

D-6071

Sub. Code

**11A/13711/
0111/0311A**

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.B.A./B.B.A.(Banking)/
B.C.A./M.B.A.(5 YEAR INTEGRATED) DEGREE
EXAMINATION, DECEMBER 2024.**

First Semester

PART I — TAMIL PAPER - I

**(CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar
Year Onwards)**

Time : Three hours

Maximum : 75 marks

பகுதி அ — (10 × 2 = 20 மதிப்பெண்கள்)

அனைத்து வினாக்களுக்கும் ஒரேரு வரிகளில் விடையளிக்க.

1. கண்ணதாசன் யாரை மானசீகக் குருவாகக் கருதினார்?
2. மக்கள் கவிஞர் எனப் போற்றப்பட்டவர்?
3. பாரதமாதவிற்கு, 'திருப்பள்ளி எழுச்சி' பாடியவர்?
4. நாமக்கல் கவிஞர் எழுதிய புதினங்கள் இரண்டினைச் சுட்டுக.
5. மீரா எக்கல்லூரியில் பேராசிரியராகப் பணியாற்றினார்?
6. 'தோழர் மோசிகீரனார்' என்னும் கவிதையை எழுதியவர்?
7. 'வயிறு' என்னும் கவிதையின் பொருளைத் தருக.
8. சிலப்பதிகாரம் உரைக்கும் முப்பெரும் உண்மைகளை எழுதுக.
9. கம்பராமாயணம் எத்தனைக் காண்டங்களால் ஆனது?
10. சீறாப்புராணம் என்பதன் பொருள் யாது?

பகுதி ஆ — (5 × 5 = 25 மதிப்பெண்கள்)

பின்வரும் வினாக்களுக்கு ஒரு பக்க அளவில் விடை தருக.

11. (அ) மாயக்கண்ணன் துயில் கொள்வதைக் கண்ணதாசன் எங்ஙனம் பாடுகிறார்?

(அல்லது)

- (ஆ) செய்யும் தொழிலே தெய்வமென பட்டுக்கோட்டையார் பாடுமாற்றை விவரிக்க.

12. (அ) பாரதியார் கூறும் இந்தியாவின் பழம்பெருமைகள் குறித்து எழுதுக.

(அல்லது)

- (ஆ) 'நோயற்ற வாழ்வு' என்னும் கவிதையின் கருத்துக்களை எடுத்துரைக்க.

13. (அ) மீராவின் வாழ்க்கை வரலாற்றைச் சுருக்கி வரைக.

(அல்லது)

- (ஆ) குழலோசை கேட்ட ராதையின் நோக்கமாகக் கு.ப.ரா. கூறுமாற்றை எழுதுக.

14. (அ) ஞானக்கூத்தனுக்கு மோசினீரனார் மேல் அன்பு தோன்ற காரணம் யாது?

(அல்லது)

- (ஆ) அப்துல் ரகுமானின் 'கண்ணும் எழுதேம்' கவிதையின் கருத்துக்களை வரைக.

15. (அ) மந்திர ஆலோசனையின் நோக்கத்தைக் கட்டுரைக்க.

(அல்லது)

- (ஆ) சீறாப்புராண நூல் குறிப்புகளைச் சுருக்கி எழுதுக.

பகுதி இ — ($3 \times 10 = 30$ மதிப்பெண்கள்)

பின்வரும் வினாக்களில் மூன்றனுக்குக் கட்டுரை வடிவில்
விடை தருக.

16. ராதையின் பெருமிதப் பேச்சுக்களைக் கண்ணதாசன் பாடுமாற்றை விளக்கிடு.
 17. கண்ணனின் குறும்புத் தனங்களைப் பாரதியார் பாடல் வழி விவரிக்க.
 18. உலகப்பன் பாட்டுப் பேசும் பொதுவுடைமைக் கருத்துக்களைச் சுட்டியுரைக்க.
 19. கண்ணகியின் வரவும் வாயிற்காப்போன் உரையும் குறித்துக் கட்டுரைக்க.
 20. இறைவனை ஆயர்கள் வழிப்பட்டமையைத் தேம்பாவணி வழிப் புலப்படுத்துக.
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D-6072

Sub. Code

11B/0311B

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.B.A./B.B.A. (Banking)/
B.C.A./M.B.A.(5 YEAR INTEGRATED) DEGREE
EXAMINATION, DECEMBER 2024.**

First Semester

PART I — COMMUNICATION SKILLS - I

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Define visual communication.
2. Give two examples for written communication.
3. Define “communication gap”.
4. I couldn't understand what you said.
(Replace the underlined word with a phrasal verb)
5. Ram wrote a letter. (Analyse this sentence)
6. Define a paragraph.
7. Define an example for a complex sentence.
8. Give a technical report.
9. Explain the different types of letters.
10. Explain the importance of e-mail.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Use the following phrasal verbs in sentences.

- (i) make out
- (ii) put up with
- (iii) cut down
- (iv) call for
- (v) suffer from.

Or

- (b) Write a letter of complaint to the corporation commissioner about bad condition of roads in your locality.

12. (a) Mention different ways of expressing an opinion in a group discussion.

Or

- (b) Prepare a report about the independence day celebrations held in your college.

13. (a) Discuss non-verbal communication with examples.

Or

- (b) Explain 'Curriculum vitae'.

14. (a) Write a paragraph on "Importance of sports in education".

Or

- (b) Discuss Barriers to communication.

15. (a) What is the function of intonation?

Or

- (b) How will you prepare yourself to deliver a speech?

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Describe various types of communication with examples.
17. Discuss the technique of writing an effective e-mail.
18. Write an essay on “Reading makes a full man”.
19. Prepare a report on a festival held in your city.
20. Describe the principles of effective oral communication.
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D-6073

Sub. Code

**12/13712/
0112/0312**

DISTANCE EDUCATION

COMMON FOR B.A./B.Sc./B.B.A./B.B.A.(Banking)/
B.C.A./M.B.A.(5 YEAR INTEGRATED) DEGREE
EXAMINATION, DECEMBER 2024.

First Semester

PART II — ENGLISH PAPER - I

(CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar
Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Write the significance of water in agriculture as discussed by C.V. Raman in *Water – the Elixir of life*.
2. What is Mrs. Packletide's reason for wanting to hunt a tiger in *Mrs. Packletide's Tiger*?
3. Mention Carl Sagan's view on the connection between modern humans and our ancestors.
4. What is the central theme of B.R. Nanda's essay *A Hero on Probation*.

5. Fill in the blanks with suitable articles :
- (a) I spoke to ————— (a/the) manager of the store.
 - (b) I have ————— (a/the) idea than will help solve this problem.
6. Fill in the blanks with correct form of Gerund :
- (a) She finished ————— (to clean/cleaning) the house before noon.
 - (b) ————— (Run/Running) every morning helps him stay fit.
7. What does C.E. Foad criticize about modern technology in *Our Civilization*?
8. Briefly explain the connection between food and evolution as discussed by J.B.S. Haldane in *Food*.
9. What is the setting of Jim Corbett's tiger hunting encounter in *A Deed of Bravery*.
10. What social issues does Shaw critique in *Pygmalion*?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Describe the significance of water conservation as presented by C.V. Raman in *Water – the Elixir of Life*.

Or

- (b) Explore how Saki uses satire to critique social class and vanity in *Mrs. Packletide's Tiger*.

12. (a) Explain J.B.S. Haldane's perspective on the relationship between food production and human progress in *Food*.

Or

- (b) Describe how Carl Sagan integrates scientific curiosity with historical analysis in *Our Ancestors*.
13. (a) Fill in the blanks with suitable articles :
- (i) I saw _____ (a/the) cat sitting on _____ (a/the) roof.
 - (ii) She is _____ (a/an) excellent dancer.
 - (iii) _____ (A/An/The) Earth revolves around _____ (a/the) Sun.
 - (iv) He wants to buy _____ (a/the) car that he saw yesterday.
 - (v) They live in _____ (a/the) small house near (a/the) river.

