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No. of printed pages: 2

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T.Y.B.C.A

BCA 301: Management Information System

1<sup>st</sup> April, 2011

Maximum Marks :80

Time: 11:00 To 2:00

Note: Figure on right indicate the marks allotted to that question.

- Q-1 [a] Write a Short note on following. [6] 3
- 1.Data Processing System 2.Data Integrity
- [b] What do you mean by MIS? What problems have been found from the survey of MIS? [5] 3
- [c] Explain any Text Handling Application. [3] 1
- OR
- Q-1 [a] Write a Short note on following. [6]
- 1.Decision Support System 2.4<sup>th</sup> Generation Language
- [b] Draw diagram of Knowledge Requirements Areas for MIS. [5]
- Explain any two of them in details.
- [c] "Computers are essential for MIS" – Comment on this statement [3]
- Q-2 [a] Explain the role of user in information system. [4]
- [b] What is Information? Explain Characteristic of good information. [6]
- [c] What are the elements in a Communication System? [3]
- Define encoding, decoding and channel.
- OR
- Q-2 [a] Classify Information in different ways. [4] 2
- [b] Explain Communication System in details. [6] 2
- [c] What is Data? Give the characteristic of Data? [3] 1
- Q-3 [a] What is Decoupling? Why it is necessary? [3] 1
- [b] What is Planning? Explain the level of Planning in details. [6] 4
- [c] Differentiate between: [4] 1
1. Share holder theory and Stake holder theory
2. Hard Properties and Soft Properties
- OR
- Q-3 [a] List down the reasons, which make the management, seek ways to avoid Planning. [3]
- [b] What is 'System Approach'? Explain features of the System Approach. [6]
- [c] Differentiate between: [4]
1. Open System and Closed System
2. Deterministic System and Probabilistic Systems

- Q4. [A] Explain basic principles of organization structure. [6] 4  
[B] Explain the nature and causes of problems in Human Relations. [8] 1

OR

- Q4. [A] What are the different directing principles? Explain each in brief. [6]  
[B] List the assumptions about the nature of man according to schain & Explain any two from it. [8]

- Q5. [A] How behavior is influenced by perception? What are the major principles of perception? Explain each in brief. [7] 1  
[B] Discuss the determinants of Job Satisfaction. [6] 1

OR

- Q5. [A] List theories of Job satisfaction. Explain any two. [7]  
[B] What are the major causes of organizational change? Explain each in brief. [6]

- Q6. [A] Define Management Control. What are the basic elements of control cycle? Explain each in brief. [6] 1  
[B] Explain TQC in brief. [5] 3/2  
[C] Explain feedforward. [2] 1

OR

- Q6. [A] What are the different multiple control factors that are important controlling process of private as well as public sector organization? Explain each in brief. [7] 1  
[B] Describe following: [6]  
i) Single and double-loop feedback.  
ii) Positive and negative feedback.  
iii) Closed and open-loop feedback.

Total Marks: 80

Time: 11:00 a.m. to 2:00 p.m.

Note: All questions are compulsory.

- Q.1 [A] What do you mean by Visual Programming Language? List out project types supported by VB. [5]
- [B] List available data types of VB. Explain string data type in detail. [5]
- [C] Explain toolbox in brief. [4]

OR

- Q.1 [A] Explain Form layout, project explorer and immediate window. [6] 2½
- [B] Write a note on msgbox() function. [4] 3
- [C] Explain function and subroutine. Also Differentiate them. [4] 2½
- Q.2 [A] Explain following function with syntax and example. [4]
- i) strconv()  
ii) dateadd()

- [B] Explain Drivelistbox, Dirlistbox and filelistbox. [6]
- [C] Explain Option button briefly and differentiate between option button and check box. [3]

OR

- Q.2 [A] Explain following function with syntax and example. [4] 1
- i) Cdate()  
ii) Lcase()
- [B] Write a note on Menu Editor. [3] 1
- [C] Explain Combobox with 3 properties and events. How it is differ from listbox control. [6] 2½
- Q.3 [A] What is an array? Explain different types of arrays in VB. [4] 2½
- [B] Explain Listview control with its different available VIEW options. [5] 1
- [C] Explain Common dialog box control. [4] 1

OR

- Q.3 [A] Differentiate between Datepicker and Monthview. [4]
- [B] List the file access type supported by VB and discuss Random Access File. [5]
- [C] Explain Toolbar with its STYLE property. [4]



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No. of Printed Pages: 2

External Examination - March/April, 2011

BCA 303: Computer Graphics and Multimedia Application

Date: 06/04/2011, Wednesday

Time: 11:00 AM to 02.00 PM

Max Marks: 80

Q 1 (A) Write a note on Printers. [04]

(B) What is Computer Graphics? Explain Major areas of application in Computer Graphics. [06]

