

UG-125

CCE

U.G. DEGREE EXAMINATION –
DECEMBER, 2018.

Second Year

ENVIRONMENTAL STUDIES

Time : 3 hours

Maximum marks : 75

PART A — (3 × 5 = 15 marks)

Answer any THREE questions.

Each answer should not exceed 2 pages.

1. Discuss the nature and scope of environmental studies.

சுற்றுச்சூழல் ஆய்வுகளின் இயல்பையும் நோக்கத்தையும் பற்றி விவாதிக்கவும்.

2. Give a short note on energy resources.

ஆற்றல் வளங்கள் – விளக்கவும்.

3. Write a brief account of ecosystem.

சுற்றுச் சூழலியல் அமைப்பு – விளக்கவும்.

4. What are the causes for water pollution?

நீர் மாசுக்கான காரணங்கள் யாவை?

5. Explain any five strategies of disaster management.

பேரிடர் மேலாண்மையின் ஏதேனும் ஐந்து திட்டங்களை விளக்கவும்.

PART B — (4 × 15 = 60 marks)

Answer any FOUR questions.

Each answer should not exceed 5 pages.

6. Explain the significance of environmental studies.

சுற்றுச்சூழல் ஆய்வுகளின் முக்கியத்துவத்தை விளக்கவும்.

7. Write a detailed note on “Need and importance of Environmental Education”.

சுற்றுச்சூழல் கல்வியின் தேவை மற்றும் முக்கியத்துவத்தை விளக்கவும்.

8. What are the threats to biodiversity? Explain.

பல்லுயிரியலுக்கான அச்சுறுத்தல்கள் என்ன விளக்கவும்.

9. Analyze the role of an individual in prevention of pollution.

மாசு குறைபாட்டை தடுக்கும் ஒரு நபர் பங்கை ஆராயவும்.

10. Explain the significance of Environmental ethics.

சுற்றுச்சூழல் நெறிமுறைகள் – முக்கியத்துவத்தை விளக்கவும்.

11. Explain the significance of solid waste management.

திட கழிவு மேலாண்மை – முக்கியத்துவத்தை விளக்கவும்.

12. Explain how environment influences human health.

சுற்றுச்சூழல் மனித ஆரோக்கியத்தை எவ்வாறு பாதிக்கிறது என்பதை விளக்கவும்.

UG-502

BCA-07

**B.C.A. DEGREE EXAMINATION —
DECEMBER 2018.**

Second Year

WINDOWS PROGRAMMING

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. List the steps in building the project in VB.
2. Differentiate model and Modeless Dialog Box
3. What is the properties window in VB
4. What do you mean by control arrays?
5. Discuss public and Private scope rules
6. Write short note on WINAPI
7. What is OLE? Explain.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain how to create and run a simple project in VB.
 9. Discuss about the controls which does not have events.
 10. Describe how to create buttons at run-time through object declaration.
 11. Explain how define and declare user defined functions.
 12. Write about Multiple document Interface.
 13. Describe how to activate other applications from VB.
 14. Explain how to use third party controls in VB.
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UG-503

BCA-08

**B.C.A. DEGREE EXAMINATION –
DECEMBER, 2018.**

Second Year

MULTIMEDIA

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions

1. Explain about CD-ROM and DVD.
2. Write notes on distribution of multimedia.
3. Describe about multimedia in publishing industry.
4. Discuss about knowledge transfer of multimedia.
5. Explain about applications of Hypertext.
6. Write notes on learning interface design.
7. Discuss about logic flowchart in multimedia development.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions

8. Write brief notes on hardware used for multimedia. Give example.
 9. Describe in detail about production of multimedia.
 10. Explain in detail about multimedia pedagogues.
 11. Describe in detail about Everest Authoring System Icon and Image=Q.
 12. Discuss briefly about multimedia development tools.
 13. Explain in detail about planning multimedia program/application.
 14. Write brief notes on development TIPS of multimedia building blocks.
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UG-504

BCA-09

**B.C.A. DEGREE EXAMINATION –
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Second Year

**RELATIONAL DATABASE MANAGEMENT
SYSTEMS**

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write notes on Data dictionary with example.
2. Explain about the attributes of ER model.
3. Describe about single valued dependencies.
4. Illustrate the properties of decomposition.
5. Explain in detail about forms and reports.
6. Write notes on objects of access database.
7. Discuss about different sorting mechanisms in a database.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Describe in detail about RDBMS Terminology.
9. Explain in detail about Relational model definitions.
10. Write brief notes on multivalued dependencies and multivalued normalization.
11. Discuss in detail about the features of Microsoft Access.
12. Create a student database of five tables and make use of view concept in Microsoft access.
13. Explain the following concepts:
 - (i) Add and save records
 - (ii) Edit records.
14. Describe in detail about the process of modify fields and modify datasheets.