Or

- (b) Change direct speech into indirect speech.
- (i) He said, "I am going to the market".
 - (ii) She said, "I will call you later".
 - (iii) They said, "We have completed our homework".
 - (iv) John Said, "I am planning a trip to London".
 - (v) The teacher said, "You must submit".

14. (a) Precise the following paragraph :

In a remote village named Niranjana, life had remained unchanged for decades. The villagers lived simply, relying on traditional farming methods. Over time, however, challenges arose. The once-fertile land became barren due to climate change, and the river supplying water dried up. Many young villagers left for the city, leaving the village struggling.

Rohan, a young man who had studied in the city, returned to Niranjana with the hope of improving conditions. He proposed modernizing their farming techniques by introducing irrigation, planting drought-resistant crops, and building a road to connect the village with nearby towns. At first, the elders resisted, reluctant to change their age-old ways. But Rohan persisted, and gradually, the village transformed. The new methods revived the land, and the road allowed for trade with neighboring towns.

As the village prospered, those who had left returned. Niranjana, once isolated and struggling, became a thriving community while maintaining its traditions. Rohan's efforts not only saved the village but also made it a model for other villages in the region.

Or

- (b) Write a paragraph on the importance of recycling in modern society.

15. (a) Analyse the depiction of bravery in Jim Corbett's *A Deed of bravery* and its impact on the narrative.

Or

- (b) What are the primary concerns raised by C.E. Foad regarding technological advancements in *Our Civilization*?

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the use of anthropomorphism in Catharine M. Willson's *The Cat*.
17. Analyse the concept of probation and its effects on the protagonist in B.R. Nanda's *A Hero on probation*.
18. Fill in the correct form of Gerund :
- (a) She enjoys ————— (to cook/cooking) in her free time.
- (b) ————— (Swim/Swimming) is good exercise.
- (c) He suggested ————— (to go/going) to the park.
- (d) I can't stand ————— (to wait/waiting) for long periods.
- (e) They talked about ————— (to visit/visiting) Japan.
- (f) She is interested in ————— (to learn/learning) French. ————— (Drive/Driving) too fast is dangerous.

- (g) He's good at _____ (to play/playing) chess.
- (h) I don't mind _____ (to help/helping) you with your homework.
- (i) She avoided _____ (to speak/speaking) about the problem.
19. Write a letter to the editor of a newspaper expressing your concern about increasing traffic congestion in your city.
20. How does Hardin B. Fones address the prevention and treatment of drug abuse in *Dangers of Drug Abuse*?
- _____

D-6200

Sub. Code

10113

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2024.

First Semester

C AND DATA STRUCTURE

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — ($10 \times 2 = 20$ marks)

Answer ALL the questions.

1. Define variable.
2. Write a for loop to print from 10 to 1.
3. Specify the uses of macros.
4. What is bitwise operation?
5. Compare array and structure.
6. Enlist the file operations.
7. Define data structure.
8. What is a linked list?
9. What are the applications of binary tree?
10. Define expression tree.

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Explain any two preprocessor directives in C.

Or

- (b) What are the various types of operators in C? Illustrate the logical operators with examples.

12. (a) Compare actual parameter and formal argument with sample program.

Or

- (b) How is pointer arithmetic done? Elaborate its concepts with an example.

13. (a) Define and explicate the concepts of self-referential data structure.

Or

- (b) How to open a file? Illustrate with any four file opening modes.

14. (a) Write a C program to implement queue operations.

Or

- (b) Give a brief note on polish notation.

15. (a) How to perform insertion and deletion operations on a tree? Illustrate with examples.

Or

- (b) State and explain any two types of binary trees.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Demonstrate various input and output statements in C with examples.
 17. Illustrate the following concepts with sample program.
 - (a) Pass by value
 - (b) Pass by reference.
 18. How to create the pointers to the structures? Illustrate with an example.
 19. What are the different types of linked lists? Explicate any two of them.
 20. Discuss the various types of tree traversals with suitable examples.
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D-6074

Sub. Code

21A/0321A

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.B.A./B.B.A.(Banking)/
B.C.A./M.B.A.(5 YEAR INTEGRATED) DEGREE
EXAMINATION, DECEMBER 2024.**

Second Semester

PART I — TAMIL PAPER - II

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

பகுதி அ — (10 × 2 = 20 மதிப்பெண்கள்)

அனைத்து வினாக்களுக்கும் ஒரே ஒரு வரிகளில் விடையளிக்க.

1. 'தேம்பா அணியான் வாடா அருள் மகன்' யார்?
2. 'வான வீதியில்' தொகுதியிலுள்ள சிறுகதைகளின் எண்ணிக்கை?
3. தும்பைப் போர் - குறிப்பு வரைக.
4. வினா எத்தனை வகைப்படும்?
5. அல்வழிப்புணர்ச்சி என்றால் என்ன?
6. சிறுகதை முன்னோடிகள் இருவரைக் குறிப்பிடுக.
7. சிறுவர் இதழ்களுக்குச் சான்றுகள் தருக.
8. சிம்பொனி இசையமைத்த தமிழர் யார்?
9. 'நாமார்க்கும் குடியல்லோம்' எனப் பாடி அரசன் ஆணையை மறுத்தவர்?
10. பெரியபுராணம் நூல் குறிப்பு வரைக.

பகுதி ஆ — ($5 \times 5 = 25$ மதிப்பெண்கள்)

பின்வரும் வினாக்களுக்கு ஒரு பக்க அளவில் விடை தருக.

11. (அ) குழந்தை ஏசுவை ஆயர்கள் போற்றுமாற்றை விவரிக்க.

(அல்லது)

(ஆ) சாந்தி கேட்ட வேத உரையைப் புலப்படுத்துக.

12. (அ) 'விமோசனம்' கதை உரைக்குப் பெண்ணியக் கருத்துக்களை எழுதுக.

(அல்லது)

(ஆ) தாடகையின் ஆற்றலையும் தறுகண்மையும் எடுத்துரைக்க.

13. (அ) ஆகுபெயரின் வகைகளைச் சான்றுகளுடன் விளக்குக.

(அல்லது)

(ஆ) ஒற்றெழுத்து மிகுமிடங்கள் குறித்து விவரிக்க.

14. (அ) பாரதியின் நாட்டுப்பற்றை எடுத்துரைக்க.

(அல்லது)

(ஆ) தமிழ் நாவல் வரலாற்றைச் சுருக்கி வரைக.

15. (அ) ஆண்டாளின் பக்தித்திறத்தைப் புலப்படுத்துக.

(அல்லது)

(ஆ) தமிழ் வளர்ச்சியில் இதழ்களின் பங்கு பற்றி எழுதுக.

பகுதி இ — ($3 \times 10 = 30$ மதிப்பெண்கள்)

பின்வரும் வினாக்களில் மூன்றனுக்குக் கட்டுரை வடிவில்
விடை தருக.

16. சாந்தி உள்ளம் மகிழ்ந்து குழந்தை ஏசுவைப் போற்றுமாற்றை விவரிக்க.
17. கருணை மனு சிறுதையின் பொருண்மையைப் புலப்படுத்துக.
18. போர்க்களத்தில் செய்தித் தொடர்பின் முக்கியத்துவத்தைச் சுட்டியுரைக்க.
19. மொழிமுதல் எழுத்துக்களைச் சான்றுகளுடன் கட்டுரைக்க.
20. இணையத்தில் தமிழ்ப் பெற்றிருக்கும் வளர்ச்சியை எடுத்துரைக்க.

D-6075

Sub. Code

21B/0321B

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.B.A./B.B.A.(Banking)/
B.C.A./M.B.A.(5 Year Integrated) DEGREE EXAMINATION,
DECEMBER 2024.**

Second Semester

PART - I — COMMUNICATION SKILLS - II

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. What do good communication skills involve?
2. List the skills required in oral communication.
3. What is demeanour?
4. How are vowels classified?
5. What is a thesaurus?
6. What is passive learning?
7. What is tone?
8. What is a proposal?

