



**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY :: PUTTUR
(AUTONOMOUS)**

Siddharth Nagar, Narayanavanam Road PUTTUR – 517583

Subject with Code : Environmental Studies (16HS605) Course & Branch : B.Tech – CSE ,EEE & ECE

Year &Sem : II-B.Tech & I-Sem Regulation : R16

QUESTION BANK (DESCRIPTIVE)

UNIT-I

**MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES
AND
NATURAL RESOURCES**

- | | |
|--|------------|
| 1. Discuss Multidisciplinary Nature of Environmental studies. | 10M |
| 2. Differentiate Renewable and Nonrenewable resources with examples.. | 10M |
| 3. (a) Discuss the major environmental impacts of mineral extraction | 6M |
| (b) Classification of minerals with examples. | 4M |
| 4. Explain the need of public awareness towards environment | 10M |
| 5. What are major causes for conflicts over water? Discuss one international and one inter - state water conflict. | 10M |
| 6. Discuss the use and over exploitation of water resources and explain hydrological cycle. | 10M |
| 7. Write a note on effect of mining on forest and tribal people. | 10M |
| 8. (a) Discuss briefly droughts and floods | 6M |
| (b) Discuss the ecological uses of forests. | 4M |
| 9. (a) Brief note on Nuclear Energy | 5M |
| (b) What are the effects of deforestation on Environment? | 5M |
| 10. Give detail account on Solar energy , wind energy and Hydropower Energy resources. | 10M |

UNIT-II**ECOSYSTEM**

1. A) Define ecosystem and explain in detail about ecological pyramids. **5M**
B) Explain the energy flow in an ecosystem. **5M**
2. Describe the structure and functions of an Ecosystem. **10M**
3. What are Ecological pyramids? Explain different types of ecological pyramids with neat sketch. **10M**
4. What is the nature of grassland ecosystem? Explain its structure and function. **10M**
5. A) Discuss the models of Energy flow in an Ecosystem. **5M**
B) What are biogeochemical cycles? Explain with the help of a diagram the nitrogen cycle. **5M**
6. Explain
A) Food chains **3M**
B) Food web **3M**
C) Ecological pyramids **4M**
7. Explain various processes involved in Ecological succession. **10M**
8. Explain the structural components of desert and lake ecosystem. **10M**
9. A) Define food chain. Write its types. **5M**
B) Explain the structure and functional components of forest ecosystem. **5M**
10. Explain the different aquatic ecosystems **10M**

UNIT-III**BIODIVERSITY AND ITS CONSERVATION**

1. Discuss the values of bio diversity. **10M**
2. Explain
 - a)Genetic diversity **4M**
 - b)Species diversity **3M**
 - c) Ecosystem diversity **3M**
3. Give an account on Indian diversity with special reference as a mega diversity nation. **10M**
4. Explain the bio-geographical classification of India. **10M**
5. Give a brief account on
 - a) Social value **2M**
 - b) Ethical value **2M**
 - c) Aesthetic value **2M**
 - d) Optional value **2M**
 - e) social values **2M**
6. A)Define hotspot of bio diversity? **5M**
B)Which are the hotspots found in India ?Discuss their salient Features. **5M**
7. What are the major threats to bio diversity? **10M**
8. Give a brief account on
 - a) Endangered species **5M**
 - b) Endemic species **5M**
9. Explain
 - a)In-situ Conservation **5M**
 - b)Ex-situ Conservation **5M**
10. Explain
 - a) Red data book **3M**
 - b) Loss of Habitat **3M**
 - c) Poaching. **4M**

