

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024
(First Semester)

Branch - ENVIRONMENTAL SCIENCE

ENERGY RESOURCES AND CONSERVATION

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	The major source of fresh water in India is a) Rainfall b) Ground water c) Atmospheric water d) Ocean water	K1	CO1
	2	Which one of the following movement was carried out for the conservation of forests and the environment? a) Forest movement b) Ganaga Action Plan c) Tehri Andolan d) Chipko Andolan	K2	CO1
2	3	What happens to earth when incoming energy is greater than the outgoing energy? a) Earth's temperature decreases b) Earth's temperature increases c) Earth's temperature is not affected d) Water level rises	K1	CO2
	4	Trapped heat inside the earth is known as _____ a) Heat energy b) Kinetic energy c) Geothermal energy d) Thermal energy	K2	CO2
3	5	_____ is made from the aerobic decomposition of sewage. a) Biomass b) Synthetic fuels c) Metal articles d) Biofuels	K1	CO3
	6	_____ is the highest quality of coal. a) Lignite b) Peat c) Anthracite d) Bituminous	K2	CO3
4	7	Which of the following is not commonly examined in an energy audit? a) Lighting b) The amount of exercise done by the family c) Air leaks d) Insulation	K1	CO4
	8	LEED means _____ a) Leadership in Energy and Efficiency Design b) Leadership in Energy and Efficiency Document c) Leadership in Energy and Environmental Design d) Leadership in Energy and Environmental Document	K2	CO4
5	9	Under BLY Scheme, a 100 Watt incandescent bulb can be replaced with _____ CFL Bulb. a) 20-25 Watts b) 50-75 Watts c) 100 Watts d) 0 Watts	K1	CO5

5	10	Where is India's first green building located? a) ITC Green Centre, Gurgaon b) Suzlon Earth, Pune c) Wipro Technologies, Gurgaon d) CII – Sohrabji Green Business Centre, Hyderabad	K2	CO5
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SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Comment on Forest land use changes in India.	K4	CO1
	(OR)			
	11.b.	Give your views on over utilization of water resources & their consequences in India.		
2	12.a.	Critically analyse on the earth's energy budget.	K5	CO2
	(OR)			
	12.b.	Describe the environmental impacts of energy resources.		
3	13.a.	Discuss generation concepts of renewable energy resources.	K6	CO3
	(OR)			
	13.b.	Differentiate between Biofuel cells and biodiesel.		
4	14.a.	Mention the role of energy managers in industries.	K5	CO4
	(OR)			
	14.b.	How will you save energy by day lighting?		
5	15.a.	List out any five schemes launched in India for energy conservation.	K4	CO5
	(OR)			
	15.b.	Outline the salient features on International Solar Alliance.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Explain in detail about the classification, exploration and extraction of mineral resources	K4	CO1
2	17	Discuss the global energy status, its needs and demand scenario.	K6	CO2
3	18	Evaluate the use of nuclear energy and its associated environmental issues.	K5	CO3
4	19	Describe the concept of green buildings and its certification process.	K4	CO4
5	20	Describe any two case studies related to green buildings or energy conservation practices.	K5	CO5