AR16

CODE: 16HS1003 **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

I B.Tech II Semester Regular & Supplementary Examinations, June-2018

ENVIRONMENTAL STUDIES

(Common to CE, ME, CSE & IT Branches)

Time: 3 Hours **Max Marks: 70**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1.	a	How can you define environment? Explain the importance of environment in today's context.	6M
	b	Enumerate the impact of mining on environment and tribal community.	8M
		(OR)	
2.	a	Describe how pesticide affects the health of human and environment.	6M
	b	Explain the principle of a solar cell and wind energy.	8M

UNIT-II

3.	a	Discuss abiotic and biotic components of ecosystem.	6M
	b	What are ecological pyramids? What are its types? Explain them	8M
		(OR)	
4.	a	How India is stated as mega biodiversity nation? Explain	6M
	b	Many species in the world are getting extinct in every one hour. What are the reasons behind it.	8M

UNIT-III

5.	a	What is the principle and working of Bag house filters and Electrostatic precipitators.	8M
	b	How soil pollution is caused? How it can be controlled?	6M
		(OR)	
6.	a	What is biomedical waste? List the measures taken to manage biomedical waste.	6M
	b	Explain the mitigation measures of floods and earthquakes	8M

UNIT-IV

7.	a	Why resettlement and rehabilitation is a big issue? How it can solve?	7M
	b	How do you know acid rain occurred in an area? What measures can be taken to reduce acid rains?	7M
		(OR)	
8.	a	What is sustainable development? Do you think we are heading towards unsustainable development? What measures are taken to achieve sustainability?	8M
	b	Which gas is responsible for ozone layer depletion? How is it generated? Write its effects	6M

UNIT-V

9.	a	How population growth of a nation effects environment?	6M
	b	Explain how earthworms, snakes and birds are farmer's friends.	8M
		(OR)	
10.	a	What are common plants you have studied in your field visit?	7M
	b	Write the role of IT in environment and human health.	7M

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AR16

CODE: 16CS1001 **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

I B.Tech II Semester Regular & Supplementary Examinations, June-2018

COMPUTER PROGRAMMING

(Common to EEE & ECE Branches)

Time: 3 Hours **Max Marks: 7M0**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place.

UNIT-I

1.	a)	Explain in detail about various data types in C?	7M
	b)	Write a brief note on Arithmetic and logical operators?	7M
		(OR)	
2.	a)	Write a detailed note on program development steps for computer languages?	7M
	b)	Explain in detail about bitwise, conditional and special operators in detail?	7M

UNIT-II

3.	a)	Explain in detail about selection statements in C?	7M
	b)	Write a program to find whether given number is Armstrong number or not?	7M
		(OR)	
4.	a)	Explain in detail about exit control and entry control loops with an example?	7M
	b)	Write a C program to perform arithmetic operations using switch case?	7M

UNIT-III

5.	a)	Write a brief note on various types of functions?	7M
	b)	Write a program to perform matrix multiplication using arrays?	7M
		(OR)	
6.	a)	Define recursion and explain with an example?	7M
	b)	Discuss about string manipulation functions?	7M

UNIT-IV

7.	a)	Define pointers? Explain operations on pointers in detail?	7M
	b)	Write difference between structures and unions?	7M
		(OR)	
8.	a)	Explain in detail about nested structures?	7M
	b)	Briefly explain dynamic memory allocation?	7M

UNIT-V

9.	a)	Explain about types of files in C?	7M
	b)	Write about modes of files with an example?	7M
		(OR)	
10.	a)	Explain about operations on files in C?	7M
	b)	Explain in detail about random access memory?	7M

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AR13

CODE: 13HS1003 **SET-2**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)

I B.Tech II Semester Supplementary Examinations, June-2018

ENVIRONMENTAL STUDIES

(Common to CE, ME, CSE & IT)

Time: 3 Hours **Max Marks: 70**

PART-A

ANSWER ALL QUESTIONS **[1 x 10 = 10 M]**

1. a) Ground Subsidence
   b) Micronutrient imbalance
   c) Grass land
   d) Endangered species
   e) Bio-magnification
   f) Biomedical wastes
   g) Holocaust
   h) Sustainable development
   i) Total Fertility Rate
   j) Occupational Hazard