9. Who publishes newsletters?
10. What responsibility does the chairperson of the interviews?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Explain non-verbal communication.

Or

- (b) List the skills required in written communication.

12. (a) Write a short note on word power.

Or

- (b) Write about the delivery methods of presentation.

13. (a) Write a short note on consonant clusters.

Or

- (b) Describe the language skills.

14. (a) Write a note on active listening.

Or

- (b) What are the characteristics of technical writing?

15. (a) State the indicators of a badly written letters.

Or

- (b) Write a short note on new letters.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain the various elements of communication skills.
 17. Explain the chief places of articulation of consonants.
 18. Examine the process of listening.
 19. Write a letter requesting for opening of bank account.
 20. Write about the essentials of a good resume.
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D-6076

Sub. Code

**22/13722/
0122/0322**

DISTANCE EDUCATION

COMMON FOR B.A./B.Sc./B.B.A./B.B.A.(Banking)/
B.C.A./M.B.A.(5 Year Integrated) DEGREE EXAMINATION,
DECEMBER 2024.

Second Semester

PART - II — ENGLISH PAPER - II

(CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar
Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Who is the author of the prescribed poem 'The Coromandel fishers'?
2. What is symbolized by the Westminster Bridge?
3. How does Tagore treat the concept of death in his *Gitanjali*?
4. What does the Second Part of *Gitanjali* sing about?
5. What is the conclusion of 'The Road Not Taken'?
6. Why does the speaker in 'Ode on a Grecian Urn' deem the Urn a Historian?
7. What reason does Antonio give for being sad in the opening of the play *The Merchant of Venice*?

8. Why does the Prince of Morocco fear that Portia will dislike him?
9. What is comprehension?
10. Write any five words that should be avoided in report writing.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Who is the author of the prescribed poem *The Coromandel fishers*?

Or

- (b) Analyse Shakespeare as a sonneteer.
12. (a) Examine the view that the songs of *Gitanjali* have a deep connection with nature.

Or

- (b) How does Wordsworth describe the beauty of London when viewed from Westminster Bridge?
13. (a) “The Road Not Taken” is about the journey of life. Elucidate.

Or

- (b) Write a short summary of the poem, ‘The coromandel fishers’.
14. (a) Discuss the relationship between Shylock and Jessica.

Or

- (b) Explain the court room scene in *The Merchant of Venice*. How does it illuminate the play’s major themes?

15. (a) Write a report on the free medical camp held in a village by your N.S.S. unit.

Or

- (b) Read the following passage and answer the questions that follows.

Sir. Winston Churchill was saved from drowning by a gardener when he was a small boy. The grateful parents of Churchill offered to educate the son of the gardener. When Sir. Winston became the prime minister, he was stricken by pneumonia. Greatly concerned, the king summoned the best physician and soon Churchill became well. The doctor was Sir. Alexander Fleming who developed penicillin. He was also the son of that gardener who saved Churchill from drowning. Sir Winston said, rarely has one man owed his life twice to the same person.

- (i) What happened to Churchill when he was a small boy?
- (ii) How did Churchill's parents show their gratitude?
- (iii) Who was summoned by the king?
- (iv) How did doctor save Churchill's life?
- (v) Why did Churchill say that he owed his life twice to the same person?

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

- 16. Critically appreciate the poem, 'The Grecian Urn' by John Keats.
- 17. Examine 'Andrea del Sarto' as a Dramatic monologue.
- 18. Analyse Portia's character in *The Merchant of Venice*.

19. Write an essay on the given topic.
'Pleasures of Reading'.
20. Read the following passage and answer the questions that follow.

In the middle of it all, Tom Sawyer walked slowly out to footpath in front of Aunt Polly's. In his hands were a bucket of paint and a big brush. He looked at the tall fence and sadness filled his heart. It must be closed to half a mile long, he was thinking. Life was empty and living was pain. He put his brush in the paint and moved it across the top of fence. He did this again and then looked at how little was painted and how much more needed to be painted before he could be free. He rested on a box, feeling discouraged.

Jim came out of the house with a water bucket. In the past Tom never liked to go to the well for water. But now it looked like a better job than painting the fence. Children were always at the wall waiting for water. As they waited, they played, had fights, rested and talked. Jim always stayed for more than an hour.

- (a) What was Tom asked to do?
- (b) Why did he think life was empty?
- (c) What looked like a better job than painting? Why?
- (d) What did Tom ask him for? What was the reply?
- (e) Who had ordered Tom to paint?

D-6201

Sub. Code

10123

DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, DECEMBER 2024.

Second Semester

PROGRAMMING IN C++

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. What is the software crisis?
2. What are keywords in C++? Provide two examples.
3. Define a member function in C++.
4. What are friendly functions in C++?
5. State the use of 'this' pointer.
6. Define polymorphism.
7. What is the purpose of file stream classes in C++?
8. Define sequential input and output operations.
9. What are overloaded function templates?
10. What is a user-defined template in C++?

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Explain the different types of operators in C++, providing examples for each type.

Or

- (b) Discuss the differences between inline functions and regular functions in C++.
12. (a) Create a class named 'counter' with a static data member to count the number of objects created and a static member function to return the count.

Or

- (b) Explain the concept of arrays of objects in C++ with appropriate examples.
13. (a) Discuss the different types of inheritance in C++ with examples.

Or

- (b) Compare and contrast pure virtual functions with regular virtual functions.
14. (a) Explain the process of opening a file in different modes in C++.

Or

- (b) Discuss common error-handling technique during file operations in C++.
15. (a) How does C++ handle multiple arguments in function templates?

Or

- (b) Explain the ten rules for handling exceptions successfully in C++.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Discuss the various control structures in C++ and their significance in program flow control.
 17. Explain the role of constructors and destructors in the lifecycle of a C++ object.
 18. Elucidate the difference between unformatted and formatted I/O operations in C++.
 19. Analyze the use of command line arguments in C++ programs and their significance in file handling.
 20. Describe the process of handling exceptions in constructors and destructors with examples.
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D-6077

Sub. Code

**31A/13731/
0131**

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.C.A. DEGREE EXAMINATION,
DECEMBER 2024.**

Third Semester

Part I — TAMIL PAPER - III

**(CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar
Year Onwards)**

Time : Three hours

Maximum : 75 marks

பகுதி அ — (10 × 2 = 20 மதிப்பெண்கள்)

அனைத்து வினாக்களுக்கும் ஒரேரு வரிகளில் விடையளிக்க.

1. ஐங்குறுநூறு - நூல் குறிப்பு வரைக.
2. ஆற்றுப்படை நூல்களைப் பட்டியலிடுக.
3. வரைவு கடாதல் என்றால் என்ன?
4. மஞ்ஞைப்பத்து - விளக்கம் தருக.
5. அகநானூற்று நூலின் எண் பகுப்புகளுக்கான திணைகளைக் குறிப்பிடுக.
6. புறநானூற்றுப் பாடல்களின் அடி வரையறை யாது?
7. 'வாயுறை வாழ்த்து' எனப் போற்றப்படும் அற நூல் யாது?
8. நான்மணிக்கடிகை எந்நூல் கருத்துக்களை ஒத்திருக்கின்றது?
9. குந்தவையின் காதலன் பெயரைக் குறிப்பிடுக.
10. 'சுவடுகள்' நாவலின் கதைமாந்தர்களில் இருவரைக் கூறுக.

பகுதி ஆ — (5 × 5 = 25 மதிப்பெண்கள்)

பின்வரும் வினாக்களுக்கு ஒரு பக்க அளவில் விடை தருக.

11. (அ) பாசறை அமைப்புக் குறித்து முல்லைப்பாட்டு விவரிக்குமாற்றை எழுதுக.

