



Paper Code : BCADSC 32L

B.C.A. II Semester Degree Examination (NEP), October 2022

Subject : COMPUTER APPLICATION

Paper : Discrete Mathematical Structures (Paper – III)

Time : 2.30 Hours

Max. Marks : 60

Instruction : Answer all Sections.

SECTION – A

Answer any five of the following :

(5×2=10)

1. a) Write the negation of the statement. "All peoples are intelligent".
- b) Write the Cartesian product of $A = \{1, 2\}$ and $B = \{a, b, c\}$.
- c) How many permutations of the letters ABCDEFGH contain the string ABC ?
- d) Define recurrence relation.
- e) What do you mean by recursive algorithms?
- f) What is an symmetric relation ?
- g) Define isomorphism of two graphs.

SECTION – B

Answer any four of the following :

(4×5=20)

2. Find the truth table of the compound proposition $(p \vee q) \rightarrow (p \wedge \sim r)$.
3. Explain set operations with Venn diagram.
4. Find the values of the extended binomial coefficients $\binom{-2}{3}$ and $\binom{1/2}{3}$.
5. Give two different examples of proofs that use strong induction.
6. Find the reflexive, closure and the symmetric closure of the relation $(1, 2), (2, 3), (2, 4), (3, 1)$ on the set $\{1, 2, 3, 4\}$.
7. Give atleast two examples of how graphs are used in modelling.

P.T.O.



SECTION – C

Answer any three of the following : (3×10=30)

8. Find the product AB where

$$A = \begin{bmatrix} 1 & 0 & 1 \\ 0 & -1 & -1 \\ -1 & 1 & 0 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 1 & -1 \\ 1 & -1 & 0 \\ -1 & 0 & 1 \end{bmatrix}$$

9. State the principle of inclusion-exclusion and outline a proof of this principle.
10. Use Mathematical induction to show that $2^n > n^2 + n$ whenever n is an integer greater than 4.
11. What is relation ? Explain different types of relations with example.
12. What is graph ? Explain different types of graph with example.

Paper Code : ENGAECC 32L

B.Sc./B.C.A. II Semester Degree Examination (NEP), October 2022

Subject : ENGLISH (Basic)

Paper : Literary Light

Time : 2.30 Hours

Max. Marks : 60

Instructions : 1) Read the questions *carefully* before answering them.

2) Answer *all* the questions from Section – C.

SECTION – A

(Prose)

I. Annotate **any two** of the following :

(2×5=10)

1) a) "Death is a great price to pay for a red rose".

b) Let me help you she said 'I Shall explain the card to you and show you what you may eat'.

c) Did you have a nice journey, Mr. David ?

II. Answer **any one** of the following :

(1×10=10)

2) What is the role of Nightingale in the story ?

3) Narrate Gandhi's experience with the young lady.

4) Explain how every cloud has its own silver lining.

SECTION – B

(Poetry)

III. Annotate **any two** of the following :

(2×5=10)

5) a) Where is the glory, where the reverence now ?

b) The eight other athletes stopped in their tracks

c) What immortal hand or eye, could frame they fearful symmetry ?

P.T.O.



IV. Answer any one of the following :

(1×10=10)

- 6) Write a critical analysis of the poem "To India – My Native Land".
- 7) How does the poem "Nine Gold Medals" inspire human compassion and cooperation ?
- 8) Explain the theme of this poem. "The Tyger".

SECTION – C

(Grammar and Composition)

V. 9) Find the error in the following sentences and rewrite them.

(2×2=4)

- a) I didn't get any informations.
- b) Myself I am Suma.

10) Use the following words as adjective and adverb in your own sentences.

(2×2=4)

- a) Easy
- b) Popular.

11) Fill in the blanks with appropriate **conjunctions** given below in brackets.

(4×1=4)

(Get, Either or, both and, whether)

- a) I take _____ coffee _____ tea.
- b) I don't know _____ he is an Indian.
- c) She always scolds him _____ she loves him.
- d) Pallavi is _____ kind _____ humble.

12) Write a dialogue requesting father to send "tour".

