08

(2012 Batch Onwards)

G 601.4

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

St Aloysius College (Autonomous)

Mangaluru

B.C.A. Semester IV– Degree Examination

April – 2018

JAVA PROGRAMMING

Time: 3 hrs. **Max Marks: 100**

PART – A

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

a) Define scope and lifetime of a variable.

b) What are instance variables? Explain.

c) Write a note on garbage collection.

d) List the methods used for characters extraction.

e) What are Nested Interfaces? Give an example.

f) What is the meaning of public static void main (String args[])?

g) What is a chained exception?

h) List the methods to create threads.

i) What is the use of toString() method? Explain with syntax.

j) Write the structure of a java program.

k) How java is secured and portable?

l) What are packages?

PART – B

Answer any FOUR of the following. **(4×5=20)**

2. Explain delete (), setCharAt() and getChar() methods of String Buffer class.
3. How the uncaught exceptions are handled? Explain with example.
4. List the differences between process based and thread based multitasking.
5. Write a note on yield() and Notify() methods.
6. Write a Program to search for an element in an array using binary search algorithm.
7. How to achieve overriding of methods? Explain with the help of an example.

PART – C

Answer any FOUR of the following. **(4×15=60)**

8. a. Explain any four Lexical issues in Java. **(6)**

b. Write a program to add two complex numbers. Use constructor to initialize complex objects. **(5)**

c. What is method overloading? Explain with syntax and example. **(4)**

9. a. Explain the use of 'super' keyword. **(7)**

b. What are final variables, final methods and final classes? Explain. **(8)**

Contd...2

10. a. How to define and implement interfaces? Explain with examples. **(6)**

b. How to handle multiple catch statements? Explain. **(5)**

c. Write a note on thread synchronization. **(4)**

11. a. Explain the skeleton of an Applet. **(6)**

b. Write a Program to check whether the string is palindrome or not. **(5)**

c. How to set the priorities to a thread? Explain. **(4)**

12. a. Write a note on –

i) Passing object as parameter.

ii) Returning object **(6)**

b. Explain the process of creating a thread by extending the thread class. **(5)**

c. Write a note on static data members and static methods. **(4)**

13. a. How to create and import packages? Explain with an example. **(6)**

b. Write a program to generate N fibonacci numbers. **(5)**

c. Differentiate between String and StringBuffer methods. **(4)**

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(2012 Batch Onwards)

G 602.4 Reg. No.: | | | | | | |

St Aloysius College (Autonomous)

Mangaluru

B.C.A. Semester IV– Degree Examination

April - 2018

VB.NET PROGRAMMING

Time: 3 hrs. **Max Marks: 100**

PART – A

1. **Answer any TEN of the following.** **(10x2=20)**

a) With suitable diagram describe .Net frame work.

b) Define namespaces in VB. Net.

c) What is the purpose of Preserve keyboard?

d) Name the function that are used to convert between character and character codes. Give example.

e) Write a short note on InputBox() function.

f) Differentiate between List boxes and Combo boxes.

g) List the various levels of scope available in VB. Net

h) Explain any two built in dialogue boxes.

i) What are various layout in MDI method?

j) Define the term Inheritance and Polymorphism.

k) What is complex Data binding?

l) What do you mean by custom exception?

PART – B

Answer any FOUR of the following. **(4x5=20)**

2. Explain any four advantage of .Net.
3. How are variables are declared in VB. Net?
4. What are common controls on VB. Net? Explain briefly.
5. Explain inheritance and its types in VB. Net.
6. What is destruction? Explain with example.
7. Write a short note on structured exception handling.

PART – C

Answer any FOUR of the following. **(4x15=60)**

8. a. Explain any five parts of VB IDE. **(5)**

b. Explain following controls:

i) Group box

ii) Picture box

iii) Progress bar **(6)**

c. Write a short note on context menus. **(4)**

Contd...2

9. a. What is event? Enlist various types of keyboard events. (5)

b. Write a program in VB. Net to do the following operations on list box and combo box controls.

i) Add item

ii) Sort items

iii) Clear items (6)

c. How to create MDI form? What are its advantages? (4)

10. a. What are properties? How to create it? What are the types of properties? (5)

b. Explain constructor and its types in VB. Net. (5)

c. Explain ADO.Net architecture in detail. (5)

11. a. Explain any five ADO.Net objects. (5)

b. Write a VB.Net program to search customer Id. Display customer record in Data Grid. (5)

c. How do you create enumerations? Explain with syntax. (5)

12. a. What is an array? Explain different types of arrays used in VB.Net. (5)

b. Explain the method overloading with the help of an example. (5)

c. How to access data from the database using server explorer? Explain. (5)

13. a. Briefly explain the object oriented features. (5)

b. Explain with example the various if.....else statements available in VB.Net (5)

c. Write a VB.Net program to check whether a character is vowel or not. (5)

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10

2012 batch onwards

G 603.4

Reg. No. | | | | | | |

St Aloysius College (Autonomous)

Mangaluru

B.C.A. Semester IV – Degree Examination

April – 2018

MANAGEMENT INFORMATION SYSTEM

Time: 3 hrs. **Max Marks: 100**

PART–A

1. Answer any TEN of the following: **(10x2=20)**

a) Define management information system.

b) What is Decomposition?

c) What is transaction processing?

d) What are the components of information?

e) What is an expert system?

f) What is redundancy?

g) What are sub systems?

h) Mention the aim of Newell-Simon model.

i) What are information centers?

j) Define strategic planning.

k) Define master file.

l) Mention the conditions for quality assurance.