(அல்லது)

(ஆ) 'குறிஞ்சிக்குக் கபிலர்' என்பார் கருத்தைப் புலப்படுத்துக.

12. (அ) நற்றிணையிலுள்ள மணிமணியான கருத்துக்களைத் தொகுத்துரைக்க.

(அல்லது)

(ஆ) வரைவு நீட்டித்த வழித் தலைமகள் தோழிக்குச் சொல்லியது யாது? விவரிக்க.

13. (அ) நப்பசலையார் பாடிய ஆனந்தப்பையுள் துறையமைந்த பாடலை விளக்குக.

(அல்லது)

(ஆ) அகநானூற்று நூல் அமைப்பின் சிறப்புகளை எடுத்துரைக்க.

14. (அ) வாழ்க்கைத் துணைநலம் குறித்த வள்ளுவரின் கருத்துக்களைப் புலப்படுத்துக.

(அல்லது)

(ஆ) யார் யாருக்குத் தூக்கம் வராது? நான்மணிக்கடிகை கூறுமாற்றை எழுதுக.

15. (அ) இராசராசசோழன் நாடகத்தின் கதைமாந்தர்களைப் பட்டியலிடுக.

(அல்லது)

(ஆ) 'சுவடுகள்' நாவலில் வரும் ரகுபதி பாத்திர இயல்பை விவரிக்க.

பகுதி இ — ($3 \times 10 = 30$ மதிப்பெண்கள்)

பின்வரும் வினாக்களில் மூன்றனுக்குக் கட்டுரை வடிவில்
விடை தருக.

16. பரணர் பாடல்கள் வழி அறியலாகும் சங்க வரலாற்றைத் தொகுத்துரைக்க.
17. மஞ்ஞைப்பத்தில் இடம்பெற்றுள்ள அகக்கருத்துக்களைச் சுட்டியுரைக்க.
18. நப்பசலை சோழன் கிள்ளிவளவனைப் புகழுமாற்றை விவரிக்க.
19. வள்ளுவர் உரைக்கும் 'அறிவுடைமை' கருத்துக்களைத் தொகுத்துரைக்க.
20. இராசராசர்சோழன் நாடகத்தின் கதைக்கோப்பைக் கட்டுரைக்க.

D-6078

Sub. Code

31B

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.C.A. DEGREE EXAMINATION,
DECEMBER 2024.**

Third Semester

PART - I — HUMAN SKILL DEVELOPMENT - I

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Define 'Self Esteem'.
2. Define psychoanalysis.
3. Give an example for 'forced commitment'.
4. Who is an extrovert?
5. Is dress code important to develop our personality?
6. Define "Time management".
7. What is mental pollution?
8. Define attitudes.
9. What is materialistic life?
10. How honesty is important in building relationship?

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Discuss various methods to find the background reasons behind conflict.

Or

- (b) What are the general factors behind stress?

12. (a) Explain "Look Before You Leap" concept in Anger management.

Or

- (b) How to overcome inner conflict in personal life?

13. (a) Briefly explain the types of negotiations.

Or

- (b) Write short notes on interpersonal relationship.

14. (a) Mention the basic qualities of a leader.

Or

- (b) Why is the contribution skill more important than knowledge?

15. (a) Discuss business negotiation skill.

Or

- (b) Explain the power of advanced thinking.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Assess the mind levels and its functions.
17. Enumerate the major influential factors in developing personality.

18. Describe how will you over come stress.
 19. Describe leadership styles.
 20. Describe 'coping with the change' concept.
-

D-6079

Sub. Code

32/13732/0132

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.C.A. DEGREE EXAMINATION,
DECEMBER 2024.**

Third Semester

PART - II — ENGLISH PAPER - III

**(CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar
Year Onwards)**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What are Mathilde's expectations to attend the party?
2. What does the author talk about 'false hopes' in "The Post Master"?
3. Why does Philip want to sell his revolver?
4. Why did the old man give the silver idol to Jack?
5. How has Gaultier been outwitted by Pierre?
6. Who is the only character left alive in the play "A kind of Justice"? Why?
7. Define abstract noun with example.
8. Why is Agenda important?
9. What are Minutes?
10. Identify the adverb in the following sentence.
We should always speak the truth.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) How does Swami get rid of his fear?

Or

- (b) Discuss the role of fate in the verger's life.

12. (a) Describe the attitude of Natalya towards Lomov.

Or

- (b) Comment on Mrs. Meldon's opinion about war.

13. (a) Comment on the theme of the play "Reunion".

Or

- (b) Describe the incident that leads to Yassin's transformation.

14. (a) Compare and contrast the characters of Jean and Pierre.

Or

- (b) In what way does the lieutenant try to help the girl?

15. (a) As a sports secretary of your college, draft a notice asking the students to give their names for participation in various events to be held on the Annual Sports Day.

Or

- (b) Describe your favourite hobby.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Trace the elements of humour in R.K. Narayan's "A Hero".
 17. Consider "The proposal" as a comedy.
 18. How do you prove that personal ambition leads to selfishness?
 19. How does the play "A kind of justice" gain a universal appeal?
 20. Do as directed
 - (a) Riya looks happier than Diya. (into positive)
 - (b) Shiva is one of the most intelligent students in the class. (into comparative)
 - (c) Gold is more precious than any other metal. (into superlative)
 - (d) No other poet is as great as Wordsworth. (into comparative)
 - (e) John is not so smart as James. (into comparative)
-

D-6202

Sub. Code

10133/12733

DISTANCE EDUCATION

B.C.A./B.C.A.(Lateral Entry) DEGREE EXAMINATION,
DECEMBER 2024.

Third Semester

RELATIONAL DATA BASE MANAGEMENT SYSTEM
(RDBMS)

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — ($10 \times 2 = 20$ marks)

Answer ALL the questions.

1. What is schema?
2. Define ER model.
3. How do you alter the table?
4. What is rename operation in relational algebra?
5. What do you mean by NULL value?
6. State the purpose of normalization.
7. Define atomicity.
8. What is multiple granularity?
9. Mention the uses of ISAM.
10. Define B+ tree.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) What is data abstraction? Explain its concepts.

Or

- (b) Illustrate any two database languages in detail.

12. (a) How to enforce the integrity constraints to a table? Explain with an example.

Or

- (b) Describe the concepts of tuple relational calculus.

13. (a) List and explicate the aggregative operators with suitable examples.

Or

- (b) What are the problems caused by redundancy? Give your own solutions.

14. (a) Elaborate the mechanism used for testing the serializability.

Or

- (b) Illuminate the role of buffer management and their processes.

15. (a) Elaborate the concept of tree based indexing with neat diagram.

Or

- (b) Write a brief note on remote backup systems.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Describe the relational models with suitable examples.
 17. Write an overview of relational algebra.
 18. Discuss the impact of SQL constructs in detail.
 19. Explain the various protocols of transaction in detail.
 20. Give a brief account on :
 - (a) Cluster indexes
 - (b) Primary indexes
 - (c) Secondary indexes.
-

D-6080

Sub. Code

41A/13741

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.C.A. DEGREE EXAMINATION,
DECEMBER 2024.**

Fourth Semester

Part I — TAMIL PAPER - IV

**(CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar
Year Onwards)**

Time : Three hours

Maximum : 75 marks

பகுதி அ — (10 × 2 = 20 மதிப்பெண்கள்)

அனைத்து வினாக்களுக்கும் ஒரேரு வரிகளில் விடை தருக.

1. செய்யுள் உறுப்புகள் எத்தனை? அவை யாவை?
2. கீர்த்தனை என்றால் என்ன?
3. குறியீடு என்றால் என்ன?
4. எட்டுத் தொகையில் புற நூல்கள் எத்தனை? அவை யாவை?
5. வரைவு என்றால் என்ன?
6. காஞ்சி என்றால் என்ன?
7. அணிகளுக்கு எல்லாம் தாயாக விளங்கும் அணி எது?
8. பின்வருநிலை என்றால் என்ன?
9. சீவக சிந்தாமணியின் ஆசிரியர் பெயர் யாது?
10. பதினெண்கீழ்கணக்கில் அக நூல்கள் எத்தனை? ஏதேனும் இரண்டினை கூறுக.

