

UG-139

CCE

U.G. DEGREE EXAMINATION —
JUNE, 2018.

Second Year

Functional Tamil

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. What is meant by environmental studies? Why is it important?

சுற்றுச்சூழல் ஆய்வுகள் என்றால் என்ன? அதன் முக்கியத்துவம் என்ன?

2. What are ecological pyramids?

சூழியல் பிரமிடுகள் என்றால் என்ன?

3. Explain the term 'disaster management'.

'பேரிடர் மேலாண்மை' - விளக்கவும்.

4. What are the causes of air pollution?

காற்று மாசுபாட்டின் காரணங்கள் என்ன?

5. Briefly write about rain water harvesting.

மழைநீர் அறுவடை பற்றி சுருக்கமாக எழுது.

PART B — (4 × 15 = 60 marks)

Answer any FOUR questions.

Each answer should not exceed 5 pages.

6. How to create awareness about environmental protection?

சுற்றுச்சூழல் விழிப்புணர்வு எப்படி உருவாக்க வேண்டும்?

7. Give an account on Mineral resources.

கனிம வளங்கள் - விளக்கவும்.

8. Write the functional aspects of ecosystem.

சுற்றுச்சூழலின் செயல்பாட்டு அம்சங்களை விளக்கவும்.

9. Write the importance of biodiversity.

பல்லுயிரியலின் முக்கியத்துவத்தை விளக்கவும்.

10. What is nuclear hazard? Explain.

அணுசக்தி ஆபத்து என்றால் என்ன? விளக்கவும்.

11. Write an account on environment protection laws.

சுற்றுச்சூழல் பாதுகாப்பு சட்டங்களை விளக்கவும்.

12. Give an account on Value Education in Environment.

சுற்றுச்சூழல் கல்வி - விளக்கவும்.

UG-727

BCA-07

B.C.A. DEGREE EXAMINATION – JUNE, 2018.

Second Year

WINDOWS PROGRAMMING

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain about Drop-Down and Pop-Up menus.
2. Describe about creating user interface design.
3. Discuss about controls that are present in tool box.
4. Write notes on visual basic object oriented programming.
5. Explain about control structures with suitable example.
6. Discuss about arrays in visual basic programming with example.
7. Write notes on Object Linking and Embedding.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Describe briefly about visual basic IDE. Give suitable example.
9. Write brief notes on components of windows programming.
10. Develop a visual basic project using forms to collect student details and submit it.
11. Explain in detail about visual basic library functions with example.
12. Briefly discuss about multiple document interface.
13. Describe about linking a VB project to an excel worksheet.
14. Explain in detail about using third party controls in VB.

UG-728

BCA-08

**B.C.A. DEGREE EXAMINATION —
JUNE, 2018.**

Second Year

MULTIMEDIA

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write notes on Input Output devices.
2. Explain about multimedia animation. Give some examples.
3. Discuss about how multimedia is useful in business
4. Describe about distributed learning environment.
5. Illustrate the features of authoring software.
6. Write notes on macromedia director.
7. Discuss about copyright issue and its management.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Write brief notes on multimedia components. Give suitable example.
9. Discuss briefly about multimedia applications.
10. Describe in detail about communication technology and multimedia services.
11. Explain in detail about Hypertext and elements of Hypertext.
12. Write brief notes on multimedia authoring tools.
13. Explain in detail about multimedia development issues.
14. Describe about planning for creation of multimedia building blocks.

UG-729

BCA-09

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

Second Year

**RELATIONAL DATABASE MANAGEMENT
SYSTEMS**

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain about Relational Data Integrity.
2. Discuss about the components of ER diagram.
3. Describe about the use of fifth normal form.
4. Write notes on usage of data normalization.
5. Create a simple table to collect employee details in Microsoft access.
6. Explain about working with database.
7. Write notes on creating reports based on database elements.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Describe in detail about overview of database management system.
9. Explain in detail about logical database design with example.
10. Write brief notes on normalization techniques.
11. Explain in detail about single valued normalizations.
12. Discuss briefly about security establishment using SQL.
13. Describe in detail about creating a database and a table in Microsoft access.
14. Explain in detail about creating a form and customizing the form.

