32402/37402/D 020

Reg. No. | | | | | | | | |

IV Semester B.C.A.3/B.B.A.3 Degree Examination, May/June 2018
KANNADA BASIC
ಸಾಹಿತ್ಯ ಸಿಂಚನ – 4

Time : 3 Hours Max. Marks : 80

ಸೂಚನೆ : ಭಾಷೆ ಮತ್ತು ಬರಹದ ಶುದ್ಧತೆಗೆ ಗಮನಕೊಡಲಾಗುವುದು.

1. a) 'ಬೇವು ಬೆಲ್ಲದೊಳಿಡಲೇನು ಫಲ' 'ಕುಲಕುಲವೆಂದು ಹೊಡೆದಾಡದಿರಿ' – ಈ ಕೀರ್ತನೆಗಳಲ್ಲಿನ ವೈಚಾರಿಕ ನಿಲುವುಗಳನ್ನು ತಿಳಿಸಿರಿ. 15

ಅಥವಾ

b) ಕೆ.ಎಸ್. ನರಸಿಂಹಸ್ವಾಮಿ ಅವರ ಗೃಹಲಕ್ಷ್ಮಿ ನಾಯಕನ ಕಣ್ಣನಗಳನ್ನುತುಂಬುವ ಚೆಲುವೆಯಾಗಿದ್ದಾಳೆ – ವಿವೇಚಿಸಿರಿ.

2. a) ಮೂಢನಂಬಿಕೆ ಮತ್ತು ಪವಾಡಗಳ ಬಗೆಗಿರುವ ಎಚ್. ನರಸಿಂಹಯ್ಯನವರ ವಿಚಾರಗಳನ್ನು ವಿವರಿಸಿರಿ. 15

ಅಥವಾ

b) ಒಂದು ಹೆಣ್ಣಿನ ಕಣ್ಣೀರ ಕಥೆ 'ಮನುವಿನ ರಾಣಿ' ಕಥೆಯಲ್ಲಿ ಹೇಗೆ ಮೂಡಿ ಬಂದಿದೆ ? ನಿರೂಪಿಸಿರಿ.

3. ಬೇಕಾದ ನಾಲ್ಕಕ್ಕೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ : (4×5=20)

a) ಹುಲ್ಲಾಗು ಬೆಟ್ಟದಡಿ ಪದ್ಯದ ನೀತಿ ಬೋಧೆ.

b) ಭ್ರಷ್ಟಾಚಾರದ ಕಾರಣಗಳು.

c) ನನ್ನ ಜನಗಳು ಪದ್ಯದಲ್ಲಿನ ಶೋಷಿತರ ನೋವುಗಳು.

d) ಸಾಹುಕಾರ ದೇವಿರಯ್ಯ.

e) ನೀರು ಸಂರಕ್ಷಣಾ ಕ್ರಮಗಳು.

f) ಡಾ. ಡಿ. ಸಿ. ಪಾವಟೆ.

4. ಬೇಕಾದ ಮೂರಕ್ಕೆ ಸಂದರ್ಭದೊಡನೆ ಸ್ಪಷ್ಟೀಕರಿಸಿರಿ : (3×5=15)

a) ಸದ್ಗುಣವೆಂಬ ಫಲವ ಬಿತ್ತದೆ ಬೆಳೆಯದೆ ಹೋದಿರಲ್ಲ.

b) ಬಂಗಾರದೊಡವೆಗಳ ಬಯಸಿಲ್ಲ ಮನಸಿನಲಿ.

c) 'ಜೀತಕ್ಕೆ ಇರ್ಸುಕೋದು ಅಂದ್ರೆ ಕುಂಡ್ರಿಸಿ ಪೂಜೆ ಮಾಡೋಕೇನಲ್ಲೆ ?'

d) ನಮ್ಮ ಸಮಾಜದಲ್ಲಿ ಮಾನಭಂಗವೆಂಬುದು ಒಂದು ಆಪಘಾತವೆಂದು ಪರಿಗಣಿಸಬೇಕು.

e) ಬಲಿ, ಮಂತ್ರೋಚ್ಚಾರಣೆ, ಮುದ್ರೆ ಆಚಾರಗಳು ಇವು ಧರ್ಮವಲ್ಲ.

