

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI-86
(For candidates admitted during the academic year 2016 – 2017 & thereafter)

SUBJECT CODE: 16VS/VA/EE15

B.Voc. DEGREE EXAMINATION, NOVEMBER 2022

SUSTAINABLE ENERGY MANAGEMENT

FIRST SEMESTER

COURSE : ALLIED CORE

PAPER : ENERGY ECONOMICS

TIME : 3 HOURS

MAX.MARKS:100

SECTION – A

ANSWER ALL QUESTIONS:

(30x1=30)

I CHOOSE THE CORRECT ANSWER:

1. Inexhaustible energy sources are known as _____ Energy
a) commercial b) renewable c) primary d) secondary energy
2. Which mineral is used for generating atomic or nuclear power?
a) coal b) bauxite c) uranium d) copper
3. "Fossil fuels" refers to:
a) coal. b) oil. c) natural gas. d) All of the above.
4. Photovoltaic energy is the conversion of sunlight into _____ energy
a) Chemical b) electrical c) mechanical d) thermal
5. The main method of natural gas transportation is:
a) tankers b) truck c) pipeline d) bags
6. Greenhouse gases
a) methane b) carbon dioxide c) water vapour d) all the above
7. Indian per capita energy consumption is _____ of the world average.
a) 4% b) 20% c) 1% d) 10%
8. _____ offers highest load.
a) Mixer b) Television c) computer d) Induction stove.
9. Which fuel dominates the energy mix in Indian energy scenario?
a) a) Oil b) Natural gas c) Coal d) Nuclear

II FILL IN THE BLANKS:

10. One unit of electricity is equal to _____ watts hour
11. Energy sources that are available in the market are called as _____
12. Natural gas is found in _____

13. Gases that trap heat in the atmosphere are called _____
14. Nuclear power stations situated at _____ and _____ in Tamilnadu
15. Air pollution is mainly caused by _____
16. If demand _____ and supply remains unchanged, a surplus occurs, leading to a lower equilibrium price
17. If demand increases and supply remains unchanged, _____, leading to a higher equilibrium price

III STATE WHETHER TRUE OR FALSE

18. The TNEB bill in Tamil Nadu is monthly
19. Biogenic gas was formed by bacterial decay at shallow depth.
20. One Joule is greater than one Calorie.
21. One GW is equal to 10^8 Watts
22. CNG is better than LPG
23. ONGC is Oil and natural gas corporation

IV ANSWER THE FOLLOWING IN ONE OR TWO LINES

24. What does equity mean in economics?
25. What is climate change exactly?
26. Give two examples of green energy.
27. Define energy elasticity.
28. What is meant by energy in economics?
29. How much renewable energy capacity is aimed by 2022 by MNRE?
30. Expand CPCB

SECTION – B

ANSWER ANY SIX QUESTIONS:

(6x5=30)

31. What do you understand by monopoly and oligopoly?
32. How do you find the demand curve?
33. Discuss the future of natural gas markets in India.
34. Explain the tradeoff advantages and disadvantages of nuclear energy.
35. Write a note on the Energy Conservation Act 2001
36. Elucidate the challenges and opportunities in renewable energy?

37. Discuss the social and economic impact of clean technology.
 38. Discuss the various causes of energy crisis.

SECTION – C

ANSWER ANY TWO QUESTIONS:

(2x20=40)

39. Explain the various issues of current climate change and discuss responses to it.
 40. Write a detailed note on the prospects and future of i) electricity ii) coal iii) renewable energy and iv) nuclear power.
 41. Critically analyze the energy policies of India and evaluate the recent budget in terms of renewable energy.
 42. Calculate the monthly electrical consumption in KWh of a house having following specifications. Explain few conservation techniques to save energy.

S.NO	Appliances	Numbers	Power consumption (watts)	Usage In Hours per day
1	Lamp	10	40	10
2	Fan	4	60	12
3	Refrigerator	1	350	24
4	Ac	2	1500	5
5	Water heater	1	2000	½
6	Television	1	150	6
7	Kitchen appliances	Includes induction stove, mixer and grinder etc.	1000	1
