(i) Printed Pages : 2 Roll No. .....

(ii) Questions : 9 Sub. Code : 0941

Exam. Code : 0030

Bachelor of Computer Applications 4th Semester

(2042)

DATABASE MANAGEMENT SYSTEM

Paper : BCA-16-405

Time Allowed : Three Hours] **[Maximum Marks : 65**

Note :— Attempt **one** question each from Sections A, B, C and D. Each question is of 13 marks. Section E is compulsory.

SECTION—A

1. Explain three level architecture of Data base management system. 13

2. (a) Explain the concept of database instance and schema with the help of example. 5

   (b) Differentiate between File system and DBMS. 8

SECTION—B

3. Explain network and hierarchical models. 13

4. (a) Explain Codd's rules for an RDBMS. 8

   (b) Explain selection and projection operations used in relational algebra. 5

SECTION—C

5. (a) Explain GRANT and REVOKE in SQL with examples. 5

(b) Explain difference between DELETE, DROP and TRUNCATE commands with example. 8

6. (a) Explain any three date functions. 6

(b) What are views ? Why are they significant in DBMS ? 7

SECTION—D

7. (a) Explain block structure of PL/SQL. 7

(b) How exceptions are handled in PL/SQL ? 6

8. What is a database trigger ? What are its various types ? What functions are performed by triggers ? Explain with suitable PL/SQL code. 2+5+3+3

SECTION—E

9. Write a note on :

(a) Foreign Key 2

(b) ROLL BACK Statement 2

(c) Cursor 3

(d) PL/SQL Data Types 3

(e) Working of GROUP BY clause 3

(i) Printed Pages : 2 Roll No. .....

(ii) Questions : 9 Sub. Code : 0 9 4 0

Exam. Code : 0 0 3 0

Bachelor of Computer Applications 4th Semester

(2042)

OPERATING SYSTEM CONCEPTS AND LINUX

Paper : BCA-16-404

Time Allowed : Three Hours] **[Maximum Marks : 65**

Note :— Attempt **one** question each from Sections A to D. Question No. 9 (Section E) is compulsory. All questions carry equal marks.

SECTION—A

1. What do you understand by operating system ? Draw the difference between Multi-processing and multi-tasking systems. 13

2. What is CPU Scheduling ? Describe FCFS and SJF CPU scheduling algorithms in detail. 13

SECTION—B

3. Define deadlock. Explain different methods of handling deadlocks in detail. 13

4. What do you understand by virtual memory ? Explain any two page replacement algorithms with suitable examples. 13

SECTION—C

5. What is LINUX ? Explain any five commands of LINUX with proper syntax. 13

6. How can you change permissions of files and directories in LINUX ? Explain with suitable examples. 13

SECTION—D

7. Who is super user ? Explain the duties of super users with the commands of LINUX. 13

8. What do you mean by VI editor ? Explain the working of VI editor in detail. 13

SECTION—E

(Compulsory Question)

9. Write short notes on the following :

(a) cp command 3

(b) swapping 2

(c) who command 2

(d) kill command 2

(e) wildcards 2

(f) grep command. 2

(i) Printed Pages : 2

(ii) Questions : 9

Roll No. 20052375

Sub. Code : 0939

Exam. Code : 0030

Bachelor of Computer Applications 4th Semester

(2042)

SOFTWARE PROJECT MANAGEMENT

Paper : BCA-16-403

Time Allowed : Three Hours] **[Maximum Marks : 65**

Note :— Attempt **one** question each from Sections A to D. Question No. 9 (Section E) is compulsory. All questions carry equal marks.

SECTION—A

1. Who is project manager ? Explain the role of project manager in project management. 13

2. What do you mean by software project management ? Explain the principles of modern software management. 13

SECTION—B

3. What is staff acquisition ? What are the issues in project staff acquisition and team formation ? 13

4. What do you understand by project integration ? Explain project monitoring and controlling in detail. 13

SECTION—C

5. What do you mean by scope management ? Describe the role of Seven core metrics with suitable examples. 13

6. What do you understand by process automation ? Explain with the help of suitable examples. 13

SECTION—D

7. What do you mean by project network diagrams ? Describe the use of PERT and CPM in detail. 13

8. What do you understand by COCOMO Model ? Explain its use with suitable examples. 13

SECTION—E

(Compulsory Question)

9. Write short notes on the following :

(a) Gantt charts 3

(b) Resource planning 2

(c) Evolution of software economics 2

(d) Integrated change control 2

(e) Checkpoint of the Process 2

(f) Iterative process planning. 2