(C) Explain Trackball and Spaceball. [03]

OR

Q 1 (A) Write a note on CRT monitor. [07] 5/12

(B) Write a note on Digitizer. [03] 1/2

(C) Write a note on Software Standards. [03] 1

Q 2 (A) Explain Mid Point Circle Algorithm. [06]

(B) Write only Boundary Fill Algorithm. [04]

(C) List and Explain All Area Fill Attributes. [03]

OR

Q 2 (A) Explain Bresenham's Line Algorithm. [06]

(B) Define: Aliasing, Bundled Table and Aspect Source Flag. [03]

(C) List and Explain All Character Attributes. [04] 1/2

Q 3 (A) What is Transformation? Explain Translation and Rotation. [05]

(B) Write a note on Sutherland Hodgeman Polygon Clipping Algorithm. [05]

(C) Explain: Input Modes and Surface Rendering. [04]

OR

Q 3 (A) What is Transformation? Explain Reflection and Shear. [05] 2/12

(B) Write a note on Cohen Sutherland Line Clipping Algorithm. [05] 2/12

(C) Explain: Parallel Projection and Zooming. [04] 1

Q 4 (A) Explain Creative's AWE32 Connectors and Audio Jacks.

[06]

(B) What is Multimedia? Explain various classification of multimedia.

[07]

OR

Q 4 (A) What is Multimedia? Explain various facets of multimedia.

[05]

(B) Write a note on Multimedia Software.

[05]

(C) Define: Quantization, Clipping and Sound Card.

[03]

Q 5 (A) Explain Various Sources of Images.

[05]

(B) Define: HyperText and HyperGraphics.

[02]

(C) Write a note on various classifications for computer animation.

[07]

OR

Q 5 (A) Write a note on Multimedia Text.

[05]

(B) Define: Raster Graphics and Vector Graphics.

[02]

(C) Write a note on phase of 3-D animation development technique.

[07]

Q 6 (A) Explain Shape Tween.

[03]

(B) Write a note on Flash Tool Box.

[08]

(C) Define: Layer, Animation

[02]

OR

Q 6 (A) Explain Motion Tween.

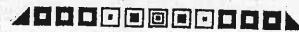
[03]

(B) What is Time Line? Explain Various features of time line.

[08]

(C) Define: Keyframe, Onion Skinning.

[02]



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T.Y.B.C.A. EXAMINATION  
2011

Friday, 8<sup>th</sup> April  
3:00 p.m. to 6:00 p.m.  
BCA-304

[SUB:-Software Engineering]

Maximum Marks : 80

Section-1

Q-1 (a) Describe the iterative enhancement model. List the limitation of this model and also suggest how it can be tackled? (06)

(b) Explain effort and error distribution. (05)

(c) Define software process, project and product. (03)

OR

Q-1 (a) Explain Waterfall Model with its limitation. (06)  $4\frac{1}{2}$

(b) What do you mean by metrics, measurement, and models? And explain it. (05) 1

(c) What do you mean by configuration identification process? (03) 1

Q-2 (a) List the components of SRS and explain any one of them (05)  $2\frac{1}{2}$

(b) Explain the requirement reviews techniques. (05) 1

(c) Draw context level and zero level DFD of Railway reservation system. (03)

OR

Q-2 (a) Explain the decision tables with an example. (05)

(b) Explain all specification languages and explain regular expressions with example. (05)

(c) Define the metrics and size measures? (03)

Q-3 (a) Explain the COCOMO Model with example in detail. (06)

(b) What do you mean by project monitoring plans? List out the methods of it. (04)

(c) What is cost estimation? (03)

OR

Q-3 (a) Explain the process of Software Configuration Management Plans (SCM). (06)  $3\frac{1}{2}$

(b) List and explain any two types of team structures. (04)

(c) What is Process Verification in Quality Assurance Plans. (03) 1

- Q 4 (A) What is a structured chart? Explain the concept of subordinate & super- ordinate. Also explain different types of modules. [08]
- (B) Explain Abstraction in detail. [03]
- (C) Write a short note on Coupling. [03]

OR

- Q 4 (A) Explain the importance of Design & also discuss the principles of Design. [05] |
- (B) Write a short note on Cohesion. [05] 3 1/2
- (C) Explain top-down and bottom-up strategy used in Software Engineering. [04] 1/2

- Q 5 (A) Explain the following: [05] |
- 1) Consistency Checker
- 2) Design Walkthrough
- (B) Explain Module Specification with example. [05] 1 1/2
- (C) Define Data Binding Metrics with example. [03] 1 1/2

OR

- Q 5 (A) Explain Logic/Algorithm Design with suitable example.. [08]
- (B) Write a note on PDL. [05]

- Q 6 (A) Write a note on: [06]
- 1) Information Hiding
- 2) V & V techniques for testing.
- (B) What is internal documentation? State its importance. [03]
- (C) What is structured programming? How does it help to improve code quality? [04]

OR

- Q 6 (A) What is Test Case? What is its importance? Explain 'Exhaustive Testing'. [06]
- (B) Explain different levels of testing. [07] 4 1/2

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T.Y. B.C.A. Examination – March/April 2011

BCA – 305 :: Object Oriented Programming using JAVA

Monday, 11<sup>th</sup> April, 2011

Time: 11.00 a.m. to 2.00 p.m.