5. ಒಂದೇ ವಾಕ್ಯದಲ್ಲಿ ಉತ್ತರಿಸಿರಿ : 15

a) ಬಸವಣ್ಣನವರ ಸೋದರಳಿಯನ ಹೆಸರೇನು ?

b) ನವಕೋಟಿ ನಾರಾಯಣ ಎಂದು ಯಾರನ್ನು ಕರೆಯುತ್ತಾರೆ ?

c) ದ. ರಾ. ಬೇಂದ್ರೆಯವರ ಕಾವ್ಯನಾಮ ಯಾವುದು ?

d) ಗೃಹಲಕ್ಷ್ಮೀ ಪದ್ಯವನ್ನು ಯಾವ ಕೃತಿಯಿಂದ ಆರಿಸಿಕೊಳ್ಳಲಾಗಿದೆ ?

ಪು.ತಿ.ನೋ.

e) ಜಿ. ಎಸ್. ಶಿವರುದ್ರಪ್ಪನವರ ಪಿ. ಎಚ್. ಡಿ. ಪ್ರಬಂಧ ಯಾವುದು ?

f) 'ಊರುಕೇರಿ' ಇದು ಯಾರ ಆತ್ಮಕಥನ ?

g) ಡಾ. ಎಚ್. ನರಸಿಂಹಯ್ಯನವರ ತಂದೆ-ತಾಯಿಯ ಹೆಸರೇನು ?

h) ರಾ.ಯ..ಧಾರವಾಡಕರ ಇವರ ಪೂರ್ಣ ಹೆಸರೇನು ?

i) 'ಮನುವಿನ ರಾಣಿ' ಕಥೆಯ ನಾಯಕಿ ಯಾರು?

j) ಬೆಸಗರ ಹಳ್ಳಿ ರಾಮಣ್ಣನವರ ಊರು ಯಾವುದು ?

k) 'ಮಹಿಳಾ ದಿನಾಚರಣೆ' ಲೇಖನ ಬರೆದವರಾರು ?

l) ನಮಗೆ ದೊರೆಯುವ ನೀರಲ್ಲಿ ಶೇಕಡಾ 80 ಭಾಗ ಯಾವ ಉದ್ದೇಶಕ್ಕೆ ಬಳಸಲಾಗುತ್ತದೆ ?

m) 'ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯದ ಶಿಲ್ಪಿ' ಎಂಬ ಕೀರ್ತಿ ಯಾರಿಗೆ ಸಲ್ಲುತ್ತದೆ ?

n) ಭಾರತದ ಸಿಡಿಲ ಸಂನ್ಯಾಸಿ ಎಂದು ಖ್ಯಾತರಾದ ವ್ಯಕ್ತಿ ಯಾರು?

o) ಗಾಂಧೀಜಿ 'ಹರಿಜನ ನಿಧಿ' ಸಂಗ್ರಹಣೆಗಾಗಿ ಬಂದಾಗ ತನ್ನೆಲ್ಲ ಆಭರಣ ನೀಡಿದ ವ್ಯಕ್ತಿ ಯಾರು ?

32421/D 210

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Fourth Semester B.C.A. 3 Degree Examination, May/June 2018
DESIGN AND ANALYSIS OF ALGORITHMS
(Regular and Repeaters)

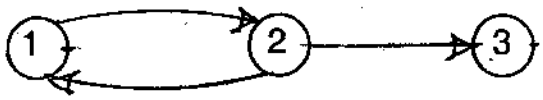
Duration : 3 Hours Max. Marks : 80

Instructions : *1) Write answer to the particular Section questions together.*
2) Draw diagrams ***wherever*** *necessary.*

PART – A

1. Solve **any ten** questions. **(10×2=20)**

a) State what do you mean by computational procedures with respect to algorithm.
b) Algorithm forms the base to write a program for solution of a given problem. Justify.
c) What is a program ?
d) Give the pseudocode convention of for – next loop.
e) Write control abstraction for Divide and Conquer (DAC).
f) What do you understand by term analysis of algorithm ?
g) What is feasible solution and optimal solution ?
h) What do you mean by two way merge pattern ?
i) For the graph given, state the indegree and outdegree of node '1' and '2'.



j) Differentiate between directed graph and undirected graph. With neat diagram.
k) Define Tree Traversal.
l) What is explicit constraint ?

PART – B

Solve **any four** questions. **(4×5=20)**

2. What are the characteristics expected in good algorithm ? Explain in brief.

P.T.O.