PART–B

Answer any FOUR of the following: **(4x5=20)**

2. Give structure of management information system based on its organisational functions.

3. Explain the concept of decoupling of information systems.

4. What are three different storage models? Explain.

5. What is DSS? Explain different characteristics of DSS.

6. Explain the types of positions found in a functional information system.

7. Explain different classification of users of IS.

Contd...2

PART–C

Answer any FOUR of the following: **(4x15=60)**

8.a) Explain the major processing functions. **(5)**

b) What are the responsibilities of the information system for management control? **(5)**

c) What is meant by closed and open systems? **(5)**

9.a) What are the characteristics of Human Information processing? Explain. **(8)**

b) Explain NOLAN stage model. **(7)**

10.a) Explain with diagram the model of the prototyping process with the help of a diagram. **(8)**

b) Explain the different pressures for centralised versus decentralised control of information resources. **(7)**

11.a) What are the different conditions to be considered for quality assurance and evaluation information systems? **(8)**

b) Explain Newell-Simon Model of human as information processor. **(7)**

12.a) Define the 3 phases of the decision process and describe the decision support for each. **(5)**

b) What is planning? What are the sources of planning data? **(5)**

c) Explain quality assurance process for application development. **(5)**

13.a) Consider a decision analysis problem whose payoffs are given by the following payoff table. **(8)**

Decision	Good competitive condition	Poor competitive condition
	80	25
	30	50
	60	40

Determine best decision with probabilities assuming 0.7 probability of good condition and 0.30 of poor conditions. Use expected value and expected opportunity loss criteria develop a decision tree with expected value at the nodes.

b) Explain the different stages of transaction processing cycle. Explain the different methods for processing transactions. **(7)**

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(2012 Batch Onwards)

G 604.4

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

St Aloysius College (Autonomous)

Mangaluru

B.C.A. Semester IV– Degree Examination

April – 2018

DATA MINING

Time: 3 hrs. **Max Marks: 100**

PART – A

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

a) Define Data cube.

b) Define Datawarehouse.

c) Write any two applications of neural network.

d) Define border set maximal frequent set.

e) What is sequence mining?

f) What is Page Rank?

g) What is web content mining?

h) Define transverse link and intrensic link.

i) Define Agglomerative clustering.

j) Define Decision tree.

k) What do you mean by support vector machine?

l) Define Reference node and Index node of a graph.

PART – B

Answer any FOUR of the following. **(4×5=20)**

2. Explain Datawarehouse architecture with neat diagram.
3. Explain Slicing and Dicing with sketches.
4. Explain Snowflake schema and Fact Constellation with neat diagram.
5. Write a note on Rough set.
6. Compare hierarchical and partitioning clustering.
7. Write a note on web usage mining and its types.

PART – C

Answer any FOUR of the following. **(4×15=60)**

8. a. Explain multidimensional data model. **(8)**

   b. Explain the issues and challenges in data mining. **(7)**

9. a. Explain any three data mining techniques. **(8)**

   b. Write a note on decision tree. **(7)**

10. a. Explain the genetic algorithm with neat diagram and genetic operators used. **(8)**

    b. Explain the episode rule discovery for texts. **(7)**

Contd...2

11. a. Explain Apriori algorithm. (8)
    b. Compare ROLAP and MOLAP. (7)

12. a. Explain the KDD Process with neat diagram. (8)
    b. Explain the features of unstructured text. (7)

13. a. Write a note on MLP and RBF. (8)
    b. Explain different types of Metadata. (7)

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G 605.4

(2012 Batch Onwards)

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

St Aloysius College (Autonomous)

Mangaluru

B.C.A. Semester IV– Degree Examination

April – 2018

COMPUTER ORIENTED NUMERICAL ANALYSIS

Time: 3 hrs. **Max Marks: 100**

PART – A

Answer any TEN of the following. **(10×2=20)**

1.

a) If $A=\begin{bmatrix}1 & 2\\ 3 & 4\end{bmatrix}$ and $B=\begin{bmatrix}-1 & 0\\ 2 & 3\end{bmatrix}$ Find $(AB)^1$

b) Write the formula for Euler's method.

c) If ∇ is the backward difference operator, $\nabla^3 y_3$ is _____.

d) Write the error term of trapezoidal rule.

e) What are the advantages of iterative methods over direct methods for solving a system of linear equations?

f) Write Adam-Bashforth corrector formula.

g) Write Newton's Forward Difference formula.

h) Give an example for each of the following-

i) Row Matrix ii) Diagonal Matrix

i) Write the formula for Simpson's $1/3^{rd}$ rule.

j) Write general numerical integration formula.

k) Write Milne's predictor – corrector formula.

l) Write Runge–Kutta Second order formula.

PART – B

Answer any FOUR of the following. **(4×5=20)**

2. Derive Simpson's $1/3^{rd}$ rule for $I=\int_{xo}^{x_n} y dx$.

3. Use Taylor's series method to compute $y(0.1)$, correct to five decimal places, if $y(x)$ satisfies $\frac{dy}{dx}=x(y-2)$ with $y(0)=3$.

4. Solve the following system of equations using Crammer's rule.

$$x_1+2x_2+3x_3=10$$
$$x_1+3x_2-2x_3=7$$
$$2x_1-x_2+x_3=5$$

5. Derive Newton's Backward Difference Interpolation formula.

6. Explain the steps involved in LU decomposition Method.

7. Find the inverse of the matrix $A=\begin{bmatrix}5 & -2 & 4\\ -2 & 1 & 1\\ 4 & 1 & 0\end{bmatrix}$.

Contd...2

G 605.4

PART – C

(4×15=60)

Answer any FOUR of the following.