PART-B

Answer one question from each unit [5x12=60M]

UNIT-I

2. a. Mention any 4 major uses of water resource. Discuss one national and one international conflict over water studied. 6M
   b. Enumerate any 6 measures that should be adopted by an individual for conservation of natural resources in the current era of over exploitation of resources. 6M

(OR)

3. a. Discuss in detail the impacts of big dams on Tribal's and the environment 6M
   b. Differentiate between Floods and Drought 6M

UNIT-II

4. a. Define Ecological Succession. Explain the major steps of succession. 6M
   b. Explain the flow of energy and flow of nutrients citing the example of a forest ecosystem 6M

(OR)

5. a. Explain the functions of Producers, Consumers and Decomposers in the operation of an ecosystem 6M
   b. Discuss the Ex-situ methods for conservation of biodiversity 6M

UNIT-III

6. a. Discuss the major causes, effects and control of air pollution 6M
   b. Briefly explain the structure of a cyclone reactor and a bag house filter in treating particulate pollutants with neat, labelled figures. 6M

(OR)

7. a. State the major causes, effects and control of Noise Pollution 6M
   b. Mention any six measures for preventing pollution by human beings. 6M

UNIT-IV

8. a. Define the term "Urbanization". State briefly about four major urban problems related to energy availability and utilization 6M
   b. Discuss the major causes and effects of Ozone depletion. 6M

(OR)

9. a. What are Acid rains? How do they affect Plants and animals? 6M
   b. Enlist the salient features of Wild life protection act, 1972. 6M

UNIT-V

10. a. Explain the patterns of population growth world wide and state the measures enforced to bring population explosion under check. 6M
    b. Discuss any six major impacts of population growth on environment. 6M

(OR)

11. a. Explain the components of a field report to be documented on a visit to an ecosystem. 6M
    b. State the salient impacts of humans on any ecosystem visited by you. 6M

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AR13

Code: 13CS1001 **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)

I B.Tech II Semester Supplementary Examinations, June-2018

COMPUTER PROGRAMMING

(Common to EEE & ECE Branches)

Time: 3 Hours **Max Marks: 70**

PART – A

Answer all questions **[10 x 1=10M]**

1. a) Define pseudo code?
   b) What is the purpose of type of keyword in C?
   c) Define union? How to access it?
   d) Define token? List the tokens of c?
   e) What is scope of a variable?
   f) What is else if ladder?
   g) Give any 2 differences between arrays and structures?
   h) Define a storage class? List the storage classes available in C?
   i) What is the output of the following C program?

```
#include<stdio.h>
int main(){
int i=2,j=2;
while(i+1?--i:j++)
printf("%d",i);
return 0;
}
```

   j) Write C statements to find maximum of two numbers using ternary operator?

PART-B

Answer one question from each unit **[5 x 12=60M]**

UNIT-I

2. a) Explain the basic structure of a C program by explaining all the sections with examples.
   b) Differentiate high level language and machine language

(OR)

3. a) Explain in detail about the increment and decrement operators with example programs.
   b) Explain about logical operators with example program

UNIT-II

4. a) Explain about if, if..else, nested if else with its syntax.
   b) Write a C program to check whether the given number is prime or not

(OR)

5. a) Design and develop a C program to reverse of an integer number NUM and check whether it is PALINDROME or NOT.
   b) Demonstrate the usage of a do-while statement with an example program.

UNIT-III

6. a) Write a program to find the transpose of a matrix of order mxn using arrays?
   b) Explain about string handling functions with an example programs.

(OR)

7. a) What is a recursion? Write a recursive program to find the GCD of two numbers?
   b) Explain in detail about call by value and call by reference with a sample Program?

UNIT-IV

8. a) Explain about self referential structures?
   b) Write a program to use pointer to a structure?

(OR)

9. a) Write about 'C' pre-processor directives.
   b) Distinguish between malloc() & calloc() memory allocation.

UNIT- V

10. a) Write a simple program to open and close a file?
    b) Write a C program to count the number of characters in a file?

(OR)

11. a) Write about command line arguments?
    b) Write a C program to open a file using command line arguments and display its contents.

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