UNIT-IV
ENVIRONMENTAL POLLUTION AND GLOBAL ENVIRONMENTAL ISSUES

- | | |
|--|------------|
| 1. Define Air pollution. Explain its causes, effects and control measures of Air pollution | 10M |
| 2. Write a note on | |
| (a) Water Pollution | 5M |
| (b) Land pollution | 5M |
| 3. (A) What is an earth quake? Write its effects. | 5M |
| (B) Land slides | 5M |
| 4. (A) Discuss the sources, effects and control of ozone layer depletion | 6M |
| (B) Nuclear Pollution | 4M |
| 5. Write a note on | |
| (a) Acid rains | 5M |
| (b) Global Warming | 5M |
| 6. Define noise pollution. Explain its causes, effects and control measures of noise pollution | 10M |
| 7. (A) Droughts and floods | 6M |
| (B) Cyclone | 4M |
| 8. (A) What is watershed management? Discuss Practices of watershed management. | 6M |
| (B) Write a short note on Role of individual in prevention of pollution. | 4M |
| 9. (A) What is solid waste management? Explain its causes and effects. | 6M |
| (B) Write a short note on control measures of solid waste management. | 4M |
| 10. (A) Write a note on Population growth? What are the factors influencing population size? | 10M |

UNIT-V**ENVIRONMENTAL LEGISLATION, LAWS, POLICES FOR SUSTAINABLE DEVELOPMENT**

- 1 .Discuss the salient features of forest conservation Act and Wild life (protection) Act **10M**
2. Describe Air (Prevention and control of pollution) Act and Environment(Protection) Act **10M**
- 3 .What is the role of Information technology in Environment and human health. **10M**
4. (A)What are the strategies taken for the development of child in healthy environment. **5M**
(B)Discuss the impact of increase of pollution on environment **5M**
- 5 . Discuss briefly about sustainable development **10M**
6. Discuss the salient features of Water Act **10M**
7. Write a note on
A) Kyoto protocol **5M**
B)Montreal protocol **5M**
8. Explain about Municipal solid waste management **10M**
9. How can we create public environmental awareness. **10M**

10. Describe your recent visit to any industrial site and explain the impact of pollutants emitted on environment and discuss the various measures to control the pollution levels. **10M**

12. Conference on Environment and Development known as Earth summit held at []
A) Johannes berg B) Riodejaneiro
C) Kenya D)Brazil
13. Which of the following is the example of non renewable resources []
A) Coal and minerals B) Soil
C)Water D) wind
14. The Term Environment has been derived from the French word _____ which means to encircle (or) surround____. []
A) Environner B) environment
C) environmental D) none of these
15. Satluj-yamuna link (SYL)canal dispute is between____ []
A) Punjab&Haryana B) Karanataka & Tamilnadu
C)Delhi&U.P D)None of these
16. Which one of the following is responsible for desertification____ []
A)deforestation B) overgrazing
C) mining D) all of these
17. Nuclear energy can be generated by []
A) Nuclear fusion B)Nuclear fission
C) Both of these D)None of these
18. The world summit was held at []
A) Rio de janerio B) Johannesburg
C) Stockholm D) United nations
19. Deforestation generally decreases due to []
A) Rainfall B) Soil erosion
C) Draught D) Global warming
20. Fossil fuels and metallic minerals are []
A) Renewable resources B) Inexhaustible resources
C) Nonrenewable resources D) None
21. Forest and wild life are []
A) Renewable resources B) Nonrenewable resources
C) Both D) None
22. Needle typed leaves are seen in []
A) Evergreen forest B) Tropical deciduous forest
C) Temperate deciduous forest D) Coniferous forest
23. Silicon obtained from []
A) Silica or sand B) Alumina
C) Calcium D) None
24. Which one of the following mineral is used in car battery____ []
A) Sulphur pyrite B) Gypsum
C) Lime stone D) Silicate
25. Which one of the following dreams to become the water super power in the middle east countries_____ []
A) Kuwait B) Syria
C) Jordan D) Turkey
26. Common energy source in Indian villages is []
A) Electricity B) Coal
C) Sun D) Wood & animal dung
27. Important forest products are []
A) Resins B) Nuts
C) Timber D) All of these