8. a. From the data in the following table, find by Lagrange's formula the value of y when $x=102$.

x	93.0	96.2	100.0	104.2	108.7
y=f(x)	11.38	12.80	14.70	17.07	19.91

(8)

b. Solve the system by Gauss Siedel method correct to two decimal places.

$$8x+2y-2z=8$$
$$x-8y+3z=-4$$
$$2x+y+9z=12$$

(7)

9. a. Compute $y(0.3)$, from the equation $\frac{dy}{dx}=x-y, y(0)=1$ taking $h=0.1$, by Runge – Kutta fourth order method. (8)

b. In the following table the values of y are consecutive terms of a series of which the number 31 is 5^{th} term.

Find the first term of the series:

x	3	4	5	6	7	8	9
y	13	21	31	43	57	73	91

(7)

10. a. Find $y(4.4)$, by Euler's modified method, taking $h=0.2$, from the differential equation:

$\frac{dy}{dx}=\frac{2-y^2}{5x}, y=1$ when $x=4$. (8)

b. Derive Simpson's ⅜ Rule. (7)

11. a. Solve the following system by Gauss-Jordan elimination method.

$$3x_1+4x_2+2x_3=15$$
$$5x_1+2x_2+x_3=18$$
$$2x_1+3x_2+2x_3=10$$

(8)

b. Derive Adam–Moulton corrector formula. (7)

12. a. Find $y(0.8)$ by Euler's method from the differential equation $\frac{dy}{dx}=\frac{-y}{1+x}$ when $y(0.3)=2$ correct up to four decimal places taking step length $h=0.1$. (8)

b. From the table

x	2	3	5	7
$\log_{10}x$	0.301	0.477	0.699	0.845

Compute $\log_{10}3.5$ using Newton's Divided Difference formula. (7)

13. a. Solve the system by Gauss Elimination method.

$$2x+y+z=10$$
$$3x+2y+3z=18$$
$$x+4y+9z=16$$

(8)

b. Evaluate $\int_0^1 x^3 dx$, by Trapezoidal rule, with $n=5$. (7)

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14

G 601.4

(2017 batch onwards)

Reg. No.

St Aloysius College (Autonomous)
Mangaluru
B.C.A. Semester IV – Degree Examination
April – 2019
JAVA PROGRAMMING

Time: 3 hrs. **Max Marks: 100**

PART–A

1. Answer any TEN of the following: **(10x2=20)**

a) List any two differences between Java and C.

b) Differentiate break and continue.

c) Write the meaning of public static void main (String args[])

d) How platform independence is achieved in Java?

e) What is inheritance?

f) List any four API packages of Java.

g) What is multithreading?

h) What is meant by rethrowing an exception?

i) What is an Applet?

j) What is the purpose of super()?

k) What is an interface?

l) What is recursion? Mention one advantage of recursion.

PART–B

Answer any FOUR of the following: **(4x5=20)**

2. Explain relational and arithmetic operators with example.
3. What is class? Explain the general form of a class with an example.
4. Describe the following APPLET attributes: CODE, NAME, WIDTH, HEIGHT, ALIGN.
5. List and explain any five thread methods with syntax and its purpose.
6. How do you create and initialize two dimensional array. Write a program to add two square matrices.
7. Write a note on abstract class and abstract methods.

PART–C

Answer any ONE full question from each unit. **(4x15=60)**

UNIT - I

8.a) Explain different logical operators in Java. **(4)**

b) List and explain different primitive data types in Java. **(5)**

c) Explain for and while loop with syntax and example. **(6)**

9.a) List and explain any five features of Java. **(5)**

b) With syntax and example explain the following. **(6)**

i) Type conversion in an expression.

ii) Increment and decrement operators.

c) Write a note on scope and life time of a variable. **(4)**

Contd...2

UNIT – II

10.a) Explain how objects are created from a class in Java with suitable example. (4)

b) Explain method overloading and method overriding with example. (7)

c) What are command line arguments? Write a program to multiply two float numbers passing through command line. (4)

11.a) Explain single inheritance with suitable example. (6)

b) Explain how to return an object from a method with suitable example. (5)

c) Explain the use of 'super' with an example. (4)

UNIT – III

12.a) Explain any four string functions with syntax and example. (4)

b) How to define and implement interfaces. Explain with example. (5)

c) What is a package? Explain how to define and import a package in Java with appropriate example. (6)

13.a) Explain different access modifiers in Java. (6)

b) Explain the vector methods InterElementAt() and CopyInto(). (5)

c) How do you define, Implement and Access interfaces? Explain with example. (4)

UNIT - IV

14.a) Explain the process of creating a thread by using Runnable interface with example. (5)

b) Explain the creation of user defined exception in Java with example. (5)

c) Explain the skeleton of Applet with example. (5)

15.a) Explain exception handling in Java with suitable example. (5)

b) Explain the complete life cycle of a thread. (6)

c) Explain Repaint method of APPLET with an example. (4)

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15

G 602.4

(2017 batch onwards)
Reg. No.

St Aloysius College (Autonomous)
Mangaluru
B.C.A. Semester IV – Degree Examination
April – 2019
WEB PROGRAMMING USING PHP

Time: 3 hrs. **Max Marks: 100**

PART–A

1. Answer any TEN of the following: **(10x2=20)**

a) What are called as escape sequences in PHP?

b) What is the use of var_dump() function?

c) Why range() function is used in PHP?

d) Explain the importance of === operator.

e) What is the output of following code, <?php.

Echo date ("l d F Y H :i a", mktime (12,15,22,11,17,2008));

f) Explain MYSQLi, object's prepare() method.

g) What is the data capacity of single cookie? How many cookies can be present in a domain?

h) Which function is useful to send any header to user's browser?

i) What is use of die() in PHP?

j) Write the syntax of nesting arrays in PHP.

k) Write the PHP syntax to connect MYSQLi database.

l) What is the benefit of $_SESSION array.

