# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

## **MSc DEGREE EXAMINATION DECEMBER 2022**

(First Semester)

### Branch - ENVIRONMENTAL SCIENCE

### **ENERGY RESOURCES & CONSERVATION**

• `\	Time: Three Hours		Maximum: 50 Marks
	ALL	SECTION-A (5 Marks) Answer ALL questions questions carry EQUAL mark	$(5 \times 1 = 5)$
1	In which one of the fol (i) Anthracite (iii) Peat	lowing types of coal, higher p (ii) Lignite (iv) Bituminous	ercentage of carbon is found?
2	(i) Conduction (iii) Albedo	of light that is reflected by a b  (ii) Refraction  (iv) Comets	ody or surface.
3	Which one of the follo (i) Uranium (iii) Thorium	owing is not an atomic fuel?  (ii) Plutonium  (iv) Helium	
4	Which rating and labe appliances? (i) BIS (iii) STAR	lling is provided by BEE disp  (ii) ISI  (iv) BLY	
5	The Government of Ir (i) March, 2002 (iii) March, 2004	ndia set up Bureau of Energy l (ii) July 2004 (iv) July 2006	Efficiency on
	ALI	SECTION - B (15 Marks Answer ALL questions L questions carry EQUAL ma	
6. a	a) Prepare a list of role of	of social forestry. (OR)	
:1	o) Elucidate the need of e		
		and entropy with examples. (OR)	<b>-</b> .1•
		tus of energy consumption in	· · · · · · · · · · · · · · · · · · ·
8.		ole resources and give its impa (OR)	ects to environment.
_	b) What is natural gas an	nd give its composition?	
9.	a) What are the benefits	(UK)	
	b) Narrate the energy eff	ficiency rating systems for bui	ldings in India.  Cont

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10.a) Is Energy Conservation Building Code mandatory in India? Discuss.

(OR)

b) Summarise the status of International Solar Alliance.

#### SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

 $(5 \times 6 = 30)$ 

11. a) Explain in detail about the water resource management.

OR)

- b) Discuss the environmental issues pertaining to over exploitation of mineral and land resources.
- 12. a) Discuss first and second laws of Thermodynamics.

(OR)

- b) Explain in detail about energy conservation measures.
- 13.a) How wind energy fulfill our energy demand? Explain.

(OR)

- b) Discuss the significance of solar energy with recent initiatives by India.
- 14. a) What is green building concept and write its status around the world?

(OR)

- b) Classify the different types of luminaries with their specifications.
- 15. a) Discuss any two government schemes related to energy conservation in India.

(OR)

b) Elucidate the functions and duties of IREDA.

Z-Z-Z

**END**