UG–396 **BCA–07**

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

Second Year

WINDOWS PROGRAMMING

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Discuss about windows and its elements with example.

2. Describe about Event Driven programming.

3. Explain about property window.

4. Write notes on creating buttons at run-time.

5. Differentiate between While loop and On Goto statement.

6. Discuss about access specifies like public and private with example.

7. Describe about creating an active X control project.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain in detail about dialog boxes and different menus in visual basic programming.

9. Describe in detail about Graphical user interface with example.

10. Briefly discuss about events based on keyboard buttons and mouse actions.

11. Write brief notes on visual basic data types with example.

12. Explain in detail about using MDI applications with example.

13. Describe the process of creating database in VB. Give suitable example.

14. Write brief notes on WINAPI.

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UG – 397 **BCA–08**

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

Second Year

MULTIMEDIA

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write note on the hardware of multimedia.

2. Explain about Multimedia distribution with example.

3. Describe about business communications of multimedia.

4. Discuss about how multimedia supports publishing industry.

5. Summarize about Icon author and ImageQ with suitable example.

6. Write short notes on working with learning styles with example.

7. Explain about sound and video in multimedia applications.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain in detail about various multimedia components with example.

9. Describe in detail about the following concepts

   (a) Sound card

   (b) Laser Disc

   (c) DVD

10. Elaborate in detail about interactive systems for teaching and learning.

11. Discuss in detail about multimedia pedagogues. Give suitable example.

12. Explain in detail about Multimedia authoring tools with suitable example.

13. Write brief notes on planning for creation and multimedia building blocks.

14. Describe in detail about development TIPS of multimedia applications

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UG–398 BCA–09

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

Second Year

RELATIONAL DATABASE MANAGEMENT SYSTEMS

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write note on RDBMS terminology with suitable example.

2. Discuss in detail about components of an ER diagram with example.

3. Explain about properties of decomposition.

4. Compare between fourth normal form and fifth normal form.

5. Describe about Microsoft access database.

6. Write note on setting field properties of a database.

7. Discuss about finding and replace menu with suitable example.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain in detail about steps of database design with suitable example.

9. Distinguish between single valued dependencies and multi valued dependencies.

10. Describe the following normalization form 1NF, 2NF, 3NF and BCNF with example.

11. Elaborate about functional dependency and normalization with example.

12. Write brief notes on forms and reports with suitable.

13. Write note on concepts opening a database with example.

14. Explain in detail about creating a table with suitable example.

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UG–399 **BCA–10**

B.C.A. DEGREE EXAMINATION — JUNE, 2019.

Second Year

COMPUTER NETWORK

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain about Transmission Media.

2. Explain about TCP/IP transmission protocols.

3. Describe about Asynchronous data transmission.

4. Describe about Synchronous data transmission protocol.

5. Describe about finding shortest path during data transfer.

6. Explain about World Wide Web with example.

7. Write notes on Repeaters and Switches with diagram.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain in detail about the layers OSI reference model with diagram.

9. Discuss in detail about wireless transmission signals.

10. Write brief notes on medium access control protocol.

11. Describe in detail about IEEE standard 802.3 and Ethernet.

12. Explain in detail about network layer design issues.

13. Discuss briefly about congestion control algorithms.

14. Describe about the overview of network services.

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UG – 400 **BCA–11**

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

Second Year

INTRODUCTION TO SOFTWARE ENGINEERING

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. What is Software Product?

2. Write down the phases in Software development

3. Write in detail about the Role of System Analyst.

4. Explain the decomposition techniques in estimation.

5. Explain the basic concepts of scheduling.

6. List out the qualities of software product.

7. Explain Blackbox testing.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain in detail about RAD and Spiral models.

9. Explain the components and characteristics of software product.

10. Explain in detail about Project development team structures.

11. Mention the estimation models and explain.

12. Explain the Scheduling plan for software project.

13. Explain Object-Behaviour Model.

14. Explain the testing strategies

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UG-401 **BCA–12**

B.C.A. DEGREE EXAMINATION — JUNE, 2019.

Second Year

COMPUTER ORIENTED NUMERICAL METHODS

Time : 3 hours Maximum marks : 75

PART A — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

1. Describe the different types of errors.

2. Find all solutions of $5x + \ln x = 10000$ correct to 4 decimal places use the Newton method.

3. Describe the bisection method.

4. Solve using Gauss- Jordan elimination method.

   $x + y + z = 5$; $2 + 3y + 5z = 8$; $4x + 5z = 2$.

5. Show by Jacobi iteration: $5x_1 - 2x_2 + 3x_n = -1$; $-3x_1 + 9x_2 + xn = 2$; $2x_1 - x_2 - 7xn = 3$.

6. Find the cubic polynomial which takes the following values: $y(0)=1$, $y(1)=0, y(2)=1$ and $y(3)=10$.

7. Derive the Simpson's 1/3 rule.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Find the root of the equation $x_3 - 5x + 3$ upto three decimal digits.

9. Solve the following system of linear equation by Gauss Elimination method.

$2x_1 - x_2 + x_3 = 3$, $3x_1 + 2x_2\ 2x_3 = -2$; $x_1 - x_2 + x_3 = 6$.

10. Solve by Gauss — Seidal method,

$2x_1 - x_2 + x_3 = 5$; $x_1 + 2x_2 + 3x_3 = 10$;
$x_1 + 3x_2 + 2x_3 = 7$.

11. The population of a town in decennial census was as given below :

Year	1891	1901	1911	1921	1931
Population (in thousands)	46	66	81	93	101

Estimate the population for the year 1925.

12. Construct a forward difference table for the following data :

x :	3.60	3.65	3.70	3.75
y :	36.598	38.475	40.447	42.527

13. Use Euler's Method to determine an approximate value of y at $x = 0.2$ from initial value problem $\frac{dx}{dy} = 1 - x + 4y \; y(0) = 1$ taking the step size $h = 0.1$.

14. Using divided difference find the value of $f'(8)$ given that:

x :	6	7	9	12
$f(x)$:	1.556	1.690	1.908	2.158