PART–B

Answer any FOUR of the following: **(4x5=20)**

2. Write a note on PHP data types.
3. With an example explain switch statement in PHP.
4. Write PHP script to perform the following operations on array.

   i) Remove the duplicates ii) randomizing the array elements.

5. What is the purpose of SQL? List & explain categories of SQL statements.
6. List and explain cookies with attributes.
7. What are the benefits of traditional model of error checking over exception-based approach for error checking in PHP?

PART–C

Answer any ONE full question from each unit. **(4x15=60)**

UNIT - I

8.a) Create web application with PHP, to validate the user name and password and allow the access to the webpage. **(8)**

b) Explain with example setting and checking variable data types in PHP. **(7)**

9.a) With syntax and example explain any five numeric functions in PHP. **(10)**

b) List and explain various attributes of form tag in PHP script. **(5)**

Contd...2

UNIT – II

10.a) How do you iterate through PHP arrays? Explain with example. **(8)**

b) What are user defined functions? Give example. Explain the benefits of user defined functions. **(7)**

11.a) List the various visibility settings and their usage by writing a PHP script. **(10)**

b) Explain with the help of an example, relationship between classes and objects. **(5)**

UNIT – III

12.a) Describe any five methods of PHP exception object with the help of an example. **(10)**

b) Mention the importance of wildcards in SQL with syntax and description. **(5)**

13.a) How to retrieve records as arrays and objects from the database in PHP. Explain with example. **(8)**

b) Mention the importance of securing configuration files? With help of an examples explain the steps involved in securing configuration files. **(7)**

UNIT – IV

14.a) What are sessions? How to create and remove sessions and session variables. **(8)**

b) What is called as logging error? How to perform logging error task in PHP. **(7)**

15.a) Describe PHP's error categories? Explain the mechanism of controlling error reporting in PHP. **(8)**

b) How to secure sessions and database access? Explain. **(7)**

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G 603.4

(2017 batch onwards)

Reg. No.

St Aloysius College (Autonomous)
Mangaluru
B.C.A. Semester IV – Degree Examination
April – 2019
COMPUTER ORIENTED NUMERICAL ANALYSIS

Time: 3 hrs. **Max Marks: 100**

PART–A

1. Answer any TEN of the following: **(10x2=20)**

a) If Δ is the forward difference operator, find $\Delta^2 y_0$.

b) Given Matrix $A = \begin{bmatrix} 1 & -2 \\ 3 & 4 \end{bmatrix}$ Find A^2.

c) Define divided difference $[x_0\ x_1\ x_2]$.

d) Write Taylor's series for y(x).

e) Write formula for Simpson's $\frac{3}{8}$ rule to evaluate $\int_0^3 f(x)dx$.

f) Define Interpolation.

g) Write Runge-Kutta 4th order formula.

h) Find Euclidian norm of Matrix.

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$

i) Given $y^1 = -y, y(0) = 1, h = 0.01$. Find $y(0.01)$ using Euler's method.

j) Give example for Upper Triangular and Lower triangular matrices.

k) Write expression for error in Trapezoidal rule.

l) Write Newton's Backward difference interpolation formula.

PART–B

Answer any FOUR of the following: **(4x5=20)**

2. Using Gauss Elimination method, solve the following linear system of equations.

   10x+y+z=12

   2x+10y+z=13

   x+y+3z=5

3. Solve the following using Gauss-Jordan method.

   4x+3y-z=6

   3x+5y+3z=4

   x+y+z=1

4. Using Lagrange's Interpolation formula, find f(301), Given that f(300)=2.4771 f(304)=2.4829, f(305)=2.4843 and f(307)=2.4871.

5. Evaluate $I = \int_0^1 cosx.dx$ using Simpson's $\frac{3}{8}$ rule when h=0.2.

6. Derive Euler's modified rule.

7. From the following table of values of x and y, obtain $\frac{dy}{dx}$ and $\frac{d^2y}{dx^2}$ for x=3 using Newton's forward difference formula.

x	0	1	2	3	4	5	6
y	6.9877	7.4036	7.7815	8.1291	8.4510	8.7506	9.0309

Contd...2

PART–C

Answer any ONE full question from each unit. (4x15=60)

UNIT - I

8.a) Solve the following system of equations using Gauss-Jordan method. (8)

$2x+4y+z=3$
$3x+2y-2z=-2$
$x-y+z=6$

b) Find the inverse of the matrix (7)

$$A = \begin{bmatrix} 5 & -2 & 4 \\ -2 & 1 & 1 \\ 4 & 1 & 0 \end{bmatrix}$$

9.a) Solve the following equations using LU Decomposition method. (8)

$2x+3y+z=9$
$x+2y+3z=6$
$3x+y+2z=8$

b) Solve the following system of linear equations using Gauss-Siedel iteration method. (7)

$10x+2y+z=9$
$2x+20y-2z=-44$
$-2x+3y+10z=22$

UNIT – II

10.a) Derive Newton's forward difference formula. (8)

b) Using divided interpolation formula, find f(x) as a polynomial in x. (7)

x	-1	0	3	6	7
f(x)	3	-6	39	822	1611

11.a) Using Newton's forward interpolation formula, estimate the population of a city for the year 1925 from the following data. (8)

Year	1921	1931	1941	1951	1961	1971
Population (in thousands)	28	32	36	44	55	68

b) Derive Lagrange's interpolation formula. (7)