- A) Bacteria
C) Humus
16. Which ecological pyramid is always upright []
A) Pyramid of bio mass
C) Pyramid of energy
17. Most stable ecosystem is []
A) Forest
C) Ocean
18. The first layer in tropical rain forest is..... []
A) Emergent layer
C)Ground layer
19. Plants use ----- gas for photosynthesis []
A) CO₂
C) N₂
20. Plants use ----- gas for respiration []
A) CO₂
C) N₂
21. The following type of mining is carried out for extraction of minerals from deeper deposits []
A) Surface mining
C)Both
22. A primary succession on bare rock starts with []
A) Lichens
C)Trees
23. Herbivores are -----consumers []
A)Primary
C)Tertiary
24. Which one of the following is an abiotic component of the ecosystem []
A)Bacteria
C)Humus
25. Which ecological pyramid is always straight []
A)pyramid of biomass
C)Pyramid of energy
26. Every food chain starts with []
A)Producers
C)decomposers
27. A network of food chains which are interlinked at various trophic levels []
A)Food chain
C)Ecological Pyramids
28. ----- is example for sedimentary nutrient cycle. []
A)Carbon cycle
C)Sulfur cycle
29. Denitriifcation is nothing but []
A)Anaerobic respiration
C) Glycolysis
30. Major components of ecosystems are ----- []
A)Structural
C)Structural and Functional
31. Continuous biotic influence have some degenerating influence on the process of succession is called []
A)Retrogressive succession
C)Autogenic Succession
32. Guano deposits are the major source of []
A)Phosphorus
C)Nitric acid
33. Chief source of energy in environment is []
A)Fire
C) Sun
34. The biggest flower in the plant kingdom []
A)Rafflesia
C)Digitalis
- B) Plants
D) Fungi
- B) Pyramid of numbers
D) Pyramid of numbers and biomass
- B) Desert
D) Mountains
- B) Canopy
D)All of these
- B) O₂
D) None
- B) O₂
D) None
- B) Sub-surface mining
D)None
- B)Herbs
D)Animals.
- B)Secondary
D) None of these.
- B)Plants
D)Fungi
- B)Pyramid of numbers
D)Pyramid of numbers and biomass
- B)Consumers
D)Primary Consumers
- B)Food web
D)None of these
- B)Phosphorus Cycle
D)Nitrogen cycle
- B) Fermentation
D) Aerobic respiration
- B)Functional
D)Abiotic component
- B)Defrected succession
D) Allogenic succession
- B) Sulphur
D) Sulphuric acid
- B) Moon
D) Stars
- B) Tagetus erecta
D)Freecia

35. The term ecosystem was coined by []
A)Dr. salim Ali B)Sir Arthur Transley
C)E.P.Odum D)Wangari Mathew.
36. The African grasslands are called []
A)Savanna B)Prairies c)pampas D)stepes
37. Man made ecosystem is called as []
A)Human ecosystem B)Anthropogenic ecosystem C)A&B D)None of these
38. Consumers are also called as []
A)Phagotrophs B)Chemotrophs
C)Auto trophs D)Photoautotrophs
39. Detrius food chain starts with []
A)Producers B)consumers C)dead organic matter D)None of these
40. Which one is correct food chain []
A)Phytoplankton → Zooplanktons → Fish B)Zooplankton → Phytoplankton → Fish
C)Grass → fish → Zooplankton D) Zooplanktons → Protozoans → Fish

UNIT-III

BIODIVERSITY AND ITS CONSERVATION

1. Species restricted only to particular area are called..... []
 - A) Hot spots
 - B) Endemism
 - C) None
 - D) Both
2. Endangered species list are kept in a book called []
 - A) Blue data book
 - B) White book
 - C) Green book
 - D) Red data book
3. Cryopreservation of plant seeds and pollen is done at very low temperature of -196°C by using []
 - A) Ice
 - B) Carbon tetrachloride
 - C) Liquid nitrogen
 - D) Ammonia
4. The minimum wind speed required for satisfactory working of wind generator is []
 - A) 5 km/hr
 - B) 15 km/hr
 - C) 25 km/hr
 - D) 55 km/hr
5. Which of the following is not a bio-geographic habitat of India as per classification []
 - A) Himalayan
 - B) Western Ghats
 - C) Sunderbans
 - D) Deserts
6. Kaziranga national park is famous for []
 - A) One horned rhino
 - B) Hangul
 - C) Tiger
 - D) Elephant
7. Which one of the following national park did not have tiger's as their main wild life []
 - A) Gir
 - B) Corbett
 - C) Dudwa
 - D) Ranthambore
8. Quinine is obtained from the bark of _____ tree []
 - A) Catharanthus
 - B) Foxglove
 - C) Cinchona
 - D) None
9. Western Ghats are very rich in endemic species of []
 - A) Birds
 - B) Lions
 - C) Amphibians
 - D) Turtles
10. Which one of the following is an extinct species []
 - A) Dugong
 - B) Great Indian bustard
 - C) Dodo
 - D) Red panda
11. Cryopreservation of plants seeds and pollen is done at a very low temperature of -196°C by using []
 - A) Ice
 - B) Carbon tetra chloride
 - C) Liquid nitrogen
 - D) Ammonia Two
12. Book list containing a record of threatened species is _____ []
 - A) Book of species
 - B) Historia plantarum