3. Compare, Linear search and binary search methodology.

4. Using the Greedy Knapsack algorithm Find optimal solution for the following n = 3, m = 24, (P_1, P_2, P_3) = (30, 28, 20) and (W_1, W_2, W_3) = (21, 18, 12).

5. State the similarities and differences between divide and conquer technique and dynamic programming methodology.

6. State the two Graph search and traversal methods. Discuss Breadth First Search and Traversal with an example.

7. Explain the sum of subset problem. Find all the possible subsets of 'W' that sum to 'm' for the following W = {5, 7, 10,12,15,18, 20}, m = {3, 5}.

PART – C

Solve **any four full** questions. **(4×10=40)**

8. What is the importance of expressing algorithm in pseudocode ? Explain various pseudocode conventions for specifying algorithm. **10**

9. a) Discuss subset paradigm and ordering paradigm with example. **5**

   b) In a job sequencing with deadline problem find all feasible solutions and then identify the optimal solution where n = 4, (P_1, P_2, P_3, P_4) = (100, 10, 15, 27) and (d_1, d_2, d_3, d_4) = (2, 1, 2, 1). **5**

10. a) Explain the flow shop scheduling problem with respect to
    i) Preemptive scheduling
    ii) Non-Preemptive scheduling. **5**

    b) Write a note on Travelling sales person problem. **5**

11. a) Draw a tree and describe the three tree traversal methods. **5**

    b) Draw the tree of recursive calls of Max Min for 'g' elements a [1 : 9] 22, 13, –5, –8, 15, 60, 17, 31, 47. **5**

12. a) Explain Strassen's matrix multiplication wtih an example. **5**

    b) Write short note on **any one**. **5**
    i) 4 × 4 Queen's problem.
    ii) Hamiltonian cycle.

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IV Semester B.C.A.3 Degree Examination, May/June 2018
(Regular and Repeater)
SOFTWARE ENGINEERING

Time : 3 Hours Max. Marks : 80

Instructions : ***1) Draw neat diagrams wherever necessary.***

2) Answer all Sections.

SECTION – A

1. Answer **any ten** questions of the following : **(10×2=20)**

a) Define software engineering.

b) Mention disadvantages of waterfall model.

c) List any 4 software ethics.

d) List behavioral models.

e) What is data dictionary ?

f) List the Architectural patterns,

g) What is design patterns ?

h) What is difference between class and sequence diagram ?

i) What do you mean system survivability ?

j) What are the three implementation issues in design ?

k) Define redundancy and diversity.

l) What is team work ?

SECTION – B

Answer **any four full** questions : **(4×5=20)**

2. Draw and explain requirement engineering process.
3. Explain the prototyping model and mention its advantages.
4. With an example, explain use-case diagram.
5. Explain object oriented design using UML.
6. Explain the dependable processes.
7. Explain the estimation techniques.

P.T.O.

SECTION – C

Answer **any four full** questions : **(4×10=40)**

8. How is a software developed using spiral model ? Explain.
9. Explain (a) Interaction model (b) Architectural views. **(5+5=10)**
10. Explain in detail security engineering.
11. Explain design patterns and implementation issues.
12. Write short notes on :
    1) Functional and non-functional requirement.
    2) Project scheduling.

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IV Semester B.C.A. 3 Degree Examination, May/June 2018
(Regular and Repeater)
IT INFRASTRUCTURE AND MANAGEMENT

Time : 3 Hours Max. Marks : 80

Instructions : ***1) All Sections are compulsory.***

2) Draw diagrams wherever necessary.

SECTION – A

1. Answer **any ten** of the following : **(10×2=20)**

   a) List out the tasks of IT system management.

   b) What is ITIL ?

   c) What are the functions of configuration management ?

   d) What do you mean by operation level Agreement ?

   e) Give the two approaches of service level management.

   f) What is the formula for ROI (Return On Investment) ?

   g) Define MTTR.

   h) What is the difference between hacker and cracker ?

   i) What is Bare Machine Recovery ?

   j) What do you mean by Logic Bomb ?

   k) What do you mean by CATTCHA ?

   l) Give the applications of biometric systems.

SECTION – B

Answer **any four** of the following : **(4×5=20)**

2. Discuss the various challenges in IT infrastructure management.
3. Differentiate incident management and problem management.
4. Explain various issues involved in the internet ethics.
5. Explain different methods of testing DRP (Disaster Recovery Plan).
6. Explain capacity management.
7. Explain EDI system.

