UG – 402 **BCA–13**

B.C.A DEGREE EXAMINATION – JUNE 2019.

Third Year

TCP/IP PROGRAMMING

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain about TCP/IP stack with neat diagram.
2. Summarize about UNS message format.
3. Describe about IP addressing and its components.
4. Discuss about basic terminology of TCP.
5. Explain about the features of TCP.
6. Write short notes on the features of UDP.
7. Explain about the terminology of UDP.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain in detail about TCP/IP layering with neat diagram.

9. Describe in detail about IP subnet addressing.

10. Write brief notes on overview of internet protocol with diagram.

11. Elaborate about TCP structure and its components with neat diagram.

12. Briefly discuss about TCP header with diagram.

13. Explain in detail about the overview of User Datagram Protocol

14. Describe in detail about TCP/IP over ATM networks.

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UG – 403 **BCA–14**

B.C.A. DEGREE EXAMINATION – JUNE 2019.

Third Year

C++ AND OBJECT ORIENTED PROGRAMMING

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Briefly explain the benefits of object oriented programming.

2. Briefly explain various storage classes supported by C++.

3. Briefly explain the new and delete operators with examples.

4. Explain how infinite loops can be checked and avoided.

5. Briefly describe structures in C++ with examples.

6. Distinguish call-by reference and call-by value parameters.

7. Describe operator overloading with examples.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain the basic concepts of object oriented programming.

9. Discuss in detail about I/O stream class hierarchy with neat pictorial representation and give the C++ code.

10. Explain in detail about bitwise operators, scope resolution operator and conditional operator with examples.

11. Explain in detail about various if-else and switch case control structures with examples.

12. Explain in detail about single dimensional array and multi dimensional array with suitable C++ examples.

13. Describe in detail about classes and objects with suitable examples.

14. Explain in about context diagrams in UML.

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UG-404 **BCA-15**

B.C.A. DEGREE EXAMINATION
JUNE 2019.

Third Year

THEORY OF COMPUTER SCIENCE

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain about operations on sets.

2. Describe about the special types of functions.

3. Discuss about logic statements with example.

4. Write short notes on quantifiers.

5. Explain about context free language.

6. Summarize about Turing machines.

7. Give short notes on paths and reach in graph theory.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions

8. Explain in detail about notation and description of sets.

9. Describe in detail about invertible and composition of functions.

10. Briefly discuss about tautological implications and equivalence if formulae.

11. Elaborate about theory of inference of propositional and predicate calculus.

12. Explain in detail about Non-deterministic finite automata.

13. Write brief notes on the techniques for Turing machine construction.

14. Briefly discuss about matrix representation of graphs.

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UG – 405 **BCA–16**

B.C.A. DEGREE EXAMINATION – JUNE 2019.

Third Year

INTRODUCTION TO INTERNET PROGRAMMING

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Give short notes on Java API with example.

2. Explain about Java libraries with example.

3. Discuss about CONTINUE and GO TO statement in Java.

4. Write a simple program using array to display sequence of characters.

5. Create a Java program using final keyword.

6. Describe about wrapper classes with example.

7. Explain about interfaces in Java with example.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain in detail about structure of a Java program. Give suitable example.

9. Elaborate about various data types in Java with example.

10. Describe in detail about control structures in Java. Give suitable example.

11. Briefly discuss about arrays and its types in Java with example.

12. Explain in detail about exception handing with example.

13. Describe in detail about abstract classes in Java with example.

14. Briefly discuss about multithreading in Java with example.

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UG – 406 **BCA–17**

B.C.A DEGREE EXAMINATION – JUNE 2019.

Third Year

INTRANET ADMINISTRATION

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain about the application areas of intranet.

2. Describe about the catalog intranet with example.

3. Discuss about the groupware of operating system.

4. Summarize about the virtual private network.

5. Explain about the account policies of intranet.

6. Describe about adding interactive to the web graphics.

7. Write short notes on various mail protocols.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain in detail about software and hardware requirement for intranet.

9. Elaborate in detail about multiple layers of intranet security.

10. Briefly discuss about the selection of computing infrastructure for intranet.

11. Describe in detail about the encryption/decryption using SSL.

12. Explain in detail about network installation and administration.

13. Briefly discuss about the graphical tools for creating animation.

14. Describe in detail about the service protocols TCP, IP, TELNET, HTTP, FTP and UDP.

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UG – 407 **BCA–18**

B.C.A. DEGREE EXAMINATION – JUNE 2019.

Third Year

MANAGEMENT PRINCIPLES AND TECHNIQUES

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write short notes on communication in management.

2. Explain about the staffing in management principle.

3. Summarize about artificial variables in linear programming.

4. Describe about finding optimal solution in linear programming.

5. Discuss about critical paths of PERT/CPM.

6. Explain about network diagram of PERT.

7. Write notes on individual replacement policy.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Solve the following LPP using simplex method

Maximize z=3x+5y

Subject to $x + y \geq 2; y \leq 6; 3x + 2y = 18$; and $x, y > 0$.

9. Solve the following transportation problem.

	A	B	C	Supply
I	6	8	4	14
II	4	9	8	12
III	1	2	6	5
	6	10	15	

10. Briefly discuss about the formulation of LP models.

11. Elaborate about the history of operations research.

12. Explain in detail about the Project management and review technique (PERT).

13. Describe in detail about the Critical Path Method (CPM)

14. Briefly discuss about the variable maintenance cost with variable money value.

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