- C) Systematic nature
D) Red data book
13. No. Of species per unit area is called_____ []
A) Species diversity
B) species richness
C) Genetic diversity
D) Ecological diversity
14. Which of the following is an example of ex-situ conservation____ []
A) Biosphere reserves
B) Gene bank
C) Sanctuary
D) All of these
15. Which group of vertebrates comprises the highest no. of endangered species____ []
A) Birds
B) Mammals
C) Fishes
D) Reptiles
16. Areas which exhibit high species richness as well as high species endemism are termed as____ []
A) Species richness
B) Biodiversity
C) Hot spots
D) Ecological diversity
17. The area reserved for the welfare of wild life is called_____ []
A) National parks
B) Botanical parks
C) Sanctuary
D) Forest
18. Animals and plants are best protected in_____ []
A) Zoos
B) Botanical gardens
C) Sanctuaries
D) National parks
19. The animal that has recently become extinct is_____ []
A) Dinosaur
B) Dodo
C) Wolly mammoth
D) Archaeopterys
20. How many bio-geographical regions are present in India? []
A)3
B)4
C)7
D)10
21. Which one of the following has maximum genetic diversity in India? []
A)Tea
B)Teak
C)Wheat
D)Mango
22. What organism is near extinction due to overexploitation? []
A) Txotic pets
B) Rare cacti
c) Siberian tiger
C)None
23. Habitats with usually high numbers of species are referred to as ____ []
A)Heterogenous
B) Divergent
C) Biodiversity hotspots
C) Multiform
24. Red data book contains data of []
A)All plant species
B)All animals species
C)Economically important species
D)Threatened species
25. IUCN means []
A)International Union for Conservation of Nature and Natural Resources
B)Information Union of Conservation of Nature and Natural resources
C) Indian union of Conservation of Natural Resources
D)None of the above
26. Which of the following region has maximum diversity []
A)Mangrooves
B)Temperate rain forests
C)Temperate deciduous Forests
D)Coral reefs

27. Biodiversity []
 A)Increases the towards the equator B)Decreases the towards the equator
 C)Remain same throughout the planet D)Has no effect on changes in latitude
28. The Most Important reason for decrease in biodiversity []
 A)Habitate pollution B)Introduction of exotic species
 B)Over-exploitation D)Habitat destruction
29. Dodo is endangered []
 A) Endangered B)Critically Endangered
 C)Rare C)Extinct
30. Blue Whale is placed under []
 A)Endangered B)Critically Endangered
 C)Rare D)Extinct
31. All are Insitu Conservation efforts except []
 A)National park B)Sanctuaries
 C)Zoo D)Biosphere reservesies
32. Hotspots are regions of high []
 A)Rarity B)Endemisms
 B)Critically endangered population D)Diversity
33. Endemic Spesies are []
 A)Rare species B)Special localised in a specific region
 B)Critically endemic species D)Critically endangered species
34. How many important Mega-biodiversity countries at world wise []
 A)9 B)10
 B)11 C)13
35. India occupies which Rank in Plant Rich species..... []
 A)1st B)2nd
 C)10th C)11th
36. The Multiple uses of biodiversity has been classified by whom..... []
 A)M.C. Neely B)Earnest Haeckel
 C)A.G .Tansley D)None
37. What is the Major Endemic species of India in the following..... []
 A)Amphibians B)Reptiles
 C)Turtiles D)Lizards
38. The term Hot spots of Bio diversity was introduced by []
 A) Earnest Haeckel B) M.C. Neely
 C)A.G .Tansley D)Myers
39. Oryza Sativa scientific name of []
 A)Rice B)Wheat
 C)Crane Sugar C)Maize
40. 50% of world Bio diversity of species found in []
 A)Tropical Rain forests B)Temperate forests
 C)Deciduous forests D)Sub-tropical forests

