

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2018
(First Semester)

Branch - ZOOLOGY

ENVIRONMENTAL BIOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks')

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

- 1 The term ecosystem was proposed by
(i) Tansley (ii) Kendeigh
(iii) Odum (iv) Clarke
- 2 The pyramid of energy is
(i) Always erect (ii) Always inverted
(iii) Either erect or inverted (iv) Not a true pyramid
- 3 Immigration refers to the
(i) outward migration
(ii) Inward migration
(iii) both inward and outward migration
(iv) None of the above
- 4 The ultimate source of phosphate in an ecosystem is
(i) Crystalline rocks (ii) Autotrophs
(iii) Soluble organic phosphate (iv) Particulate phosphate
- 5 Iron and Gold are _____ resources.
(i) Finite (ii) Infinite
(iii) Continuous (iv) Renewable
- 6 The non-renewable source of energy is _____ energy.
(i) Solar energy (ii) Tidal
(iii) Fossil fuel (iv) Wind
- 7 Animals and plants are best protected in
(i) National parks (ii) Botanical gardens
(iii) Sanctuaries (iv) Zoological parks
- 8 The variation of species richness in different ecosystems of a geographical area is called
(i) Ecosystem diversity (ii) Species diversity
(iii) Genetic diversity (iv) Alpha index diversity
- 9 Minamata disease is caused by
(i) Air Pollution (ii) Land Pollution
(iii) Noise Pollution (iv) Water Pollution
- 10 Sound becomes hazardous noise pollution at decibels:
(i) Above 80 (ii) Above 30
(iii) Above 100 (iv) Above 120

Cont...

SECTION - B (35 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 7 = 35)

- 11 a Differentiate food chain and food web.
OR
b Discuss about the nature and flux of energy through communities.
- 12 a Differentiate 'Mortality' and 'Natality' rate with examples.
OR
b State the strategies to control human population.
- 13 a Evaluate the 'Wind Energy' is a source of renewable energy,
OR
b Discuss about 'Land' as a resource.
- 14 a Organize on Rain Water Harvesting.
OR
b Analyze the value of Biodiversity.
- 15 a Assess the role of Biological indicators in environmental monitoring.
OR
b Critically evaluate the biological effects of soil pollution.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Elucidate the different methods employed to measure Primary productivity.
- 17 The gaseous and sedimentary cycles are significant Biogeochemical cycles-Justify.
- 18 Distinguish renewable and non-renewable energy resources of energy with suitable examples.
- 19 Enumerate the aims of Wild Life Management and analyze the different methods to preserve the Wild Life.
- 20 Man can be called as a "Disastrous Animal", if he does not manage Air Pollution - Comment.

Z-Z-Z

END