Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May – 2017**

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| **Code :** | **14CE2042** | **Duration :** | **3hrs** |
| **Sub. Name :** | **GLOBAL CLIMATE CHANGE AND ITS IMPACT** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| Q. No. | Sub Div. | Questions | Course  Outcome | Marks |
| 1. | a. | Define IPCC? Explain its role. | CO1 | 4 |
| b. | List the calamities that comes with continued global warming. | CO1 | 2 |
| c. | Illustrate the relation between greenhouse effect with climate change. | CO2 | 14 |
| (OR) | | | | |
| 2. | a. | Explain the importance to study about paleoclimate? | CO1 | 4 |
| b. | Demonstrate Marine carbon cycle in ocean atmosphere. | CO1 | 10 |
| c. | Explain the goal of performance matrix. | CO2 | 6 |
| 3. | a. | Explain the role of scientists to address key uncertainties in our understanding of the climate system? | CO3 | 4 |
|  | b. | Explain climate change in agriculture impacts adaptation and mitigation. | CO2 | 16 |
| (OR) | | | | |
| 4. | a. | Differentiate El-Nino with La-Nina. | CO2 | 8 |
|  | b. | Demonstrate the role of La-Nina in climate change. | CO2 | 12 |
| 5. | a. | What do you understand by the term climate change projection. | CO2 | 2 |
|  | b. | Define ODSs? | CO1 | 2 |
|  | c. | Explain the role of the Sun in climate change in recent decades? | CO2 | 12 |
|  | d. | Define GCMs? | CO3 | 4 |
| (OR) | | | | |
| 6. | a. | Explain calibration in climate model. | CO2 | 4 |
|  | b. | Discuss the situation, when will a wind can be labeled as trade wind? Explain the reason. | CO2 | 6 |
|  | c. | Explain Terrestrial carbon cycle. | CO2 | 10 |
| 7. | a. | List the components of climate mode. | CO3 | 4 |
|  | b. | Explain the role of coastal zone management with respect to climate change and sea level rise. | CO3 | 16 |
| (OR) | | | | |
| 8. | a. | Explain in detail how the changes in the vertical structure of atmospheric temperature from the surface up to the stratosphere. State about the causes of recent climate change. | CO2 | 8 |
|  | b. | Justify “the current level of atmospheric CO2 concentration unprecedented in Earth’s history? | CO2 | 12 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Relate the term “Christ child” with ocean atmosphere. | CO1 | 4 |
|  | b. | Explain in detail about climate change evidences and causes. | CO2 | 16 |

ALL THE BEST