

Reg. No.

B.Tech. DEGREE EXAMINATION, MAY 2023

Fourth to Seventh Semester

18CEO406T – GLOBAL WARMING AND CLIMATE CHANGE*(For the candidates admitted during the academic year 2018-2019 to 2021-2022)***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 & Part - C** should be answered in answer booklet.

Time: 3 hours

Max. Marks: 100

PART – A (20 × 1 = 20 Marks)

Marks BL CO PO

Answer **ALL** Questions

- Without the earth atmosphere the earth average temperature would be below _____ temperature of water.

(A) Boiling	(B) Freezing	1	1	2	3
(C) Vaporization	(D) Melting				
- The El-Nino phenomenon occurs in

(A) Atlantic ocean	(B) Pacific ocean	1	1	2	1
(C) Indian ocean	(D) Arctic ocean				
- Ocean temperature increases more slowly than land temperature because of larger effective _____ of the oceans.

(A) Heat capacity	(B) Heat balance	1	2	1	2
(C) Heat transfer	(D) Heat exchanger				
- Global warming is observed century scale rise in the _____ of earth climate system.

(A) Maximum temperature	(B) Minimum temperature	1	3	1	2
(C) Average temperature	(D) Temperature				
- Following is the important Kyoto mechanism.

(A) Emission trading	(B) Clean development mechanism	1	3	2	1
(C) Both (A) and (B)	(D) Life cycle development				
- Carbon dioxide contributes _____ percent to global warming.

(A) 10-15%	(B) 20-25%	1	2	1	2
(C) 30-35%	(D) 40-45%				
- When did chlorofluorocarbon invent

(A) In late 1950s	(B) In late 1930s	1	3	2	1
(C) In late 1920s	(D) In late 1940s				
- In sunlight _____ hits the panel of solar cells.

(A) Dust	(B) Photons	1	3	1	1
(C) Electrons	(D) Protons				

9. Higher CO ₂ concentration stimulates	1	2	1	1
(A) Photosynthesis				
(B) Evaporation				
(C) Transpiration				
(D) Infiltration				
10. Snow covered surfaces having	1	3	2	2
(A) High albedo level				
(B) Low albedo level				
(C) Medium albedo level				
(D) No albedo level				
11. An atom is surrounded by	1	2	1	2
(A) Nucleus				
(B) Neutrons				
(C) Protons				
(D) Electrons				
12. Hydroelectric schemes supplying about 6% of worlds	1	1	1	2
(A) Industrial energy				
(B) Commercial energy				
(C) Residential energy				
(D) Space energy				
13. Methane is considered to be effective	1	2	1	1
(A) Pollutant				
(B) Greenhouse gas				
(C) Element				
(D) Waste energy				
14. Each year precipitations of weather, expected to rise in the northern high latitudes in	1	3	1	1
(A) Winter				
(B) Spring				
(C) Summer				
(D) Autumn				
15. Evaporation occurs through	1	2	1	2
(A) Plants				
(B) Leaves of plants				
(C) Stems				
(D) Flowers				
16. The carbon intensity of natural gas is 25% less than	1	3	1	2
(A) Oil				
(B) Coal				
(C) Liquid				
(D) Nitrogen				
17. The purpose of dykes and coastal dunes, involves in protecting from	1	3	1	2
(A) Heat				
(B) Sea				
(C) Wind				
(D) Water waves				
18. Rio summit conference focused on	1	2	1	2
(A) Social eqaty				
(B) Environmental and development				
(C) Economic development				
(D) Education and health				
19. The global water cycle is a basic component of the	1	3	1	2
(A) Country				
(B) Climate system				
(C) Global system				
(D) Area zone				
20. Anthropogenic effects are human caused such as	1	2	1	2
(A) Burning of fossil fuels				
(B) Volcanic eruption				
(C) Earthquake				
(D) Avalgches				

PART – B (5 × 4 = 20 Marks)

Answer ANY FIVE Questions

	Marks	BL	CO	PO
21. Draw and state the layers of atmosphere.	4	1	2	1
22. Define radiation.	4	1	3	1
23. Name the gases (or) composition of the atmosphere.	4	1	5	1
24. Define the earth tilt.	4	1	2	1
25. Write short notes on Kyoto protocol.	4	1	2	1
26. What are the biomedical waste?	4	1	2	1
27. State the highlights of Indian wind energy association.	4	3	1	2

PART – C (5 × 12 = 60 Marks)

Answer ALL Questions

28. a. Write down the molecular formation of ozone layer.	12	3	1	4
(OR)				
b. Describe the important points to be considered for impact of global warming.	12	2	1	4
29. a. How greenhouses gases affect the atmospheric condition and what are its effect?	12	2	2	1
(OR)				
b. Explain how electromagnetic radiation, electromagnetic spectrum, convection plays a major role in atmospheric condition.	12	2	2	1
30. a. Elaborate the importance of understanding atmospheric stability.	12	1	1	2
(OR)				
b. Write the effects of climate change in agriculture, forestry sector and its causes.	12	1	2	1
31. a. Write short notes on		3	1	1
(i) Continental plates, with respect to volcanoe	6			
(ii) Ocean currents	6			
(OR)				
b. Explain about short lived and long lived climate forciers and its effects in direction.	12	2	1	1
32. a.i. Eco friendly plastics types and reusability in today world, discuss.	6	2	1	1
ii. How municipal solid waste are classified?	6	2	2	1
(OR)				
b. Explain the clean development mechanism and its project cycle with flow chart.	12	3	2	1

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