(1×4=4)

13) Write a short speech of welcome on "Gandhi Jayanti".

(1×4=4)



Paper Code : BCOMOEC 12L

II Semester Open Elective Degree Examination (NEP), October 2022

Subject : COMMERCE

Paper : Financial Environment

Time : 2½ Hours

Max. Marks : 60

Instruction : Attempt all Sections according to internal choice.

ವಿಭಾಗ - ಅ

SECTION - A

1. ಬೇಕಾದ ಐದಕ್ಕೆ ಉತ್ತರಿಸಿರಿ.

Answer any five questions.

- ಏಕಸ್ವಾಮ್ಯ ಎಂದರೇನು ?
What is the meaning of Monopoly ?
- ರಾಷ್ಟ್ರೀಯ ಆದಾಯ ಎಂದರೇನು ?
What is National Income ?
- ಹಣಕಾಸಿನ ನೀತಿಯ ಅರ್ಥವನ್ನು ವಿವರಿಸಿ.
Explain the meaning of monetary-policy.
- ಕೋಶೀಯ ನೀತಿ ಎಂದರೇನು ?
What is Fiscal (budgetary) policy ?
- ನಿರುದ್ಯೋಗ ಎಂದರೇನು ?
What is the unemployment ?
- ಹಣಕಾಸಿನ ವಲಯ ಎಂದರೇನು ?
What is the financial sector ?

ವಿಭಾಗ - ಬ

SECTION - B

ಬೇಕಾದ ನಾಲ್ಕಕ್ಕೆ ಉತ್ತರಿಸಿರಿ.

(4×5=20)

Answer any four questions.

2. ಪೂರೈಕೆಯ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುವ ಅಂಶಗಳು ಯಾವುವು ? ವಿವರಿಸಿರಿ.

Which are the factors affecting supply ? Explain.

P.T.O.

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3. ಜಿಡಿಪಿಯ ವ್ಯಾಖ್ಯೆ ಮತ್ತು ಜಿಡಿಪಿಯ ಲೆಕ್ಕಚಾರದ ಬಗ್ಗೆ ವಿವರಿಸಿರಿ.

Define GDP and how to measure GDP explain.

4. ಹಣಕಾಸಿನ ನೀತಿಯ ಉದ್ದೇಶಗಳನ್ನು ವಿವರಿಸಿರಿ.

Explain the objectives of monetary policy.

5. ರಾಜ್ಯಕೋಶ ನೀತಿಯ ಉದ್ದೇಶಗಳನ್ನು ವಿವರಿಸಿರಿ.

Explain the objectives of fiscal policy.

6. ಹಣದುಬ್ಬರದ ಸಾಮಾಜಿಕ-ವೆಚ್ಚಗಳನ್ನು ವಿವರಿಸಿರಿ.

Explain the social costs of inflation.

ವಿಭಾಗ - ಕ

SECTION - C

ಬೇಕಾದ ಮೂರಕ್ಕೆ ಉತ್ತರಿಸಿರಿ.

(3×10=30)

Answer any three questions.

7. ಮಾರುಕಟ್ಟೆಯ ವರ್ಗೀಕರಣಗಳನ್ನು ವಿವರಿಸಿರಿ.

Explain the classification of market.

8. ಭಾರತದ ಅಭಿವೃದ್ಧಿಯಲ್ಲಿ ಆರ್‌ಬಿಐನ ಪಾತ್ರವನ್ನು ವಿವರಿಸಿರಿ.

Explain the role of RBI in India's development.

9. ರಾಜ್ಯಕೋಶ ನೀತಿಯ ಸಾಧನಗಳ (ಅಸ್ತ್ರಗಳ) ನ್ನು ವಿವರಿಸಿರಿ.

Explain the fiscal policy instruments.

10. ಹಣದುಬ್ಬರದ ಅರ್ಥ ಏನು ? ಹಣದುಬ್ಬರದ ಪ್ರಕಾರಗಳನ್ನು ವಿವರಿಸಿರಿ.

What is the meaning of inflation ? Explain the types of inflation.

