



**B.TECH DEGREE EXAMINATIONS: MAY 2018**

(Regulation 2015)

Fourth Semester

**U15EST004: ENVIRONMENTAL SCIENCE IN TEXTILE AND APPAREL TECHNOLOGY**

(Common to TXT/FT)

**COURSE OUTCOMES**

- CO1:** Analyze the impact of engineering solutions in a global and societal context
- CO2:** Discuss contemporary issues that results in environmental degradation and would attempt to provide solutions to overcome those problems
- CO3:** Highlight the importance of ecosystem and biodiversity
- CO4:** Ability to consider issues of environment and sustainable development in his personal and professional undertakings
- CO5:** Paraphrase the importance of conservation of resources
- CO6:** Play an important role in transferring a healthy environment for future generations

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. Match the various types of coal and its grade on its calorific values

CO1 [K<sub>1</sub>]

List I		List II	
A. Bituminous		i. I	
B. Anthracite		ii. IV	
C. Peat		iii. II	
D. Lignite		iv. III	

- |    | A   | B   | C   | D  |
|----|-----|-----|-----|----|
| a) | i   | iii | iv  | ii |
| b) | iii | iv  | ii  | i  |
| c) | ii  | iv  | iii | i  |
| d) | iii | i   | ii  | iv |

2. The environmental activist Medha Patkar has taken up issues on the dam CO2 [K<sub>2</sub>]  
a) Tehri b) Bakra  
c) Sardar Sarovar d) Mettur
3. Identify the true statement on ecosystem CO3 [K<sub>2</sub>]  
1. The interlocking of food chain is called food web in an ecosystem  
2. The darker zone in the lakes where light penetrations is nil is called Littoral zone  
3. Estuaries have the character of fresh water only  
4. The over nourished lakes where algal bloom is called Eutrophication  
a) 1,3 b) 1,4  
c) 1,2 d) 2,3
4. The tropical grass lands in Africa are called as CO3 [K<sub>2</sub>]  
a) Prairies b) Pampas  
c) Savannas d) Steppes
5. Assertion (A): Some amount of fluoride is required in drinking water to prevent tooth decay CO2 [K<sub>2</sub>]  
Reason (R): Excess of fluoride in ground water from rocks causes fluorosis  
a) Both A and R are Individually true and R is the correct explanation of A b) Both A and R are Individually true but R is not the correct explanation of A  
c) A is true but R is false d) A is false but R is true
6. Species restricted to only specific areas is called CO3 [K<sub>1</sub>]  
a) Alpha rich species b) Beta rich species  
c) Endemic species d) Gama rich species
7. List the following in the sequence of the year the Act has been promulgated CO4 [K<sub>3</sub>]  
1. Wild life protection Act  
2. Air prevention and control of pollution Act  
3. Water prevention and control of pollution Act  
4. The environmental protection Act  
a) 2-3-4-1 b) 1-3-2-4  
c) 3-4-2-1 d) 4-1-3-2
8. Choose the golden fibre CO3 [K<sub>2</sub>]  
a) Silk b) Jute  
c) Wool d) Cotton

9. Assertion (A): The ENVIS is network sharing centre for the ministry of environment CO1 [K<sub>2</sub>]  
Reason (R): It function to build a repository to disseminate information on surroundings
- a) Both A and R are Individually true and R is the correct explanation of A      b) Both A and R are Individually true but R is not the correct explanation of A  
c) A is true but R is false      d) A is false but R is true
10. CEDAW deals with CO6 [K<sub>2</sub>]  
a) Freedom of speech      b) Discrimination against women  
c) Value education      d) Environmental education

**PART B (10 x 2 = 20 Marks)**

**(Answer not more than 40 words)**

11. Justify that the ecological uses of forest would surpass its commercial uses. CO1 [K<sub>1</sub>]  
12. Discuss two major issues on environmental effect of mining on its surroundings. CO1 [K<sub>2</sub>]  
13. State the reason why pyramid of energy is always upright. CO2 [K<sub>2</sub>]  
14. Write the salient features of hot spot in India. CO3 [K<sub>2</sub>]  
15. Write two major features of Red book data. CO3 [K<sub>3</sub>]  
16. Describe briefly the methods of control of noise pollution in power loom industries. CO4 [K<sub>2</sub>]  
17. Write briefly on Nutrient imbalance in the soil. CO4 [K<sub>3</sub>]  
18. Write a critical note on 'Nuclear Holocaust'. CO5 [K<sub>2</sub>]  
19. What does T<sub>d</sub> mean in population explosion? CO6 [K<sub>2</sub>]  
20. Differentiate immigration and enigration. CO6 [K<sub>2</sub>]

**Answer any FIVE Questions:-**

**PART C (5 x 14 = 70 Marks)**

**(Answer not more than 300 words)**

**Q.No. 21 is Compulsory**

21. i Explain any two renewable energy sources which would suit to Indian economy (7) CO1 [K<sub>2</sub>]  
and environment to solve future energy crisis.  
ii Discuss the demerits of modern agriculture. (7) CO1 [K<sub>2</sub>]
22. i Discuss the salient features of any one terrestrial ecosystem. (7) CO2 [K<sub>2</sub>]  
ii Explain the major threats to biodiversity which has brought climatic change in (7) CO2 [K<sub>2</sub>]  
India.

23. i What is special about Indian mega biodiversity. (7) CO2 [K<sub>3</sub>]  
ii Compare and contrast the in-situ and ex-situ methods of conservation of biodiversity. (7) CO2 [K<sub>3</sub>]
24. i Elaborate 3 R's Reduce, Reuse and Recycle before taking the solid waste from Textile industries for destruction. (7) CO3 [K<sub>3</sub>]  
ii Discuss the individuals role in controlling air and water pollution. (7) CO3 [K<sub>3</sub>]
25. i 'Rain water harvesting project' is mandatory for all buildings newly constructed - Justify. (7) CO4 [K<sub>2</sub>]  
ii Discuss the salient features of 'Wild life protection Act, 1972'. (7) CO4 [K<sub>2</sub>]
26. i Explain the variation of population among different nations on aspects such as natality, mortality and fertility. (7) CO5 [K<sub>2</sub>]  
ii Discuss briefly about HIV/AIDS. (7) CO5 [K<sub>2</sub>]
27. i Discuss briefly the role of IT on Environment and Human health. (7) CO6 [K<sub>2</sub>]  
ii Write the importance of value based environmental education. (7) CO6 [K<sub>2</sub>]

\*\*\*\*\*