

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2022
(Fourth Semester)

Branch – ENVIRONMENTAL SCIENCE

**DISCIPLINE SPECIFIC ELECTIVE-II NATURAL RESOURCES AND
CONSERVATION**

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

1. Temperature of atmosphere decreases in _____.
(i) Stratosphere (ii) Troposphere
(iii) Mesosphere (iv) Both(ii)& (iii)
2. A pyranometer is used for measurement of _____.
(i) Direct radiation only (ii) Diffuse radiation only
(iii) Direct as well as diffuse radiation (iv) All of the above
3. As compare to normal water concentration of oxygen in hot water is
(i) Low (ii) High (iii) Same (iv) Equal
4. The Columbia river Treaty Agreement between USA and _____.
(i) North America (ii) Cuba
(iii) Mexico (iv) Canada
5. The process by which wind, water, or gravity transports soil and sediment from one location to another is known as
(i) Desertification (ii) Erosion
(iii) Soil Conservation (iv) Habitat
6. Which of the following is not the criterion to qualify as a hotspot?
(i) It is most contain at least 1,500 species of vascular plants(>0.5% of the world's total) as endemics
(ii) It has to have lost $\geq 70\%$ of its original native habitat
(iii) It must be the part of underdeveloped country
(iv) None of the above
7. Which of the following is found in the form of Monazite sand along the Kerala coast?
(i) Chromite (ii) Uranium
(iii) Thorium (iv) Graphite
8. The most nuclear fuel used in the world is _____.
(i) Thorium - 232 (ii) Uranium - 238
(iii) Uranium - 235 (iv) Plutonium - 239
9. Which of the following statement is correct about the National Park?
(i) Multipurpose protected areas to preserve genetic diversity in representative eco system
(ii) A reserves area meant for preserving its natural vegetation, wildlife and natural beauty
(iii) A reserves area meant for preservation and developing of endangered species
(iv) All of the above

Cont...

- 10 Conservation within the natural habitat is
 (i) *In-situ* conservation (ii) *Ex-situ* conservation
 (iii) *In vivo* conservation (iv) *Ex vivo* conservation

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a Sketch and briefly describe the layers of atmosphere.
 OR
 b Narrate the importance of energy conservation for the sustainable world.
- 12 a Enlist the 5 main properties of water.
 OR
 b Outline the sources of rural and urban water supply.
- 13 a State the reasons for soil degradation in India.
 OR
 b Evaluate the uses and values of estuarine ecosystem.
- 14 a How are minerals formed? Explain.
 OR
 b How can we use mineral resources more sustainably?
- 15 a Differentiate the National Parks from Sanctuaries.
 OR
 b What is *ex-situ* conservation? Explain with example.

SECTION - C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

- 16 a Critically analyse the solar energy status in India.
 OR
 b Highlight the alternative energy resources for the future generation.
- 17 a Examine the need of water conservation in India.
 OR
 b Discover and explain the innovative approaches in water management system in TamilNadu.
- 18 a Why forests are so important for life sustainability in the earth? Discuss.
 OR
 b Elucidate the effects of modern agricultural land use practices on the environment.
- 19 a Explain the harmful effects of non-renewable energy resources.
 OR
 b Analyze the possible ways to expand our present non-renewable energy resources.
- 20 a Critically analyze the influence of anthropogenic activities on species extinction.
 OR
 b Elucidate the facts about germplasm bank and gene bank.

Z-Z-Z

END