Bachelor of Computer Application (BCA)

4ᵗʰ Semester (Batch 2021-24)

ENVIRONMENTAL STUDIES (ESL-221)

Paper–VII

Time Allowed—3 Hours]   [Maximum Marks—75

Note :– Section–A : (25 Marks) This section consists of **seven** short type questions. Candidates are required to attempt **five** questions, each carrying **5** marks. Answer to any of the questions should not exceed two pages.

Section–B : (50 Marks) This section consists of **eight** essay type questions. Candidates are required to attempt **five** questions, each carrying **10** marks. Answer to any of the questions should not exceed five pages.

SECTION—A

1. What are different types of mineral resources ? Mention about effects of their use and over utilization.

2. Discuss upon environmental effects of Soil erosion.

3. What is equitable use of resources for sustainable lifestyles ?

4. Describe about 'Biogeographical classification of India'.

5. Write note on Cyclones and its effects.

6. Discuss about *in situ* methods of conservation of biodiversity.

7. Write note on HIV/AIDS.

SECTION—B

8. Discuss about food resources and effects of modern agriculture.

9. Mention the role of individual in conservation of natural resources.

10. Write note on 'Energy flow in an ecosystem'.

11. Write a detailed note on Environmental Protection Act, 1986.

12. Explain about Disaster Management. Mention about causes and consequences of acid rain.

13. What is Rain Water Harvesting and Watershed Management ? Discuss about resettlement and rehabilitation of people.

14. Write notes on :

    (i) Human Rights

    (ii) Environment and Health.

15. What is Ozone depletion ? Discuss their causes, effects and mitigation measures.

Bachelor of Computer Application (BCA) 4ᵗʰ Sem.
(Batch 2021-24)
INFORMATION SYSTEMS
Paper-II

Time Allowed—3 Hours]   [Maximum Marks—75

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. (a) In what ways the information can be documented ? Discuss.   7

   (b) Discuss different methods for capturing and accessing of on-line information.   8

2. (a) Is it possible to convert information into computer-readable form ? If yes, Discuss.   6

   (b) Valuable information must have certain characteristics. Explain.   9

SECTION—B

3. What are the different types of Information Systems ? Explain Computer Based Information System in detail.

15

4. Explain different phases of development life cycle of Information System in detail with the help of an example. 15

SECTION—C

5. What are the basic concepts of MIS ? Explain the working of three levels of management in an organization. 15

6. What are the different types of decisions supported by DSS ? Explain the working of Expert System as DSS. 15

SECTION—D

7. What are the advantages and disadvantages of Accounting Information System ? Explain its primary components in detail. 15

8. Explain the term Marketing System. What are its participants ? What are the problems faced by marketing system ? 15

Exam. Code : 107204
Subject Code : 1666

Bachelor of Computer Application (BCA) 4th Sem.
(Batch 2021-24)

DATA STRUCTURES AND FILE PROCESSING

Paper–I

Time Allowed—3 Hours]   [Maximum Marks—75

Note :— Attempt **FIVE** questions in all, selecting at least
ONE question from each section. The fifth
question may be attempted from any section. All
questions carry equal marks.

SECTION—A

1. What are the features of different types of data
structures ? Explain the procedure of time and space
trade off.   15

2. (a) What are the different operations that can be
performed on Stacks ? Explain.   10

   (b) Compare the features of Stacks and linked lists.

                                                          5

SECTION—B

3. (a) Discuss the operations that can be performed on
trees.   5

   (b) How depth first search operations are performed
on graphs ? Explain.   10

4. Explain the following :

    (a) Role of trees.   5

    (b) Binary search.   10

SECTION—C

5. Discuss the following sorting techniques by taking suitable examples :

    (a) Insertion sort.   7.5

    (b) Quick sort.   7.5

6. Explain the working of the following sorting techniques :

    (a) Heap sort.   7.5

    (b) Bubble sort.   7.5

SECTION—D

7. (a) Discuss the role of different types of file organizations.   10

    (b) Explain the concept of Master and transaction file.   5

8. Write notes on the following :

    (a) Compaction.   7.5

    (b) Blocking.   7.5

Exam. Code : 107204

Subject Code : 1668

Bachelor of Computer Application (BCA) 4ᵗʰ Semester
(Batch 2021-24)

INTERNET APPLICATIONS

Paper—III

Time Allowed—3 Hours] [Maximum Marks—75

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION–A

1. Write a note on Evolution of Internet. Also explain its working.

2. What are various advantages and disadvantages of email ? What do you mean by filtering email messages ?

SECTION–B

3. What is protocol ? Explain the use and working of HTTP and TCP/IP.

4. What is difference between HTML and DHTML ? Give example of both.

SECTION–C

5. Explain the working of Search Engine. What is SEO ?

6. What is difference between Web Directory and Search Engine ? Write about their uses.

SECTION–D

7. Explain the difference between Internet, Intranet and Extranet. Also give example of each of these.

8. Which hardware, software, protocols are involved in the working of Intranet and Extranet ?