Reg. No.															

B.Tech. DEGREE EXAMINATION, MAY 2022
Fourth to Seventh Semester

18CEO406T – GLOBAL WARMING AND CLIMATE CHANGE
(For the candidates admitted from the academic year 2018-2019 to 2019-2020)

Note:
(i) **Part - A** should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.
(ii) **Part - B** should be answered in answer booklet.

Time: 2½ Hours Max. Marks: 75

PART – A (25 × 1 = 25 Marks)
Answer **ALL** Questions

	Marks	BL	CO	PO
1. Fall of moisture from atmosphere to the earth surface in any form is called as _____. (A) Evaporation (B) Run off (C) Precipitation (D) Hydrological cycle	1	1	1	1
2. The process by which plants capture the sun's energy and use it to grow is called as _____. (A) Biological carbon cycle (B) Photosynthesis (C) Precipitation (D) Evaporation	1	1	1	1
3. _____ represents the outermost layer of earth's atmosphere. (A) Stratosphere (B) Mesosphere (C) Thermosphere (D) Exosphere	1	1	1	1
4. The ratio of actual vapour pressure to that required for saturation at the same temperature (A) Specific humidity (B) Relative humidity (C) Mixing ratio (D) Absolute humidity	1	1	1	1
5. Ozone consists of _____ oxygen atoms. (A) 1 (B) 2 (C) 3 (D) 4	1	1	1	1
6. _____ is the study of past climates. (A) Paleoclimatology (B) Climatology (C) Mesoclimatology (D) Microclimatology	1	1	2	1
7. The elements who have same atomic number but different atomic weight those elements are called as _____. (A) Palynomorphs (B) Isotopes (C) Atomic mass (D) Atomic volume	1	1	2	1
8. Oxygen is having _____ isotropes. (A) 2 (B) 3 (C) 4 (D) 5	1	1	2	1

9. _____ is a term used to describe the shape of earth's orbit around the sun. 1 1 2 1
(A) Eccentricity (B) Obliquity
(C) Precession (D) Tilt

10. Albedo of fresh snow is about _____. 1 1 2 1
(A) 0.5 (B) 0.7
(C) 0.9 (D) 1.2

11. Mercury freezes at _____. 1 1 3 1
(A) –49°C (B) 39°C
(C) 29°C (D) –39°C

12. A hygrometer measures _____. 1 1 3 1
(A) Heat and cold (B) Precipitation
(C) Humidity (D) Rainfall

13. _____ measures the speed or strength of wind. 1 1 3 1
(A) Barometer (B) Anemometer
(C) Radar gauges (D) Float gauges

14. Acid rain pH value is _____. 1 1 3 1
(A) 3.1 (B) 4.3
(C) 3.4 (D) 5.6

15. The most common type of self recording rain gauge is _____. 1 1 3 1
(A) Weighing bucket (B) Tipping bucket
(C) Floating type (D) Tide gauge

16. _____ is an international body for assessing the science related to climate change. 1 1 4 1
(A) World Metrological Organization (B) National Climate Data Centre
(C) United Nations Environment Programme (D) Intergovernmental Panel on Climate Change

17. The first assessment report of intergovernmental panel on climate change was completed in _____. 1 1 4 1
(A) 1980 (B) 1975
(C) 1990 (D) 1987

18. The Kyoto protocol was adopted on _____. 1 1 4 1
(A) 11 December 1997 (B) 16 May 2005
(C) 11 December 1990 (D) 16 February 2005

19. Carbon credit trading is generated from 1 1 4 1
(A) International Emissions Trading (B) Clean Development Mechanism
(C) Doha Amendment (D) Koyoto Protocol

20. _____ is a framework convention which aims to limit the level of climate change. 1 1 4 1
(A) Clean Development Mechanism (B) United Nations Framework Convention on Climate Change
(C) Koyoto protocol (D) International Emissions Trading

21. Which one of the following has non-renewable energy sources? 1 1 5 1
(A) Sunlight (B) Wind
(C) Waves (D) Petroleum

22. _____ energy is the process of obtaining heat or energy from a large body of water. 1 1 5 1
(A) Hydrothermal (B) Geothermal
(C) Tidal (D) Solar

23. Biodiesel quality is governed by _____ quality parameters. 1 1 5 1
(A) ASTM D5453 (B) ASTM D6751
(C) ASTM A105 (D) IS456

24. Which of the following is a pure biodiesel? 1 1 5 1
(A) B2 (B) B5
(C) B20 (D) B100

25. Minimum wind speed required to generate electricity is _____. 1 1 5 1
(A) 10 km/hr (B) 20 km/hr
(C) 15 km/hr (D) 25 km/hr

PART – B (5 × 10 = 50 Marks) Marks BL CO PO
Answer **ALL** Questions

26. a. Explain the hydrological cycle and carbon cycle with neat sketch. 10 3 1 1

(OR)

b. Write short notes on
(i) Ozone depletion 5 3 1 1
(ii) EL Nino and their impact 5 3 1 1

27. a. Explain the role of land and ocean to regulate climate. 10 3 2 1

(OR)

b. What is flood? Explain the types and causes of floods. 10 3 2 1

28. a. Explain the impact of climate change on various sectors. 10 3 3 1

(OR)

b. Explain the weather and climate parameters measuring instruments with neat sketch. 10 3 3 1

29. a. Explain the role of intergovernmental panel on climate change in detail. 10 3 4 1

(OR)

b. Explain the following
(i) Kyoto protocol 5 3 4 1
(ii) Clean development mechanism 5 3 4 1

30. a. Explain the use of renewable resources. 10 3 5 1

(OR)

b. Explain the concept of sustainable development and carbon sequestration. 10 3 5 1

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