பகுதி ஆ — ($5 \times 5 = 25$ மதிப்பெண்கள்)

அனைத்து வினாக்களுக்கும் ஒரு பக்க அளவில் விடை தருக.

11. (அ) ஆசிரியப்பா குறித்து எழுதுக ?
(அல்லது)
(ஆ) படிமம் - விளக்குக.
12. (அ) கையறுநிலை - விளக்குக.
(அல்லது)
(ஆ) உடன் போக்கு - விளக்குக.
13. (அ) தற்குறிப்பேற்ற அணியைச் சான்றுடன் விளக்குக.
(அல்லது)
(ஆ) பிறிது மொழிதல் அணியைச் சான்றுடன் விளக்குக.
14. (அ) பாஞ்சாலி சபதத்தில் இடம் பெறும் சபதங்கள் குறித்து எழுதுக.
(அல்லது)
(ஆ) இயேசுவின் பன்னிரு சீடர்கள் குறித்து எழுதுக.
15. (அ) புதிய யாப்பு வடிவங்கள் குறித்து எழுதுக.
(அல்லது)
(ஆ) கலிப்பா குறித்து விளக்குக.

பகுதி இ — ($3 \times 10 = 30$ மதிப்பெண்கள்)

பின்வரும் வினாக்களுக்கு மூன்றனுக்குக் கட்டுரை வடிவில் விடை தருக.

16. பாவகைகளுள் ஆசிரியப்பா பெறுமிடம் குறித்து கட்டுரைக்க.
17. தொடை குறித்து கட்டுரைக்க.

18. உருவக அணியின் வகைகளைச் சான்றுடன் விவரி.
19. அறத்தொடு நின்றல் - விவரி.
20. மௌன மயங்கங்களில் சிற்பி கூறும் கருத்துக்களை விவரி.
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D-6081

Sub. Code

41B

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.C.A. DEGREE EXAMINATION,
DECEMBER 2024.**

Fourth Semester

Part I — HUMAN SKILLS DEVELOPMENT - II

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Why is counseling important?
2. Name the types of managerial skills.
3. Write the difference between technical skill and human skill.
4. What is presentation?
5. How do you define organization skills?
6. What makes a good leader?
7. State the importance of understanding skills.
8. Why is it important to understand individuals in an organization?
9. How do you handle a problem at workplace?
10. What is social responsibility?

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Explain the purpose of guidance and counselling.

Or

- (b) How can communication strengthen the human relationship?

12. (a) Write notes on conceptual skills.

Or

- (b) What do you do to improve your technical skills?

13. (a) How do you grab the attention of the audience in a presentation?

Or

- (b) What are the essential multi-tasking skills?

14. (a) Identify the major interactions between community and society?

Or

- (b) Explain the role of an individual in an organization.

15. (a) How do you handle a social problem?

Or

- (b) Examine the importance of cooperative learning skills.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain the importance and techniques of counselling.
 17. How do you plan and prepare for a presentation?
 18. Describe the different types of organization skills.
 19. Elaborate on understanding skills.
 20. List out the merits and demerits of social responsibilities.
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D-6082

Sub. Code

42/13742

DISTANCE EDUCATION

**COMMON FOR B.A./B.Sc./B.C.A. DEGREE EXAMINATION,
DECEMBER 2024.**

Fourth Semester

Part II — ENGLISH – PAPER IV

**(CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar
Year Onwards)**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Write about the character of Lalajee in Jim Corbett's story *Lalajee*.
2. What is the central theme of Hemingway's *A Day's Wait*?
3. Mention Eliza Doolittle's transformation in *Pygmalion* by G.B. Shaw.
4. How does R.K. Narayan portray childhood in *Swami and Friends*?
5. What is the theme of redemption in *The Winter's Tale*?
6. Write the significance of fate in *Romeo and Juliet*.
7. What were Nehru's contributions to India's independence, according to A.J. Toynbee?

8. What does grammar skills contribute to effective communication in academic writing?
9. What lesson do the two old men learn in Tolstoy's *Two Old Men*?
10. What social issues does Shaw critique in *Pygmalion*?

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Describe how Jim Corbett portrays the socio-economic background of Lalajee in *Lalajee*.

Or

- (b) Explore the significance of the relationship between father and son in Hemingway's *A Day's wait*.

12. (a) Describe the significance of class distinctions in G.B. Shaw's *Pygmalion*.

Or

- (b) Explore the theme of colonialism and identity in R.K. Narayan's *Swami and Friends*.

13. (a) Describe the concept of mercy versus justice in *The Merchant of Venice*.

Or

- (b) Explore the role of free will in Shakespeare's *Romeo and Juliet*.

14. (a) Analyze Jawaharlal Nehru's vision for modern India as portrayed by A.J. Toynbee.

Or

- (b) Delineate Martin Luther King Jr.'s vision for racial equality as described by R.N. Roy.

15. (a) What does Tolstoy suggest about human resilience and faith in *Two Old Men*?

Or

- (b) Analyse the role of education and its transformative power in *Swami and Friends*.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Examine the moral lesson conveyed in Tolstoy's *Little Girls Wiser Than Men*.
17. What does Shaw suggest about gender roles through the characters of Eliza and Higgins in *Pygmalion*?
18. Analyze the roles of secondary characters such as Mercutio, Tybalt, and the Nurse in *Romeo and Juliet*.
19. Examine how Martin Luther King Jr.'s Christian beliefs influenced his approach to civil rights activism as portrayed by R.N. Roy.
20. What does the Winter's tale suggest about forgiveness and reconciliation?

D-6203

Sub. Code

10143/12743

DISTANCE EDUCATION

B.C.A./B.C.A. (Lateral Entry) DEGREE EXAMINATION,
DECEMBER 2024.

Fourth Semester

INTERNET AND JAVA PROGRAMMING

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — ($10 \times 2 = 20$ marks)

Answer ALL questions.

1. Define Internet. What are the components required to connect internet?
2. What is a Search Engine? Give examples.
3. What are the types of Polymorphism?
4. Differentiate between while and for looping statements.
5. How will you create a constructor? Give an example.
6. Define Enumerated data types.
7. Draw a neat diagram for the Life Cycle of a thread.
8. Write a simple program to add Applet in an HTML file.
9. When does an I/O exception occur?
10. Discuss in detail interactive input/output operations in Java.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Briefly explain about the Web Browser.

Or

- (b) Write a short note on the Internet Relay Chat System.

12. (a) Briefly explain about various applications of Java.

Or

- (b) Write a Java program to check whether the given number is prime or not.

13. (a) Write a program to find the area of a square and rectangle using the method overloading.

Or

- (b) Explain how to define and use arrays. Give examples.

14. (a) Briefly explain how synchronization is achieved in java.

Or

- (b) Briefly explain the concept of Managing Error and Exceptions in Java.

15. (a) What are character streams? Explain about various character stream classes.

Or

- (b) Explain in detail about Random Access File class? What are the its constructors and methods?

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Describe the functions of e-mail with a suitable diagram.
 17. Explain the various concepts of OOPs with suitable examples.
 18. Explain the implementation of packages and interfaces in Java.
 19. (a) Explain the need for Graphics Programming in Java. (6)

(b) Create a Bar chart to display the number of students in the department of computer science for the past five years. (4)
 20. Explain in detail about Input/Output classes in detail.
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D-6204

Sub. Code

10151/12751

DISTANCE EDUCATION

B.C.A./B.C.A.(Lateral Entry) DEGREE EXAMINATION,
DECEMBER 2024.

Fifth Semester

ACCOUNTING FUNDAMENTALS

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — ($10 \times 2 = 20$ marks)

Answer ALL the questions.