UNIT – III

12.a) Derive Simpson's $\frac{1}{3}$ rule. (8)

b) From the following table of values of x and y, obtain $\frac{dy}{dx}$ and $\frac{d^2y}{dx^2}$ at $x = 1.3$. (7)

x	1.0	1.1	1.2	1.3	1.4
y	43.1	47.7	52.1	56.4	60.8

Contd...3

13.a) Evaluate $I = \int_0^1 \frac{1}{(1+x)}\, dx$ correct to three decimal places using trapezoidal rule. **(8)**

b) Evaluate $I = \int_0^1 \frac{1}{x}\, dx$ by Simpson's $\frac{1}{3}$ rule with four strips. **(7)**

UNIT – IV

14.a) Given $\frac{dy}{dx} - 1 = xy$ with $y(0) = 1$, obtain Taylor series expansion for y(x) and find y(0.1) correct to four decimal places. **(8)**

b) Given that $\frac{dy}{dx} = 1 + y^2$ where y=0 when x=0 and h=0.2. Find y(0.2). using Runge-Kutta 4th order formula. **(7)**

15.a) Derive Adam-Moulton corrector formula. **(8)**

b) Determine the values of y when x=0.1. Given y(0)=1, solve $\frac{dy}{dx} = x^2 + y$ using Euler's modified method. Take h=0.05. **(7)**

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 18

(2017 Batch onwards)

G 604.4

Reg. No. | | | | | | |

St Aloysius College (Autonomous)

Mangaluru

B.C.A. Semester IV – Degree Examination

April - 2019

DATA MINING

Time: 3 hrs. **Max Marks: 100**

PART – A

Answer any TEN of the following. **(10x2=20)**

1. a) What is Clustering?
   b) Define support and Confidence.
   c) What is Sequence mining?
   d) Define border set and maximal frequent set.
   e) Write a note on rule generation.
   f) What is OLAP?
   g) Explain the major trends in Data mining.
   h) What do you mean by Multi layer perceptron?
   i) What are the advantages of decision tree?
   j) Explain the role of warehouse server.
   k) What is Web content mining?
   l) What is meant by metadata?

PART – B

Answer any FOUR of the following. **(4x5=20)**

2. Explain OLAP operations.
3. Explain Multidimensional data model.
4. Compare DBMS with data Mining.
5. Explain supervised learning with example.
6. Write a note on Web mining.
7. Explain the applications of data mining.

PART – C

Answer any ONE full questions from each unit. **(4x15=60)**

UNIT I

8. a. Describe the knowledge discovery process in Data Mining. **(8)**

Contd...2

b. Explain the warehouse schema. (7)

9. a. Explain the architecture of data warehouse with a neat diagram. (8)

b. Write a note on OLAP engine and data warehouse backend process. (7)

UNIT II

10. a. Explain the different data mining techniques. (8)

b. Explain association rules. (7)

11. a Discuss the apriori algorithm for frequency item set generations. (8)

b. Explain the data mining application areas and applications. (7)

UNIT III

12. a Explain the support vector machine classifier. (10)

b. Explain rough set theory. (5)

13. a Explain any one unsupervised learning method in detail. (8)

b. Explain data mining using neural networks. (7)

UNIT IV

14. a Explain K – medoid algorithm, with a example (10)

b. Explain the different web mining categories. (5)

15. a Explain K- mean algorithm with an example. (8)

b. Explain the concept of partitioning around medoids. (7)

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G 605.4

(2017 batch onwards)
Reg. No.

St Aloysius College (Autonomous)
Mangaluru
B.C.A. Semester IV – Degree Examination
April - 2019
MANAGEMENT INFORMATION SYSTEM

Time: 3 hrs. **Max Marks: 100**

PART–A

1. Answer any TEN of the following: **(10x2=20)**

a) Define Management Information System. Give an example.
b) Name any two sources of Information.
c) Differentiate between open system and closed system.
d) What is transaction processing system?
e) List any two characteristics of Decision Support System?
f) Define Business model.
g) What do you mean by scenario approach?
h) Represent decision making as a component of problem solving.
i) What is a project?
j) What is artificial intelligence?
k) Define executive information system.
l) Which are the two aspects of Information security?

PART–B

Answer any FOUR of the following: **(4x5=20)**

2. Explain the information system activities.
3. Explain different types of management support system.
4. What are the components of TPS?
5. Explain Gorry Scott Morton grid.
6. Explain SWOT analysis in MIS.
7. Explain the various applications of artificial intelligence.

PART–C

Answer any ONE full question from each unit. **(4x15=60)**

UNIT – I

8.a) Which are the constraints in MIS operations? **(5)**
b) Explain any four types of information. **(4)**
c) With a neat diagram, explain the components of Information System. **(6)**

9.a) What do you mean by operation support system? Explain different types of operation support system. **(8)**
b) What is information? Briefly explain the different sources of information. **(7)**

Contd...2

UNIT – II

10.a) Explain transaction processing cycle with a neat diagram. (9)

b) What are the components of DSS? Explain. (6)

11.a) Explain the methods for processing transaction. (5)

b) What are the classes of DSS? Explain. (5)

c) Explain the control for transaction processing. (5)

UNIT – III

12.a) Explain SDLC with a neat diagram. (9)

b) What are the limitations of SWOT analysis? (6)

13.a) With a neat diagram, explain the components of an organizational planning process. (9)

b) Explain the different parts of a business model. (6)

UNIT – IV

14.a) What are the features of executive information systems? (5)

b) Explain any five common hacking tactics. (5)

c) What are the benefits and limitation of expert systems? (5)

15.a) Explain the components of Enterprise Information Portal with an example. (9)

b) Briefly explain the basic categories of ethical issues. (6)

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20

(2016 Batch onwards)

G 701.4 Reg. No: | | | | | | |

St Aloysius College (Autonomous)

Mangaluru

B.A./B.Sc./B.C.A. - Semester IV – Degree Examination

April - 2019

FOUNDATION COURSE IN HUMAN RIGHTS AND VALUE EDUCATION

Time: 3 Hours **Max. Marks: 100**

PART – A

HUMAN RIGHTS

I. Answer all the following questions in three sentences each. Each question carries one mark: (1x5=5)

ಕೆಳಗಿನ ಎಲ್ಲಾ ಪ್ರಶ್ನೆಗಳನ್ನು ಮೂರು ವಾಕ್ಯಗಳಲ್ಲಿ ಉತ್ತರಿಸಿರಿ. ಪ್ರತಿಯೊಂದು ಪಶ್ನೆಗೂ ಒಂದು ಅಂಕಗಳು.