SECTION – C

Answer **any four** of the following : **(4×10=40)**

8. i) Explain the various diagrams used in design model.

   ii) List the design issues in service level management. **(8+2=10)**

9. Explain all the components in Financial level management process.

P.T.O.

10. Explain various steps involved in incident management with diagram. Explain advantages and relationship with other management.
11. What do you mean by cryptography ? Explain various algorithms.
12. What is computer forensics ? Explain the terms in context to computer forensics :
    a) Database forensics
    b) Network forensics
    c) Firewall forensics
    d) Mobile Device forensics.

(2+2+2+2+2=10)

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IV Semester B.C.A.3 Examination, May/June 2018
VB·NET
(Regular & Repeaters)

Time : 3 Hours Max. Marks : 80

Instructions : *1)* ***All*** *Parts are* ***compulsory.***
2) Draw property chart and screen design for programs.
3) Draw neat diagrams whenever necessary.

PART – A

1. Answer **any ten** questions of the following : **(10×2=20)**
   a) What is ·NET Framework ?
   b) Define FCL.
   c) What is visual studio IDE ?
   d) What is event ?
   e) List any four properties of label.
   f) Mention any four control names in VB·NET.
   g) Write the syntax to declare a constant in VB·NET.
   h) Write the syntax of MsgBox.
   i) Mention any four string functions.
   j) What is DialogBox ?
   k) What is a constructor ?
   l) What is ADO·Net ?

PART – B

Answer **any four** questions of the following : **(4×5=20)**

2. Explain the ToolBox and solution explorer components of visual studio IDE.

3. Design a screen saver application using timer control.

P.T.O.

4. Define the following terms used in VB·Net.
   a) InputBox
   b) SQL
   c) Function
   d) ComboBox
   e) Event

5. Explain any two conditional statements in VB·NET with syntax and example.

6. Design an application to create a login form and validate it using MsgBox.

7. Explain any five datatypes used in VB·Net.

PART – C

Answer **any four** questions of the following : **(4×10=40)**

8. What is IDE ? Explain all the components of IDE with diagram.

9. Explain all the looping statements in VB·Net.

10. Design an Pizza order application using CheckBox and radiobuttons and also generate a bill for the same.

11. a) Write a short note on static and dynamic array.
    b) Explain any five mathematical functions used in VB·Net. **(5+5=10)**

12. Write the uses of the following controls :
    a) Open File Dialog control
    b) Font Dialog control
    c) Tool tip
    d) Timer Control
    e) Scroll Bar. **(5×2=10)**

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IV Semester B.C.A.3 Degree Examination, May/June 2018
PROGRAMMING USING JAVA
(Regular and Repeaters)

Time : 3 Hours Max. Marks : 80

***Instructions** : 1) **All** Sections are **compulsory**.*
*2) Draw diagrams **wherever** necessary..*

SECTION – A

1. Answer **any 10** of the following : **(10×2=20)**
   a) What is web browser ?
   b) List the tools of JDK.
   c) Illustrate increment operator with an example.
   d) What is method overloading ?
   e) When do we declare a method or class final ?
   f) What is scope of a variable ?
   g) What is an applet ?
   h) What is wrapper class ?
   i) Why do we need the import statement ?
   j) What is a constructor ?
   k) State the special operators of Java.
   l) What is an interface ?

SECTION – B

Answer **any four** of the following : **(4×5=20)**

2. How Java is strongly associated with the internet ?
3. Explain various looping statements in Java.
4. Explain life cycle of thread with neat diagram.
5. Differentiate between public and friendly access.
6. Write a Java program to implement any five string operations.
7. Explain Java API packages frequently used.

P.T.O.

SECTION – C

Answer **any four** of the following : **(4×10=40)**

8. Explain the classification of Java stream classes with neat diagram.

9. a) Explain the classification of Java statements.

   b) Write a Java program to display right angle triangle of "*" (stars) using nested for loop.

10. a) Describe the structure of Java program.

    b) Write a Java program to illustrate method overloading.

11. a) Describe different forms of inheritance with examples.

    b) Explain HTML tags and their functions.

12. a) Write a note on visibility control.

    b) Differentiate between Java and C++.