1. What is the fundamental accounting equation, and how is it represented?
2. Define the accrual basis of accounting and explain its importance in financial reporting.
3. What are the key difference between assets, liabilities, and equity on a balance sheet?
4. What is the concept of depreciation and its impact on financial statements?
5. What is the purpose of a trial balance, and how is it prepared?
6. Name the double-entry accounting system and provide an example to illustrate it.

7. What is the significance of the matching principle in accounting, and how does it affect the recognition of revenues and expenses?
8. Differentiate between cash flow statement, income statement and balance sheet, highlighting their unique purposes and contents.
9. What are the main steps in the accounting cycle, and why is it essential to follow this process?
10. How are financial ratios used to assess a company's performance and what are some common financial ratios employed by analysts?

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) From the following balances extracted from the books of a trader at the close of the accounting year ending 31st December 2000, prepare profit and loss account.

Trial balance as on 31st Dec. 2000.

Particular	Rs.	Particular	Rs.
Gross profit	1,53,000	Apprenticeship premium	5,000
Salaries	46,500	Dividend received	12,000
Rent (office)	12,300	Interest received	8,000
Fire insurance	2,700	Rent received	5,000
Premium	1,500		
Discount allowed	7,500		
Carriage outward	6,300		
Bad debts	750		
Printing and stationary	21,500		
Selling expenses	1,050		
Rent, rates and taxes	8,000		
Loss by fire (not covered by insurance)	2,000		

Particular	Rs.	Particular	Rs.
Legal charges goodown rent	12,700		
Depreciation on office equipment	5,500		
Repairs and maintenance	4,800		
Bank charges	1,200		

Salaries due but not paid Rs. 2,500. Fire insurance premium has been in advance to the extent of Rs. 300. Rent, rates and tax outstanding Rs. 150.

Or

(b) Explain the accounting concepts and conventions.

12. (a) Difference between journal and ledger.

Or

(b) Journalise the following transactions and post them to the ledger accounts concerned :

1991		Rs.
Jan. 1	Purchased goods for cash	2,000
Jan. 3	Sold goods to Karim	500
Jan. 10	Received from Karim	500
Jan. 15	Purchased machinery for each	1,000
Jan. 20	Cash sales	300
Jan. 25	Sold goods to Rahim and Sons	600
Jan. 28	Received From Rahim and Sons	590
	Discount allowed	10
Jan. 30	Paid rent	50
Jan. 31	Paid salaries	100

13. (a) A company named “TechCo” maintains subsidiary books for its sales and purchases transactions. You are given the following information for the month of June 2023 :

(i) Sales subsidiary Book

- Date : June 2023
- Sales to customers on credit :

June 1: sold goods worth \$2,000 to Customer A

June 5: sold goods worth \$3,500 to Customer B

June 12: sold goods worth \$1,800 to Customer C

June 20: sold goods worth \$2,700 to Customer A

Cash sales :

June 15: sold goods worth \$1,200 for cash

(ii) Purchases subsidiary book :

- Date : June 2023
- Purchases from suppliers on credit :

June 2: purchases goods worth \$1,500 to from
supplier X

June 7: purchases goods worth \$2,800 to from
supplier Y

June 14: purchases goods worth \$1,900 to from
supplier X

Cash purchases :

June 25: purchases goods worth \$1,000 for cash.

Assume all transactions are exclusive of taxes.

Required :

- (1) Prepare the sales subsidiary Book for the month of June 2023.
- (2) Prepare the purchases subsidiary Book for the month of June 2023.

Or

- (b) Enter the following transactions in simple cash book.

2006		Rs.
Jan 1	Cash in hand	12000
Jan 5	Received from Ramesh	3000
Jan 7	Paid rent	3000
Jan 8	Sold goods	7000
Jan 10	Paid Sohan	2000

14. (a) From the following balances extracted from the books of X & Co., prepare a trading and profit and loss account and balance sheet on 31st December, 1991.

	Rs.		Rs.
Stock on 1 st January	11,000	Returns outwards	500
Bills receivables	4,500	Trade expenses	200
Purchases	39,000	Office fixtures	1,000
Wages	2,800	Cash in hand	500
Insurance	700	Cash at bank	4,750
Sundry debtors	30,000	Tent and taxes	1,100
Carriage inwards	800	Carriage outwards	1,450
Commission (Dr.)	800	Sales	60,000
Interest on capital	700	Bills payable	3,000
Stationary	450	Creditors	19,650
Returns inwards	1,300	Capital	17,900

The stock on 21st December, 1991 was valued at \$25,000.

Or

- (b) From the following information of Johnson's Ltd. On 31st March, 2003 you are required to prepare the Trading Profit and Loss A/c and Balance Sheet :

	Rs.		Rs.
Opening stock	5,000	Capital	89,500
Bills receivable	22,500	Commission (Cr.)	2,000
Purchases	1,95,000	Return outward	2,500
Wages	14,000	Trade expenses	1,000
Insurance	5,500	Office fixtures	5,000
Sundry debtors	1,50,000	Cash in hand	2,500
Carriage inward	4,000	Cash at bank	23,750
Commission (Dr.)	4,000	Rent and rates	5,500
Interest on capital	3,500	Carriage outward	7,250
Stationary	2,250	Sales	2,50,000
Returns inwards	6,500	Bills payable	15,000
Creditors	98,250		
Closing stock	12,500		

15. (a) Explain the causes for the differences in two balances.

Or

- (b) You are given the financial data of two companies, Company A and Company B, for the year 2022. Your task is to conduct a ratio analysis using the provided data and answer the questions below :

Company A

Total assets : \$ 5,00,000

Total liabilities : \$ 2,00,000

Net sales : \$ 8,00,000

Cost of goods sold : \$ 4,00,000

Net income : \$ 1,00,000

Total equity : \$3,00,000

Company B

Total assets : \$ 7,00,000

Total liabilities : \$ 3,00,000

Net sales : \$ 12,00,000

Cost of goods sold : \$ 6,00,000

Net income : \$ 1,50,000

Total equity : \$ 4,00,000

- (i) Calculate The debt-to-Equity Ratio for both company A and company B.
- (ii) Calculate the Profit Margin for both company A and company B.
- (iii) Based on the ratio calculated above, which company seems to be in a better financial position?

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Mr. Ramu has the following transactions in the month of July. Record them into the journal and show postings in the ledger and balance the accounts.

July 1st : Ramu started business with a capital of Rs. 75,000

1st : Purchased goods from Manu on credit Rs. 25,000

2nd : Sold goods to Sonu Rs. 20,000

3rd : Purchased goods from Meenu for cash Rs. 15,000

4th : Sold goods to Tanu for cash Rs. 16,000

5th : Goods returned to Manu Rs. 2,000

- 6th : Bought furniture for Rs. 15,000
- 7th : Bought goods from Zenu Rs. 12,000
- 8th : Cash paid to Manu Rs. 10,000
- 9th : Sold goods to Jane Rs. 13,500
- 10th : Goods returned from Sonu Rs. 3,000
- 11th : Cash received from Jane Rs. 5,500
- 12th : Goods taken by Ramu for domestic use Rs. 3,000
- 13th : Returned goods to Zenu Rs. 1,000
- 14th : Cash received from Sonu Rs. 12,000
- 15th : Bought machinery for Rs. 18,000
- 16th : Sold part of the furniture for Rs. 1,000
- 17th : Cash paid for the purchase of bicycle for Ramu's son Rs. 1,500
- 19th : Cash sales Rs. 15,000
- 20th : Cash purchases Rs. 13,500

17. A Government organization receives Grant in Aid amounting to Rs. 10,00,000 on 1.4.2007. Against this grant the organization spends the following amount during the period ended on 31.3.2008.