11. 1991ರ ನರಸಿಂಹನ್ ಸಮಿತಿಯ ಶಿಫಾರಸ್ಸುಗಳನ್ನು ವಿವರಿಸಿರಿ.

Explain the recommendations of Narasimhan Committee 1991.



Paper Code : BCADSC 12L

B.C.A. II Semester Degree Examination (NEP), October 2022

Subject : COMPUTER APPLICATIONS

Paper : Data Structure Using C (Paper – I)

Time : 2.30 Hours

Max. Marks : 60

Instruction : Answer all Sections.

SECTION – A

Answer **any five** of the following :

(5×2=10)

1. a) What is data structure ? Mention the two basic types of data structures.
- b) Mention the functions used in memory allocation and de-allocation.
- c) Write the syntax for declaration and initialization of one-dimensional arrays.
- d) What do you mean by Searching ? Mention types of Searching techniques in arrays.
- e) What is Node ? Write the structure of Node in single linked list.
- f) Define Stack. What are the operations performed on Stack ?
- g) What are Terminal and Non-terminal Nodes ?

SECTION – B

Answer **any four** of the following :

(4×5=20)

2. Explain algorithm performance analysis with an example.
3. What is Recursion ? Explain different types of Recursion techniques with examples.
4. Write an Algorithm for inserting an element into an one-dimensional array.
5. Explain Single linked list.

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6. What is Queue ? Explain memory representation of Queue.
7. Define the following :
 - i) Binary Search tree
 - ii) Root Node
 - iii) Sibling Node
 - iv) Degree of Node
 - v) Edge.

SECTION – C

Answer **any three** of the following : **(3×10=30)**

8. Distinguish between Iterative and Recursive functions with suitable examples.
9. Write an algorithm for insertion sort. Explain with an example.
10. Write an algorithm for deleting an element from given position in single linked list.
11. Convert the following infix expression into postfix expression.
 $A + B * C / (E - F)$
12. Discuss the algorithms of a Binary Tree traversals :
 - a) Preorder Traversal
 - b) Inorder Traversal
 - c) Postorder Traversal.



Paper Code : KANAEECC 32L

ಬಿ.ಎಸ್ಸಿ./ಬಿ.ಸಿ.ಎ. II ಸೆಮಿಸ್ಟರ್ ಪದವಿ ಪರೀಕ್ಷೆ (NEP), ಅಕ್ಟೋಬರ್ 2022

Subject : ಕನ್ನಡ(Basic)

Paper : ವಿಜ್ಞಾನ ಗಂಗಾ - ಭಾಗ - 2

Time : 2½ Hours

Max. Marks : 60

- ಸೂಚನೆಗಳು : 1) ಎಲ್ಲಾ ಭಾಗಗಳಿಗೂ ಉತ್ತರಿಸಿ.
2) ಭಾಷೆ ಮತ್ತು ಬರಹ ಶುದ್ಧಿಗೆ ಗಮನ ನೀಡಲಾಗುವುದು.
3) ಬಲಗಡೆಯ ಅಂಕಗಳು ಪ್ರಶ್ನೆಯ ಪೂರ್ಣ ಅಂಕಗಳು.

ಭಾಗ - ಅ

I. ಬೇಕಾದ ಎರಡಕ್ಕೆ ಉತ್ತರಿಸಿ :

(10×2=20)

- 1) ದೇವರಿಗಿಂತ ಜೀವನ ದೊಡ್ಡದು - ಕಾರಂತರ ಲೇಖನದ ಮುಖಾಂತರ ವಿವರಿಸಿ.
- 2) ವ್ಯಕ್ತಿತ್ವ ನಿರ್ಮಾಣದ ಚಿಂತನೆಗಳನ್ನು ಸ್ವಾಮಿ ಜಗದಾತ್ಮಾನಂದರ ಲೇಖನದ ಮೂಲಕ ನಿರೂಪಿಸಿ.
- 3) ಬಿ. ಜಯಶ್ರೀ ಅವರ ಜೀವನದ ಅಗಾಧತೆ ಕಂಡಾಗ ಕತೆಯಲ್ಲಿ ಮೂಡಿಬಂದ ಜೀವನ ಕಲೆಯನ್ನು ವಿವರಿಸಿ.
- 4) ಸ್ತ್ರೀ ಸಂವೇದನೆ - ದಲಿತ ಸಂವೇದನೆಯನ್ನು ದು. ಸರಸ್ವತಿ ಅವರ ಆತ್ಮಕತೆ ಮೂಲಕ ವಿವರಿಸಿ.