UNIT -V**ENVIRONMENTAL LEGISLATION ,LAWS POLICIES FOR SUSTAINABLE DEVELOPMENT**

1. Act provides for setting up of National Parks and Wild life Sanctuaries []
 - A) Environment protection Act B) Wildlife (Protection)
 - C) Forest protection Act D) Water prevention Act
2. ENVIS generates database on []
 - A) Coastal ecology B) Biodiversity
 - C) Occupational health D) All of these
3. Expanding population trend is predicted for the coming years when age-pyramid is []
 - A) Bell shaped B) Pyramid shaped
 - C) Urn shaped D) None of these
4. As per the forest act, the cultivation of which of the following is a non-forest activity []
 - A) Tea B) Rubber
 - C) Mulberry D) None
5. Which state in India has the lowest birth rate []
 - A) Kerala B) Bihar
 - C) Madhya Pradesh D) Himachal Pradesh
6. World population day []
 - A) July 21 B) July 11
 - C) June 11 D) June 5
7. HIV can pass from infected person to others by []
 - A) Contaminated Syringe B) mosquito bite
 - C) Sweat D) All
8. Now a day's how many children are born every second []
 - A) 3-4 B) 4-5
 - C) 5-6 D) 6-7
9. Elisa test is used to detect []
 - A) Malaria B) AIDS
 - C) Cholera D) Tuberculosis
10. The most severe problem faced by the world is []
 - A) Nuclear proliferation B) industrial pollution
 - C) Population explosion D) AIDS
11. World animal welfare day []
 - A) October 22 B) October 2
 - C) October 3 D) October 4
12. ICDS is a welfare scheme for []
 - A) Public B) Women
 - C) Men D) Children
13. Which among the following is a poor country []
 - A) Italy B) Botswana
 - C) Canada D) Newzeland
14. The zero population growth due to equal birth & death rate is called []
 - A) Natural increase B) Demographic transition

- A) Sustainable development B) Green growth
C) Clean technology D) Carrying capacity
30. Study of trends in human's population growth and prediction of future growth is Called []
A) Demographic transition B) Zero population growth
C) Both D) None
31. Full form of TFR []
A) Total First Report B) Timber For Rating
C) Total Fertility Rate D) All
32. Field work is carried out for []
A) To get Awareness about environment B) To gain knowledge
C) To determine Pollution level D) All the above
33. Southern Blotting test is used to analyse []
A) Malaria B) AIDS
C) Cholera D) Tuberculosis
34. If a nation has 5 % annual growth rate, its population will be doubled in ---- years []
A) 45 Years B) 14 Years
C) 30 Years D) 28 Years
35. What is the ratio of boys to girls in china []
A)1.4:1 B)2.4:3
C)3.1:4 D) 3:4
36. MHRD, government of India formulated strategic plan for the welfare of children in the Areas of []
A)Health and Education B) Clean and Nutrition
C) Safe drinking water & SanitationD) All the above
37. Full form of HIV []
A) Human Influenza Virus B) Homo Immuno Virus
B) Human Induced Virus D) Human Immuno Virus
38. The chemicals that causes cancer are known as []
A) Tetratogenic B) Mutagenic
C) Neurotoxin's D) Carcinogenic
39. If a nation has an annual growth rate of 2%, its population will be doubled in ---- years []
A) 20 Years B) 35Years
C) 50Years D) 70 Years
- 40 WWW stands for ____ []
A)World Web Wide B)World wide web
c)Wide web world D)Wide World Web