Sl.No	Date	Particulars	Amount (In Rs.)
1.	01.04.2007	Opened bank account by depositing cheque of Grant in Aid	10,00,000
2.	05.04.2007	Withdrawn cash	60,000
3.	06.04.2007	Purchase of table and chairs from Indian store	1,05,000
4.	06.04.2007	Purchase of computer from M/s Excel enterprises	1,50,000
5.	10.04.2007	Cash purchases of 2 ceiling fan	8,000

6.	10.05.2007 Travelling advance to A	5,000
7.	11.06.2007 Printing expenses	2,000
8.	12.06.2007 A submit the claim for expenses of	2,000
9.	15.07.2007 Medical advance to B by cheque	10,000
10.	24.07.2007 A submit the claim for expenses of	1,000
11.	30.07.2007 Salaries paid by bank	15,000
12.	15.08.2007 A submit the claim for expenses of	1,000
13.	25.08.2007 B, Submitted the Medical Expenses and Balance Amount returned to office	5,000
14.	30.08.2007 Salary paid by bank	15,000
15.	30.09.2007 Salary paid by bank	15,000
16.	12.10.2007 Loan given to C by cheque	12,000
17.	30.10.2007 Salary paid by bank	15,000
18.	1.11.2007 A submit the claim for expenses of	1,000
19.	05.12.2007 Further advance to A	10,000
20.	25.12.2007 Cash withdrawn	15,000
21.	30.12.2007 Salary paid by cash	15,000
22.	15.01.2008 Loan received from C	12,000
23.	25.01.2008 Printing expenses	5,000
24.	30.01.2008 Salary paid by bank	15,000
25.	15.02.2008 Salary paid by bank	13,500
	15.02.2008 Salary accrued but not yet paid to D	1,500
26.	15.02.2008 Miscellaneous expenses	12,000
27.	17.02.2008 Salary paid to 'D' in cash	1,500
28.	27.02.2008 Salary paid by bank	15,000
29.	5.03.2008 Printing expenses	3,000

30. 11.03.2008 Telephone expenses by cheque 15,000
31. 15.03.2008 Advance to Mr. Verma (employee) 8,000
32. 31.03.2008 Payment to Indian stores by cheque 50,000
33. 31.03.2008 Payment to M/s excel enterprises 72,500

Prepare Trial Balance, Income and Expenditure Account and Balance Sheet as on 31.03.2008.

18. From the following trial balance of Gurdeep Singh as at 31st December, 2007, prepare trading and profit and loss account and balance sheet.

Dr. Balances	Rs.	Cr. Balances	Rs.
Opening stock	15,500	Capital	60,000
Land and building	35,000	Loan from Mrs. Gurdeep Singh @9%	30,000
Machinery	50,000	Sundry creditors	9,600
Furniture and fixtures	5,000	Purchase returns	2,100
Purchases	1,06,000	Sales	2,07,300
Salaries	11,000	Discount	1,200
General expenses	2,500		
Rent	3,000		
Postage and telegrams	1,400		
Stationery	1,300		
Wages	26,000		
Freight on purchases	2,800		
Carriage on sales	4,000		
Reports	4,500		
Sundry debtors	30,000		
Bad debts	600		
Cash in hand	100		
Cash at bank	6,400		
Sales returns	5,100		
	<u>3,10,200</u>		<u>3,10,200</u>

The following further information was given :

- (a) Wages for December 2007 amounting to Rs. 2,100 have not yet been paid
- (b) Included in General expenses is insurance premium Rs. 600, paid for the year ending 31st March, 2008
- (c) A provision for doubtful debts @5% on debtors is necessary
- (d) Depreciation is to be charged as follows :
Land and building 2%, machinery 10% and furniture and fixtures 15%
- (e) The loan from Mrs. Gurdeep Singh was taken on 1st July, 2007. Interest has not been paid yet.
- (f) The value of stock on hand on 31st Dec. 2007 was Rs. 14,900.

19. Explain the concept of “Errors and rectification”.

20. You are the financial analyst for XYZ corporation. Your task is to calculate the liquidity ratio for the company based on the provided financial information. The liquidity ratio is an important measure of a company’s ability to meet its short-term obligations using its most liquid assets. The formula for the liquidity ratio is as follows :

$$\text{Liquidity ratio} = (\text{Total liquid assets}) / (\text{Total current liabilities})$$

Where :

- Total liquid assets : Includes all assets that can be quickly converted into cash within one year, such as cash, cash equivalents, and accounts receivable.
- Total current liabilities : represents all obligations that are due within one year, including accounts payable, short-term debts, and other current liabilities.

You have been given the following financial data for XYZ corporation :

- Cash and cash equivalents : \$ 200,000
- Accounts Receivable : \$ 120,000
- Inventory : \$ 80,000
- Prepaid expenses : \$ 20,000
- Accounts payable : \$ 90,000
- Short – term debt : \$ 60,000
- Other current liabilities : \$ 30,000.

Instructions :

- (a) Calculate the total liquid assets by summing up the values of cash and cash equivalents, accounts receivable, and prepaid expenses.
- (b) Calculate the total current liabilities by summing up the values of accounts payable, short-term debt, and other current liabilities.
- (c) Use the formula for the liquidity ratio to find the result.
- (d) Provide your answer with the calculated liquidity ratio.

Note : For the sake of simplicity, assume all the given amounts are in US dollars.

D-6205

Sub. Code

10152/12752

DISTANCE EDUCATION

B.C.A./B.C.A.(Lateral Entry) DEGREE EXAMINATION,
DECEMBER 2024.

Fifth Semester

COMPUTER GRAPHICS

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — ($10 \times 2 = 20$ marks)

Answer ALL the questions.

1. Mention any two applications areas of computer graphics.
2. List out any two input devices used in graphics.
3. Define scaling.
4. What do you mean by composite transformation?
5. How do you represent 3D objects?
6. What do you mean by shielding?
7. Define composite transformation in 3D.
8. Write any two viewing coordinates for 3-D viewing.
9. Define raster animation.
10. List out the computer animation languages.

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Write short note on the graphics system software.

Or

- (b) Describe about the line drawing algorithm.

12. (a) Enumerate window to view-port coordinate transformations.

Or

- (b) Discuss the following terms : (i) Rotation
(ii) Reflection.

13. (a) Write short note on quadratic surfaces in 3D objects.

Or

- (b) Describe about Hermite curve and its uses.

14. (a) Write short note on three-dimensional graphics packages.

Or

- (b) Discuss in detail about the three-dimensional composite transformations.

15. (a) Write a short note on key frame systems.

Or

- (b) Discuss about general animation functions.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Illustrate the scan line polygon fill algorithm.
 17. Discuss in detail the Sutherland-Hodgeman polygon clipping algorithm.
 18. Describe the various illumination models.
 19. Write a brief note on projection transforms and clipping in 3-D viewing.
 20. Explain back face detection and scan-line detection methods in detail.
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D-6206

Sub. Code

10153/12753

DISTANCE EDUCATION

**B.C.A./B.C.A.(Lateral Entry) DEGREE EXAMINATION,
DECEMBER 2024.**

Fifth Semester

OPERATING SYSTEMS

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Define operating system.
2. Specify the purpose of fork()?
3. What is scheduler?
4. State any two advantages of multiprocessor system.
5. Define semaphore.
6. Write the mechanisms to avoid deadlock situation.
7. Specify the purpose of page table.
8. Differentiate page and segment.
9. How do you manage the free space with operating system?
10. What is the disk?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Explain the various operations of an operating system.

Or

- (b) Illustrate the use of form and exec system calls.

12. (a) Explicate the different process operations.

Or

- (b) Elaborate the concept of multiprocessor system.

13. (a) Describe the critical section problem in detail.

Or

- (b) Exemplify the characteristics of deadlock.

14. (a) What are memory management functions? Explain them.

Or

- (b) Explain the concept of segmentation.

15. (a) What are the various file operations? Explain them.

Or

- (b) Show the advantage of disk management.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Discuss the main advantages of layered approach to system design.
17. Demonstrate any two process scheduling algorithms in detail.