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BCA-10

**B.C.A. DEGREE EXAMINATION –
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COMPUTER NETWORK

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions

1. Explain about TCP/IP transmission protocols.
2. Write notes on communication satellites.
3. Describe about Synchronous data transmission protocol.
4. Discuss about channel allocation problems.
5. Explain about World Wide Web with example.
6. Differentiate between TCP and UDP.
7. Write notes on Repeaters and Switches with diagram.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions

8. Write brief notes on the layers of TCP transmission protocol.
9. Discuss in detail about wireless transmission signals.
10. Explain in detail about data link layer issues with example.
11. Describe in detail about IEEE standard 802.3 and Ethernet.
12. Write brief notes on network routing algorithms.
13. Discuss briefly about congestion control algorithms.
14. Explain in detail about ISDN and Broadband ISDN.

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BCA-11

**B.C.A. DEGREE EXAMINATION —
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INTRODUCTION TO SOFTWARE ENGINEERING

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. What are the baseline specifications of Software?
2. Explain software applications.
3. Describe the sources of issues in software testing.
4. Explain software project estimation.
5. What are the major influencing factors in software quality?
6. Write in detail about Risk identification.
7. Give a brief note on system analysis.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain software quality concepts.
 9. Explain system analysis in detail.
 10. How will you maintain software quality through reviews?
 11. Discuss about software tools and environment.
 12. What are cohesion and coupling? How will you use these concepts in design?
 13. Explain software project planning in detail.
 14. What is ISO? Explain the ISO standards for software quality.
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UG-507

BCA-12

**B.C.A. DEGREE EXAMINATION —
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Second Year

COMPUTER ORIENTED NUMERICAL METHODS

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write down the pitfalls in computation.
2. Find the positive root of using bisection method correct to one decimal place, $f(x) = xe^x - 1 = 0$.
3. Describe the Cramer's rule.
4. Describe Gauss Jordan method.

5. Determine the interpolating polynomial for data :

$$\begin{array}{l} x: \quad 0 \quad 0.5 \quad 1 \quad 2 \\ f(x): \quad 0 \quad y \quad 3 \quad 2 \end{array}$$

Find y if the coefficient of x^3 in $P_3(x)$ is 6.

6. Find the least square approximation of second degree for the discrete data :

$$\begin{array}{l} x: \quad -2 \quad -1 \quad 0 \quad 1 \quad 2 \\ f(x): \quad 15 \quad 1 \quad 1 \quad 3 \quad 19 \end{array}$$

7. Describe the Euler's method.

PART B — ($5 \times 10 = 50$ marks)

Answer any FIVE questions.

8. Find all solutions of $e^{2x} = x + 6$, correct to 4 decimal places ; use the Newton method.
9. Use the bisection method to find solutions accurate to within 10^{-2} for $x^3 - 7x^2 + 14x - 6 = 0$ on $[0, 1]$.
10. Solve the linear system

$$9x_1 + x_2 + x_3 = b_1$$

$$2x_1 + 10x_2 + 3x_3 = b_2$$

$$3x_1 + 4x_2 + 11x_3 = b_3$$

Using Jacobi's iteration method.

11. Using Newton's forward difference formula evaluate $f(15)$. Given the following table of values.

x :	10	20	30	40	50
$f(x)$:	46	66	81	93	101

12. Explain linear and polynomial regression.

13. Evaluate the integral $I = \int_0^{\pi/2} \sin x dx$, using two terms Gaussian formula.

14. For the IV order

$$y' + 2y = 2 - e^{-4t}y(0) = 1.$$

Use Euler's method with a step size of $h = 0.1$ to find approximate values of the solution at $t = 0.1, 0.2, 0.3, 0.4$ and 0.5 . Compare then to the exact values of solution.
