity using..... | Which of the following is not under the Ministry of New and Renewable Energy? | How many forms of fossil fuels are there\_\_\_\_ | The most efficient energy conversion occurs in |
| Recall/ Remembering | Understanding | Application | Understanding | Application |
| a) coal | a) wind | a) Wind energy | a) one | a) tidal power stations |
| b) Natural gas | b) solar | b) Solar energy | b) two | b) diesel engines |
| c) petrolium | c) moving water | c) Tidal energy | c) three | c) solar panels |
| d)oil | d)dung | d) Large hydro | d) four | d) hydro-electric power stations |
| Ans: <a > | Ans: <c> | Ans: <d> | Ans: <c> | 1. Ans: <d> |

**Assessment Type: Practice Worksheets: End of CO: in LMS/ downloadable PDF**

*If students have access to laptop/ desktop – they can answer it on LMS, else download it and answer it and file it for later use. They can also copy the question in their notebook in case the space provided is insufficient.*

1. Best suited for subjective questions.
2. Numerical problems
3. Short answer questions

| 1. **Question Space**   **Enlist various natural resources.** | 1. **Question Space**   **Describe future demands of global energy** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **Describe renewable energy resources.** | 1. **Question Space**   **Describe renewable energy resources.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **Describe cyclic energy resources.** | 1. **Question Space**   **State the causes of depletion of energy resources.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **State the effects of depletion of energy resources.** | 1. **Question Space**   **State the advantages and disadvantages of conventional forms of energy.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **State the advantages and disadvantages of nonconventional forms of energy.** | 1. **Question Space**   **Describe present global energy use and its future demand.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **Describe various energy conservation methods.** | 1. **Question Space**   **State the impacts of over use of energy resources on environment.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **Describe energy conservation at personal level.** | 1. **Question Space**   **Describe energy conservation at global level.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **Describe energy strategies for sustainable world.** | 1. **Question Space**   **Describe present global energy use.** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |

| 1. **Question Space**   **State the need of energy conservation.** | 1. **Question Space**   **Enlist the solutions for conserving natural resources..** |
| --- | --- |
| 1. **Answer Space** | 1. **Answer Space** |