18. Give a brief account on starvation in deadlock.
 19. Briefly explain the concepts of demand paging.
 20. What are the allocation methods of a disk space? Explain them.
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D-6207

Sub. Code

10161/12761

DISTANCE EDUCATION

**B.C.A./B.C.A.(Lateral Entry) DEGREE EXAMINATION,
DECEMBER 2024.**

Sixth Semester

MANAGEMENT PRINCIPLES AND TECHNIQUES

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define planning.
2. What are the objectives of planning?
3. What do you mean by redundant constraints?
4. What do you understand by degeneracy in a transportation problem?
5. What are the three main phases of a project?
6. What do you mean by a non-degenerate solution in a TP?
7. When should the replacement be done?
8. What are the categories into which the replacements of items are classified?

9. Define group replacement.
10. State the conditions under which group replacement is superior to individual replacement.

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Explain the various functions of management.

Or

- (b) Give an overview of popular overall direct control measures.

12. (a) Use graphical method to solve the following LPP.

Maximize $Z = 6x_1 + x_2$ subject to the constraints :

$$2x_1 + x_2 \geq 3, x_2 - x_1 \geq 0 \text{ and } x_1, x_2 \geq 0.$$

Or

- (b) Use simplex method to solve the following LPP.

Maximize $Z = 3x_1 + 2x_2$

Subject to the constraints :

$$x_1 + x_2 \leq 6$$

$$2x_1 + x_2 \leq 6$$

$$\text{and } x_1, x_2 \geq 0.$$

13. (a) Draw the network for the project whose activities and their precedence relationships are given below :

Activity : P Q R S T U

Predecessor : - - - P,Q P,R Q,R

Or

- (b) Calculate the earliest start, earliest finish, latest start and latest finish of each activity of the project given below :

Activity	1-2	1-3	1-5	2-3	2-4
Duration (in weeks)	8	7	12	4	10
Activity	3-4	3-5	3-6	4-6	5-6
Duration (in weeks)	3	5	10	7	4

14. (a) The cost of machine is Rs. 6100 and its scrap value is Rs. 100. The maintenance cost found from experience are as follows :

Year	1	2	3	4	5	6	7	8
Main cost (Rs.)	100	250	400	600	900	1200	1600	2000

When should the machine be replaced?

Or

- (b) The following failure rates have been observed for a certain type of light bulb :

End of week	1	2	3	4	5	6
Pro.of failure to date	0.05	0.14	0.32	0.56	0.86	1.00

The cost of replacing an individual failed bulb is Rs. 1.20. If the cost of group replacement is 35 paise per bulb, determine the best replacement policy.

15. (a) A machine owner finds from his past records that the costs per year of maintaining a machine, whose purchase price is Rs. 6000, are as given below :

Yr.	1	2	3	4	5	6	7	8
Maintenance cost	1000	1200	1400	1800	2300	2800	3400	4000
Resale price	3000	1500	750	375	200	200	200	200

Determine at what age a replacement is due.

Or

- (b) The following mortality rates have been observed for a certain type of light bulbs

Week	1	2	3	4	5
Percent failing by the end of week	10	25	50	80	100

There are 1000 bulbs in use and it costs Rs. 2 to replace an individual bulb, which has burnt out. If all the bulbs were replaced simultaneously, it would cost 50 paise per bulb. Find the average cost of group replacement policy.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Define decision-making and explain the process of decision-making that affects the efficiency of the business decisions.
17. Find an optimum solution to the following transportation problem.

		Warehouse				Capacity
		D	E	F	G	
Factory	A	42	48	38	37	160
	B	40	49	52	51	150
	C	39	38	40	43	190
Demand		80	90	110	160	

18. Project consists of the following activities and time estimates.

Activity	Least time (days)	Greatest time (days)	Most likely time (days)
1-2	3	15	6
1-3	2	14	5
1-4	6	30	12
2-5	2	8	5
2-6	5	17	11
3-6	3	15	6
4-7	3	27	9
5-7	1	7	4
6-7	2	8	5

- (a) Compute expected duration and expected variance of each activity.
- (b) What is the probability that the project will be completed in 27 days?

(For standard normal $Z = 0.35$, area under normal curve from 0 to Z is 0.1368).

19. A machine owner finds from his past records that the costs per year of maintaining a machine, whose purchase price is Rs. 8000, are as given below.

Yr	1	2	3	4	5	6	7	8
Maintenance cost	1000	1300	1700	2200	2900	3800	4800	6000
Resale price	4000	2000	1200	600	500	400	400	400

Determine the time at which it is profitable to replace the truck.

20. The cost of a machine is Rs. 61,000 and its scrap value is Rs. 1,000. The maintenance costs found from the past experiences are as follows :

Year	1	2	3	4	5	6	7	8
Maintenance cost in Rs.	1000	2500	4000	6000	9000	12000	16000	20000

When should the machine be replaced?

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DISTANCE EDUCATION

**B.C.A./B.C.A.(Lateral Entry) DEGREE EXAMINATION,
DECEMBER 2024.**

Sixth Semester

SYSTEM ANALYSIS AND DESIGN

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. What is the primary goal of system analysis and design?
2. Define the term “feasibility study” in the context of system analysis and design.
3. What are the key differences between functional requirements and non-functional requirements?
4. Name two commonly used tools or techniques for data modelling in system analysis and design.
5. List the purpose of a data flow diagram (DFD) in the system development process.
6. What is the role of a use case diagram in system analysis and design?
7. Define the concept of normalization as applied to database design.

8. What is a prototype, and how does it aid in the system development process?
9. Differentiate between the terms “verification” and “validation” in the context of system testing.
10. What is the significance of a feasibility report in the system development life cycle?

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) List and explain the characteristics of system concepts.

Or

- (b) Explain the Interpersonal skills in detail.

12. (a) Explain Fact Finding techniques.

Or

- (b) Write a short note on decision tree.

13. (a) Explain Input Design of on-line systems.

Or

- (b) Write the classification of forms in detail.

14. (a) Write a short notes on Database Design.

Or

- (b) Write a short notes on top Down Approach.

15. (a) Explain HIPO with suitable example.

Or

- (b) Explain Evaluation Process in System Maintenance.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain role of system analyst in detail.
 17. Explain fact finding techniques in detail.
 18. Explain process and stages of system design in detail.
 19. Write a detailed note on Warnier Orr diagram.
 20. Explain Hardware and software selection in detail.
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Sub. Code

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DISTANCE EDUCATION

**B.C.A./B.C.A.(Lateral Entry) DEGREE EXAMINATION,
DECEMBER 2024.**

Sixth Semester

VISUAL BASIC PROGRAMMING

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Define GUI.
2. How do you running and testing the VB program?
3. Differentiate the variables and constants in VB.
4. Give the syntax of for loop in VB.
5. What do you mean by subroutines?
6. What are the uses of arrays in VB?
7. Define MDI.
8. What are the different options available in menu bar?
9. What are the features of ADO data control?
10. Expand ODBC.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Explain any three IDE components of visual basic?

Or

- (b) Explain the functions of properties window.

12. (a) Describe the various operators available in VB.

Or

- (b) Write note on text box control and check box control in VB with an example.

13. (a) What are multi-dimensional arrays? Discuss about dynamic arrays.

Or

- (b) What is the difference between function and a procedure in VB?

14. (a) Illustrate the properties of MDI form.

Or

- (b) What is menu? Explain the steps for creating a menu with a suitable example.

15. (a) Explain any three controls used in VB to manipulate data retrieved from tables.

Or

- (b) Write the steps to add, delete, and search data using an ADO control.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain the different windows available in standard EXE project of VB.
 17. Write the various looping structures of VB and give their syntax and its usage.
 18. Write a visual basic program to simulate a calculator.
 19. How do you building MDI form by creating MDI child forms?
 20. Develop a VB program to display records from database using ADODC control.
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