A–8856	Sub. Code
	4BSO1C1

B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

First Semester

Software

FUNDAMENTALS OF COMPUTERS AND C-PROGRAMMING

(CBCS 2014 onwards)

Time : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** questions.

1. What do you mean by hardware and software?

2. Convert the octal number 24.25 into decimal.

3. What is MICR? Give any two applications of MICR.

4. What is compiler? How compilers are different from interpreters?

5. Name the storage classes used in C.

6. What are the rules to be followed for forming an identifier?

7. How will you initialize a character array?

8. When pointers are useful?

9. Give the declaration of a union with an example.

10. What is the difference between opening a file in w+ mode and a+ mode?

Part B   (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Describe the characteristics of computers.

Or

(b) Perform the operation 125 - 27 using 1's and 2's complement.

12. (a) Describe the different types of monitors.

Or

(b) What are the types of viruses? Explain

13. (a) Describe the logic operators available in C.

Or

(b) Write a program to print the fibonacci numbers using recursive function

14. (a) Write a program to obtain the sum of diagonal elements of a matrix

Or

(b) Explain array of pointers.

15. (a) What is a structure? Also compare using array

Or

(b) Explain the following functions:

(i) fgetc

(ii) fputc ( )

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Part C (3 × 10 = 30)

Answer any **three** questions.

16. Describe the different generations of Computers.

17. What are the major auxiliary storage devices for a computer? Explain any four of it

18. Describe the loop structures available in C.

19. Write a program to arrange the names in alphabetical order and assign roll number to each name.

20. Write a program to copy the contents of one file to another.

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A–8862	Sub. Code
	4BSOE2A

B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

Fifth Semester

Software

ELECTIVE-DATABASE MANAGEMENT SYSTEM

(CBCS – 2014 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **ALL** questions.

1. List any four applications of database system.

2. Define Schema.

3. What is atomic domain?

4. What is the purpose of Boyce-coded Normal Form?

5. List the types of Network .

6. What is Intraquery parallelism?

7. What is Integrity constraint?

8. Define Views.

9. Differentiate function and procedure.

10. What is package?

Part B (5 × 5 = 25)

Answer **ALL** questions, choosing either (a) or (b).

11.   (a) Write short notes on data definition language.

Or

(b) What is weak entity set? Explain with an example.

12.   (a) Discuss about the features of good relational designs.

Or

(b) Explain Third Normal Form.

13.   (a) Explain speedup and scaleup in parallel systems.

Or

(b) Write short notes on distributed systems with an example

14.   (a) How do you create table and perform table management?

Or

(b) How do you create user privilages?

15.   (a) How do you integrate SQL in a PL/SQL program.

Or

(b) Define function. Explain with an example

Part C (3 × 10 = 30)

Answer any **three** questions.

16.   Explain Specilization and Generalization in ER diagram.

17.   Explain in detail about multivalued dependencies

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18. What are the two approaches to store the relation in the distributed database? Explain.

19. Discuss about Integrity Constrains.

20. How do you create and modify a trigger? Explain with an example.

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A–8863	Sub. Code
	4BSO6C2

B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

Sixth Semester

Software

SOFTWARE ENGINEERING

(CBCS – 2014 onwards)

Time : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** questions.

1. Define Programmer.

2. Write a note on Functional Structure.

3. What is COCOMO?

4. What is Regular expression?

5. List out the three mapping steps of Jackson Structured programming.

6. What is Recursion?

7. What is Software testing?

8. Give any two maintenance tools.

9. What is SQA plan?

10. What are external failure costs?

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Discuss the various project size categories in brief.

Or

(b) What are the steps to consider while defining the problem?

12. (a) Explain the concept of Product complexity.

Or

(b) Describe the working of decision tables.

13. (a) What are the steps involved in real time system design process?

Or

(b) Explain the concept of Single Entry and Single Exit Constructs.

14. (a) Discuss the strategic issue of software testing.

Or

(b) Explain the concept of system testing.

15. (a) Write a note on Background Issues of software quality assurance.

Or

(b) Describe the concept of software reviews.

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Part C (3 × 10 =30)

Answer any **three** questions.

16. Discuss the quality and productivity factors in detail.

17. Explain the various cost estimation techniques.

18. Write a detailed note on Software design notations.

19. Describe the concept of Unit Testing in detail.

20. Explain the need of Quality Concepts.

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