1. Define human rights.
ಮಾನವ ಹಕ್ಕನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿರಿ.
2. In which year the International Labour Organization came into existence?
ಅಂತರಾಷ್ಟ್ರೀಯ ಕಾರ್ಮಿಕ ಸಂಸ್ಥೆಯು ಯಾವ ವರ್ಷದಲ್ಲಿ ಜಾರಿಗೆ ಬಂತು?
3. Name two awards received by Amnesty International.
ಅಂತರಾಷ್ಟ್ರೀಯ ಕ್ಷಮಾದಾನ ಸಂಸ್ಥೆಗೆ ದೊರಕಿದ ಎರಡು ಪ್ರಶಸ್ತಿಗಳನ್ನು ಹೆಸರಿಸಿರಿ.
4. Which day is celebrated as consumer's day in India?
ಭಾರತದಲ್ಲಿ ಯಾವ ದಿನವನ್ನು ಗ್ರಾಹಕರ ದಿನವೆಂದು ಆಚರಿಸಲಾಗುತ್ತದೆ?
5. Who can be appointed as chairman of NHRC and what is the term of its office?
ರಾಷ್ಟ್ರೀಯ ಮಾನವ ಹಕ್ಕುಗಳ ಆಯೋಗದ ಅಧ್ಯಕ್ಷರನ್ನಾಗಿ ಯಾರನ್ನು ಆಯ್ಕೆ ಮಾಡಬಹುದು ಮತ್ತು ಅವರ ಅಧಿಕಾರವಧಿ ಎಷ್ಟು?

II. Answer any FIVE questions in about a paragraph. Each question carries 3 marks: (3x5=15)

ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಐದು ಪ್ರಶ್ನೆಗಳಿಗೆ ಒಂದು ವಾಕ್ಯಖಂಡದೊಳಗೆ ಉತ್ತರಿಸಿರಿ. ಪ್ರತಿಯೊಂದು ಪ್ರಶ್ನೆಗೂ 3 ಅಂಕಗಳು.

6. For conducting Asian Games in 1982, the Central government began several projects necessary for conducting various games. It handed over the construction work to various contractors, who paid very lowest wages for the workers, which were not sufficient even for food. The petitioner society moved a Public Interest Litigation against central government alleging that it was exploiting the labour by paying them low wages. The Supreme Court agreed with the contention of the petitioner society and ordered the defendants to enhance wages. It held that the non payment of minimum wages to the workers was a denial of their right to live with basic human dignity.

i) Justify the judgement of Supreme Court.

ii) Which article of the Indian Constitution enumerates the right to live with human dignity?

1982ರಲ್ಲಿ ಏಷಿಯಾಡ್ ಗೇಮ್ ನಡೆಸುವ ಸಲುವಾಗಿ ಕೇಂದ್ರ ಸರಕಾರವು ಹಲವಾರು ಯೋಜನೆಗಳನ್ನು ನಿರೂಪಿಸಿತ್ತು. ಇವುಗಳನ್ನು ಕಾರ್ಯಗತ ಗೊಳಿಸುವ ಸಲುವಾಗಿ ಕೇಂದ್ರ ಸರಕಾರವು ಈ ಯೋಜನೆಗಳನ್ನು ಹಲವಾರು ಗುತ್ತಿಗೆದಾರರಿಗೆ ಹಸ್ತಾಂತರಿಸಿತು. ಆದರೆ ಈ ಗುತ್ತಿಗೆದಾರರು ತಮ್ಮ ಕೆಲಸಗಾರರಿಗೆ ಅತೀ ಕಡಿಮೆ ವೇತನ

Contd...2

ನೀಡುತ್ತಿದ್ದರು. ಈ ವೇತನವು ಅವರ ಆಹಾರಕ್ಕೂ ಸಾಕಾಗುತ್ತಿರಲ್ಲಿಲ್ಲ. ಕೆಲಸಗಾರರಿಗೆ ಕಡಿಮೆ ವೇತನ ನೀಡುವುದನ್ನು ವಿರೋಧಿಸಿ ಮನವಿದಾರರ ಸಂಘ ಕೇಂದ್ರ ಸರಕಾರದ ವಿರುದ್ಧ ಮೊಕದ್ದಮೆ ಹೂಡಿತು.

ಸರ್ವೋಚ್ಚ ನ್ಯಾಯಲಯವು ತೀರ್ಪನ್ನು ಕೆಲಸಗಾರರ ಪರವಾಗಿ ನೀಡಿ ಅವರ ವೇತನವನ್ನು ಹೆಚ್ಚಿಸುವಂತೆ ಆಜ್ಞೆ ನೀಡಿತು ಮಾತ್ರವಲ್ಲದೆ ವೇತನವನ್ನು ಕೊಡದಿರುವುದು ಒಬ್ಬ ವ್ಯಕ್ತಿಯ ಜೀವಿಸುವ ಹಕ್ಕು ಮಾತ್ರವಲ್ಲ ಘನತೆಯೊಂದಿಗೆ ಜೀವಿಸುವುದನ್ನು ಉಲ್ಲಂಘಿಸುವುದಾಗಿದೆ ಎಂಬ ಮೇರುವಾದವನ್ನು ಪ್ರತಿಪಾದಿಸಿತು.