ಭಾಗ - ಬ

II. ಬೇಕಾದ ಎರಡಕ್ಕೆ ಉತ್ತರಿಸಿ :

(10×2=20)

- 1) ತಾಯಿ ಮತ್ತು ಮಕ್ಕಳ ಸಂವಾದವನ್ನು 'ಕನಸಿನೊಳಗೊಂದು ಕಣಸು' ಕಾವ್ಯದ ಮೂಲಕ ವಿವರಿಸಿ.
- 2) ಬಣ್ಣದ ಗುಬ್ಬಾರು ಮಳೆರಾಜ ಮತ್ತು ಮತ್ತೆ ಮಳೆ ಹುಯ್ಯುತ್ತಿದೆ - ಕವನಗಳಲ್ಲಿ ವ್ಯಕ್ತವಾದ ಬರಗಾಲದ ಭೀಕರತೆ ನಿರೂಪಿಸಿ.
- 3) ಬರಪರಿಹಾರದ ಯೋಜನೆಗಳು ಹೇಗೆ ದುರುಪಯೋಗವಾಗುತ್ತದೆ ಎಂಬುದನ್ನು 'ಯಾತಕ್ಕೆ ಮಳೆ ಹೋದವೋ' ಗದ್ಯದ ಮೂಲಕ ವಿವರಿಸಿ.
- 4) 'ನಾನೊಬ್ಬ ಸ್ತ್ರೀವಾದಿ' ಸಂದರ್ಶನದಲ್ಲಿ ವ್ಯಕ್ತವಾದ ಸಾಮಾಜಿಕ ಹೊಣೆಗಾರಿಕೆಯನ್ನು ವಿವರಿಸಿ.

P.T.O.

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ಭಾಗ - ಕ

(4x5=20)

III. ಬೇಕಾದ 4ಕ್ಕೆ ಉತ್ತರಿಸಿ :

- 1) ಉದ್ಧಾರದ ಹೆದ್ದಾರಿ.
- 2) ಡಾ. ಕೆ. ಶಿವರಾಮ ಕಾರಂತ.
- 3) ಕಲ್ಕಿ.
- 4) ಬದುಕಿಗೆ ಬೇಕು ಸಂಗೀತದ ನವಿರು.
- 5) ಸತ್ಯಂ ಕಂಪ್ಯೂಟರ್ಸ್ ಕಂಪನಿ.
- 6) ಸಿಗ್ಮಂಡ್ ಫ್ರಾಯ್ಡ್.



Paper Code : BCADSC 22L

B.C.A. II Semester Degree Examination (NEP), October 2022

Subject : COMPUTER APPLICATION

Paper : Object Oriented Programming with Java (Paper – II)

Time : 2.30 Hours

Max. Marks : 60

Instruction : Answer all Sections.

SECTION – A

Answer **any five** of the following :

(5×2=10)

1. a) Define Integer constant and real constant with example.
- b) What is loop ? Write different looping statements.
- c) Write the basic form of class definition.
- d) Define object and class in java.
- e) Define inheritance. Write its forms.
- f) What are GUI Components ?
- g) Define multithreading and thread in java.

SECTION – B

Answer **any four** of the following :

(4×5=20)

2. Explain nested if else statement with example.
3. Write a java program to display message, "welcome to java".
4. Explain the method declaration with syntax.

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5. Write a java program to illustrate method overriding.
6. List the java event classes and listener interfaces.
7. How to create a threads in java ?

SECTION – C

Answer any three of the following :

(3×10=30)

8. Explain looping statements in java.
 9. Explain visibility modifiers with example.
 10. Discuss the different forms of inheritance in java.
 11. Explain applet life cycle.
 12. Explain exception handling try-catch with example.
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