UG-730

BCA-10

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

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. Write notes on the use of computer networks.
3. Describe about Asynchronous data transmission.
4. Explain about Token Ring with neat diagram.
5. Describe about finding shortest path during data transfer.
6. Write notes on Domain Name Service.
7. Differentiate between Bridges and Gateways.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Describe in detail about LAN, WAN and MAN. With neat diagram.
9. Explain in detail about the layers OSI reference model with diagram.
10. Write brief notes on medium access control protocol.
11. Discuss in detail about ALOHA protocols.
12. Explain in detail about network layer design issues.
13. Write brief notes on Email service with diagrams.
14. Describe about the overview of network services.

UG-731

BCA-11

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

**INTRODUCTION TO SOFTWARE
ENGINEERING**

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write the characteristics of software. Compare it with hardware.
2. What are the factors that should be considered when planning the structure of software engineering?
3. Write in detail about COCOMO model.
4. Explain with neat sketch about a simple design for Railway Ticketing System.
5. Explain the object oriented analysis techniques.

6. List out the qualities of software product.
7. Explain software equation.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain in detail about Life cycle phase.
9. Explain problem based estimation.
10. Explain in detail about typical management risks in software engineering.
11. List the CASE tools and explain.
12. Explain the important steps to be carried out when implementing a methodology.
13. Explain object-behaviour model.
14. Explain the categories of CASE tools.

UG-732

BCA-12

**B.C.A. DEGREE EXAMINATION —
JUNE, 2018.**

**COMPUTER ORIENTED NUMERICAL
METHODS**

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Write a program to implement secant method.
2. Write a program to implement Regula-Falsi method.
3. Write a program to implement Gauss-Seidal method for finding the roots of linear equations.
4. In the following table, use the Newton Interpolation formula to find :

(a) $f(2.4)$

(b) $f(8.7)$

$x :$	2	4	6	8	10
$f(x) :$	9.68	10.96	12.32	13.76	15.28

5. Find the least-squares approximation of $f(x) = x^{1/3}$ on $[0,1]$ by a polynomial of degree at most.
6. Using Lagrange's interpolation formula find a second degree polynomial which passes through the points $(0, 0)$, $(1, 1)$ and $(2, 20)$.
7. Solve using Euler's method :

$$\frac{dy}{dx} = \sin(x + y) - e^x \cdot y(0) = 4.$$

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Use the Newton method to find the smallest and the second smallest positive roots of the equation $\tan x = 4x$, correct to 4 decimal places.
9. Solve the following system by using the Gauss-Jordan elimination method :

$$\begin{aligned} x + y + z &= 5 \\ 2x + 3y + 5z &= 8 \\ 4x + 5z &= 2. \end{aligned}$$
10. Use the Gauss Seidal method to solve the system :

$$\begin{aligned} 4x_1 + x_2 - x_3 &= 3 \\ 2x_1 + 7x_2 + x_3 &= 19 \\ x_1 - 3x_2 + 12x_3 &= 31. \end{aligned}$$

11. Derive the Newton's forward interpolation formula with example.

12. Using Lagrange's interpolation formula, find from the following table :

$x:$	0	2	4	6
$y:$	-3	5	21	45

13. Evaluate $\int_{-3}^3 x^4 dx$ by using :

- (a) Trapezoidal
- (b) Simpson's.

Rule and verify your results by actual integration.

14. Using RK of order 4 to solve the following, using a step size of $h = 0.1$ for

$$0 \leq x \leq 1 \quad \frac{dy}{dx} = \frac{5x^2 - y}{e^{x+y}} \quad y(0) = 1.$$