ಅ) ಸರ್ವೋಚ್ಚ ನ್ಯಾಯಲಯದ ಈ ತೀರ್ಪನ್ನು ಸಮರ್ಥಿಸಿರಿ.

ಆ) ಭಾರತದ ಸಂವಿಧಾನದ ಯಾವ ವಿಧಿಯು ವ್ಯಕ್ತಿಯ ಘನತೆಯೊಂದಿಗೆ ಜೀವಿಸುವ ಹಕ್ಕನ್ನು ನೀಡಿದೆ?

7. The State Government of Andhra Pradesh vacated forcefully the residents of Bhimrao Bada, with an intention to construct a building for Congress party. The residents of Bhimrao Bada, the opposition party and the general public opposed the action of the Government. They approached the High Court of Andhra Pradesh. The High Court gave judgement in favour of the residents of Bhimrao Bada.

   i) Do you think the Government of Andhra Pradesh is justified in its action? Give reasons.

   ii) Identify the human rights violated in this case.

   ಆಂಧ್ರ ಪ್ರದೇಶ ಸರಕಾರವು ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷಕ್ಕೆ ಕಟ್ಟಡವನ್ನು ಕಟ್ಟುವ ಸಲುವಾಗಿ ಭೀಮರಾವ್ ಬಾಡ ಎಂಬ ಪ್ರದೇಶದ ನಿವಾಸಿಗಳನ್ನು ಬಲವಂತ ಪೂರ್ವಕವಾಗಿ ತೆರವುಗೊಳಿಸಿತು. ಸರಕಾರದ ಈ ನಿಲುವನ್ನು ಆ ಪ್ರದೇಶದ ನಿವಾಸಿಗಳು, ವಿರೋಧ ಪಕ್ಷದವರು ಹಾಗೂ ಸಾರ್ವಜನಿಕರು ವಿರೋಧಿಸಿದ್ದರಲ್ಲದೆ ಆಂಧ್ರ ಪ್ರದೇಶ ಉಚ್ಚ ನ್ಯಾಯಾಲಯದಲ್ಲಿ ದಾವೆಯನ್ನು ಹೂಡಿದರು. ಉಚ್ಚ ನ್ಯಾಯಾಲಯವು ಇದನ್ನು ಪರಿಶೀಲಿಸುತ್ತ ಭೀಮರಾವ್ ಬಾಡದ ನಿವಾಸಿಗಳ ಪರವಾಗಿ ತೀರ್ಪನ್ನು ನೀಡಿತು.

   ಅ) ಆಂಧ್ರ ಪ್ರದೇಶ ಸರಕಾರದ ಈ ಕೃತ್ಯವನ್ನು ನೀವು ಅನುಮೋದಿಸುತ್ತೀರಾ?

   ಆ) ಯಾವ ಮಾನವ ಹಕ್ಕು ಇಲ್ಲಿ ಉಲ್ಲಂಘನೆಯಾಗಿದೆ?

8. Examine the nature of human rights.
   ಮಾನವ ಹಕ್ಕುಗಳ ಸ್ವರೂಪವನ್ನು ಪರಿಶೀಲಿಸಿರಿ.

9. Write a note on consumer rights.
   ಗ್ರಾಹಕ ಹಕ್ಕಿನ ಬಗ್ಗೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

10. What is meant by indigenous population?
    ಬುಡಕಟ್ಟು ಸ್ಥಳೀಯ ಜನಾಂಗ ಎಂದರೇನು?

11. What is meant by an unorganized labour? Mention any two problems faced by unorganized labourers.
    ಅಸಂಘಟಿತ ಕಾರ್ಮಿಕರು ಎಂದರ ಯಾರು? ಅವರು ಎದುರಿಸುತ್ತಿರುವ ಯಾವುದಾದರೂ ಎರಡು ಸಮಸ್ಯೆಗಳನ್ನು ಬರೆಯಿರಿ.

III. Answer any <u>FIVE</u> questions in about 10 sentences each. Each question carries 5 marks: **(5x5=25)**

ಕೆಳಗಿನ ಯಾವುದಾದರೂ <u>ಐದು</u> ಪ್ರಶ್ನೆಗಳಿಗೆ 10 ವಾಕ್ಯಗಳಲ್ಲಿ ಉತ್ತರಿಸಿ. ಪ್ರತಿಯೊಂದು ಪ್ರಶ್ನೆಗೂ 5 ಅಂಕಗಳು.

12. Explain the classification of human rights.
    ಮಾನವ ಹಕ್ಕುಗಳ ವರ್ಗೀಕರಣವನ್ನು ವಿವರಿಸಿರಿ.

13. Examine the status of minorities in India.
    ಭಾರತದಲ್ಲಿ ಅಲ್ಪಸಂಖ್ಯಾತರ ಸ್ಥಾನಮಾನವನ್ನು ಪರಿಶೀಲಿಸಿ ಬರೆಯಿರಿ.

14. Write a note on racial discrimination.
    ವರ್ಣಭೇದ ನೀತಿಯ ಬಗ್ಗೆ ಒಂದು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

15. Explain any five functions of Human Rights Watch.
    'ಮಾನವ ಹಕ್ಕುಗಳ ಕಾವಲು' ಇದರ ಯಾವುದಾದರೂ ಐದು ಕಾರ್ಯಗಳನ್ನು ವಿವರಿಸಿರಿ.

Contd...3

16. Discuss the role of students in promoting human rights.
ಮಾನವ ಹಕ್ಕುಗಳ ರಕ್ಷಣೆಯಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಗಳ ಪಾತ್ರವನ್ನು ವಿವರಿಸಿರಿ.

