

AR13

Code: 13HS1003

SET-1

**ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)**

I B. Tech II Semester Regular / Supplementary Examinations, May- 2016

**ENVIRONMENTAL STUDIES
(Common to CE, MECH, CSE & IT)**

Time: 3 hours

Max Marks: 70

PART – A

Answer all questions

[10 x 1=10M]

1. a) Biosphere
- b) Afforestation
- c) Succession
- d) Endemic species
- e) Land degradation
- f) food web
- g) Sustainable development
- h) cyclone
- i) acid rain
- j) Urbanization

PART-B

Answer one question from each unit

[5 x 12=60M]

UNIT-I

2. a) Explain about multidisciplinary nature of the subject environmental studies?
- b) Critically discuss the composition of the lithosphere and its role?

[6M + 6M]

(OR)

3. a) What do you mean by Deforestation? Discuss its causes.
- b) Define energy and explain various merits and demerits in using non-renewable energy resources?

[6M + 6M]

UNIT-II

4. a) Enumerate some characteristics of an Ecosystem.
- b) Discuss the Bio-geographical classification of India and values of biological resources

[4M + 8M]

(OR)

5. a) Explain the important types and characters of a desert ecosystem?
b) Discuss in brief the biodiversity at Global Level and National Level also. [6M + 6M]

UNIT-III

6. a) Define pollution, write the different disposal methods of municipal solid waste?
b) Discuss different effects of water pollution on man and materials? [6M + 6M]

(OR)

7. a) Explain about the sources and effects of biomedical waste?
b) Write about the various ways of Solid Waste Management. [6M + 6M]

UNIT-IV

8. a) Define sustainable development and explain urban energy related problems?
b) What is rehabilitation and explain the watershed management to conserve water? [6M + 6M]

(OR)

9. a) Write notes on Floods
b) Nuclear holocaust with case study?
c) Provisions of EPA-1986? [4M + 4M + 4M]

UNIT-V

10. a) Explain about consumerism and waste products.
b) Role of IT to improve environmental quality? [6M + 6M]

(OR)

11. a) Prepare a document for your visited any polluted site and give your conclusions
b) Rise of urban slums and their problems?
c) How does the value education help the environment? [4M + 4M + 4M]

13CS1001

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)

I.B. Tech II Semester Regular / Supplementary Examinations, May- 2016

COMPUTER PROGRAMMING

(Common to ECE & EEE)

Time: 3 hours

Max Marks: 70

PART-A

Answer all questions

[10 X 1 = 10M]

1. a) Point down the differences between an **algorithm** and a **flowchart**.
- b) Determine the value of the following logical expression if a=5,b=10 and c=-6
 $a > b \ \&\& \ a < c$
- c) Justify “Using goto statement is not always a good programming practice”.
- d) In what ways does a **switch** statement differ from an **if** statement?
- e) Mention one limitation of using **getchar** and **scanf** functions for reading strings
- f). Distinguish between **Global** and **Local** variables.
- g) How is a pointer initialized?
- h) Write the syntax of nested structure
- i) How does an append mode differ from a write mode?
- j) Explain the general format of **fseek** functions.

PART-B

Answer one question from each unit

[5 X 12=60]

UNIT - I

2. a) Explain the program development steps in C with a neat diagram.
- b) Write an algorithm and draw a flowchart to find the sum of the even numbers between 1 and 50. [6M + 6M]

(OR)

3. a) Explain in detail about different types of operators available in C language.
- b) What is type conversion? Differentiate between implicit and explicit type conversions. [7M + 5M]

UNIT - II

4. a) Write a program to determine and print the sum of the following harmonic series for a given value of n:
 $1 + 1/2 + 1/3 + \dots + 1/n$
- b) Explain the use of ‘while’ and ‘for’ statements with example. [6M + 6M]

(OR)

5. a) Write a program using a do-while loop to calculate and print the first m fibonacci numbers.
b) Write a program to produce the following form of Floyd's triangle

```
1
0 1
1 0 1
0 1 0 1
1 0 1 0 1
```

[6M + 6M]**UNIT – III**

6. Write a C program for Matrix Multiplication by defining functions: readMatrix, writeMatrix, multiplyMatrix and DisplayMatrix. **[12M]**

(OR)

7. What are the various parameter passing mechanisms (call by value and reference)? Explain with C programs. **[12M]**

UNIT – IV

8. a) Explain how arrays are related to pointers. Give an example
b) If m and n have been declared as integers and p1 and p2 as pointers to integers, then find out the errors, if any, in the following statements.
i. p1 = &m; ii. p2 = n; iii. m=p2-p1; iv. *p1 = &n; **[4M + 8M]**

(OR)

9. a) Distinguish between structures and union with example
b) Write a C program using structure to create a library catalogue with the following fields; Access number, author's name. Title of the book, year of publication, publisher's name. **[6M + 6M]**

UNIT – V

10. a) What are the differences between buffered and unbuffered file I/O functions?
b) Write a C program to simulate DOS TYPE command. **[4M + 8M]**

(OR)

11. a) Explain about various file handling functions in C with examples.
b) Write a program to copy the contents of one file to another using file handling functions. **[6M + 6M]**