17. Explain the organization and composition of NHRC.
ರಾಷ್ಟ್ರೀಯ ಮಾನವ ಹಕ್ಕುಗಳ ಆಯೋಗದ ರಚನೆಯನ್ನು ವಿವರಿಸಿರಿ.

18. Write a short note on PUCL.
ಪಿಯುಸಿಎಲ್ ನ ಬಗ್ಗೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

IV. Answer any ONE question in about 20 sentences each. Each question carries 10 marks: **(10x1=10)**

ಈ ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಒಂದು ಪ್ರಶ್ನೆಯನ್ನು 20 ವಾಕ್ಯಗಳಲ್ಲಿ ಉತ್ತರಿಸಿರಿ. ಪ್ರತಿಯೊಂದು ಪ್ರಶ್ನೆಗೂ 10 ಅಂಕಗಳು.

19. Discuss the role of NGO's in promoting and protecting human rights.
ಮಾನವ ಹಕ್ಕುಗಳ ಅಭಿವೃದ್ಧಿ ಹಾಗೂ ರಕ್ಷಣೆಯಲ್ಲಿ ಸರಕಾರೇತರ ಸಂಘ ಸಂಸ್ಥೆಗಳ ಪಾತ್ರವನ್ನು ಚರ್ಚಿಸಿ ಬರೆಯಿರಿ.

20. Explain the origin and development of human rights.
ಮಾನವ ಹಕ್ಕುಗಳ ಉಗಮ ಹಾಗೂ ಬೆಳವಣಿಗೆಯನ್ನು ವಿವರಿಸಿರಿ.

V. Answer any ONE question in about 40 sentences each. Each question carries 15 marks: **(15x1=15)**

ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಒಂದು ಪ್ರಶ್ನೆಯನ್ನು 40 ವಾಕ್ಯಗಳಲ್ಲಿ ಉತ್ತರಿಸಿ. ಪ್ರತಿಯೊಂದು ಪ್ರಶ್ನೆಗೂ 15 ಅಂಕಗಳು.

21. Explain the rights enshrined in the UDHR.
ಮಾನವ ಹಕ್ಕುಗಳ ವಿಶ್ವವ್ಯಾಪಿ ಘೋಷಣೆಯಲ್ಲಿರುವ ಹಕ್ಕುಗಳನ್ನು ವಿವರಿಸಿರಿ.

22. Discuss the remedies against violation of human rights in India.
ಮಾನವ ಹಕ್ಕುಗಳ ಉಲ್ಲಂಘನೆಯ ವಿರುದ್ಧವಿರುವ ಪರಿಹಾರೋಪಾಯಗಳನ್ನು ಚರ್ಚಿಸಿ ಬರೆಯಿರಿ.

PART – B

(VALUE EDUCATION)

VI. Answer any FOUR questions in about 8-10 sentences. Each question carries FIVE marks: **(5x4=20)**

ಕೆಳಗಿನ ಯಾವುದಾದರೂ ನಾಲ್ಕು ಪ್ರಶ್ನೆಗಳನ್ನು 8–10 ವಾಕ್ಯಗಳಲ್ಲಿ ಉತ್ತರಿಸಿರಿ. ಪ್ರತಿಯೊಂದು ಪ್ರಶ್ನೆಗೂ 5 ಅಂಕಗಳು.

23. What is meant by female infanticide and what are the reasons for female infanticide?
ಹೆಣ್ಣು ಶಿಶು ಹತ್ಯೆಯೆಂದರೇನು? ಹೆಣ್ಣು ಶಿಶು ಹತ್ಯೆಗೆ ಕಾರಣಗಳೇನು?

24. Explain Mahatma Gandhi's views on women empowerment.
ಮಹಿಳಾ ಸಬಲೀಕರಣದ ಬಗ್ಗೆ ಮಹಾತ್ಮ ಗಾಂಧೀಜಿಯವರ ಅಭಿಪ್ರಾಯವನ್ನು ವಿವರಿಸಿರಿ.

25. Write a short note on cloning.
ಕ್ಲೋನಿಂಗ್ ಬಗ್ಗೆ ಲಘು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

26. What are the goals of counseling?
ಆಪ್ತ ಸಲಹೆಯ ಧ್ಯೇಯೋದ್ದೇಶವೇನು?

27. What are the qualities of a good listener?
ಉತ್ತಮ ಆಲಿಸುವವನ ಗುಣ ಲಕ್ಷಣಗಳೇನು?

28. What is meant by suicide? What are the two main reasons for suicide?
ಆತ್ಮಹತ್ಯೆಯನ್ನು ಎಂದರೇನು? ಆತ್ಮಹತ್ಯೆಯ ಎರಡು ಕಾರಣಗಳೇನು?

VII. Answer any ONE question in about 20 sentences. The Question carries 10 marks: **(10x1=10)**

ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಒಂದು ಪ್ರಶ್ನೆಯನ್ನು 20 ವಾಕ್ಯಗಳಲ್ಲಿ ಉತ್ತರಿಸಿ. ಪ್ರಶ್ನೆಗೆ 10 ಅಂಕಗಳು.

29. What are the ways to manage stress? Explain.
ಒತ್ತಡ ನಿರ್ವಹಣೆಗೆ ಬೇಕಾದ ಅಂಶಗಳಾವುವು? ವಿವರಿಸಿರಿ.

30. Explain ten commandments for conquering depression.
ಖಿನ್ನತೆಯನ್ನು ನಿಯಂತ್ರಿಸಲು ಬೇಕಾದ ಹತ್ತು ಮಾರ್ಗೋಪಾಯಗಳನ್ನು ವಿವರಿಸಿರಿ.

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