Total Marks: 80

Section – I

- Q - 1** [a] ✓ What is Java? Explain Java features [7] 4  
 [b] ✓ Explain Operators in Java. [4] 2  
 [c] ✓ Define following [3]  
 i). Class Variable                      ii). Instance Variable                      iii). Local Variable.

**OR**

- Q - 1** [a] Compare Java with C/C++. [7]  
 [b] Explain Java Tokens [4]  
 [c] Write a short note on JVM and JDK. [3]

- Q - 2** [a] Explain Decision Making statements of Java. [6]  
 [b] Write a short note on following [4]  
 i). Overloading                      ii). Constructor  
 [c] Explain Final keyword for class and methods. [3]

**OR**

- Q - 2** [a] ✓ Explain looping statements of Java. [6] 2 1/2  
 [b] ✓ Write a short note on [4] 1/2  
 i). Overriding                      ii). this  
 [c] ✓ Explain Abstract keyword for class and methods. [3] 1/2

- Q - 3** [a] ✓ What is Array? How to create and use 2-dimentional array, explain with example. [7] 2 1/2  
 [b] ✓ String class and Maths class belongs to which Java Package? Explain any 5 String class methods available in Java. [6] 1/2

**OR**

- Q - 3** [a] What is Interface? How to create and use Interface explain with example. [7]  
 [b] Write a short note on, [6]  
 i). try                      ii). catch                      iii). throws

- Q-4 [a] Explain Input Stream Class and Output Stream Class. [6] 4  
[b] Explain in brief the handling of primitive data types. [5] 1/2  
[c] What are RandomAccessFile and StreamTokenizer? [3] 1/2

OR

- Q-4 [a] Explain Reader Stream class & Writer Stream with example. [6]  
[b] What is File? Write Java code to accept data from keyboard and store it in. [5]  
[c] What is Wrapper Class? Explain different wrapper classes used in Java. [3]

- Q-5 [a] What is Applet? Explain Applet architecture and Applet skeleton. [6] 4  
[b] List the control supported by AWT and explain any one from it. [4] 2  
[c] Explain Delegation Event Model. [3]

OR

- Q-5 [a] Explain the passing of parameters to Applets using HTML tag with example. [6]  
[b] Differentiate between local and remote Applet. [4]  
[c] Write about different mouse and keyboard events. [3]

- Q-6 [a] What is Package? Explain creating, accessing and using package with suitable example. [6]  
[b] Explain with example how to create thread using thread class. [4]  
[c] What is Java Bean? Write down advantages of it. [3]

OR

- Q-6 [a] What is Thread? Explain life cycle of Thread. [6] 4  
[b] Explain Java API Packages. [4] 1/2  
[c] Write a short note on Bean Developer Tools. [3] 1/2

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T.Y.B.C.A. EXAMINATIONS - 2011

BCA - 306 : Operating System Concepts

Wednesday, 13<sup>th</sup> April, 2011

Time: 11.00 am to 2.00 pm

Max. Marks: 80

Q-1

- (A) Explain Real time system in detail. [5]
- (B) Write short note on: Job [4]
- (C) Do as directed: [4]
  1. Differentiate: Process hierarchy and File hierarchy
  2. Explain Resource sharing and Computation speedup as a major reason for building distributed systems.

OR

Q-1

- (A) ✓ What is Operating System? List and explain various functions of Operating System. [5] 2 1/2
- (B) ✓ Explain monolithic operating system structure. [4] 2 1/2
- (C) ✓ Do as directed: [4] 1
  1. Differentiate: Time sharing and Real time operating system
  2. Define: System call, Loosely coupled system

Q-2

- (A) ✓ Explain Shortest Job First scheduling algorithm with advantages and disadvantages. [5] 2 1/2
- (B) ✓ Write note on: Process termination [4] 1 1/2
- (C) ✓ Do as directed: [4] 1 1/2
  1. Define: Waiting time, Daemon
  2. Differentiate: Short term and Long term scheduler

OR

Q-2

- (A) Explain process transition states with example. [5]
- (B) Explain Round Robin scheduling algorithm with advantages and disadvantages. [4]
- (C) Do as directed: [4]
  1. Define: Context switch, Aging
  2. Differentiate: Preemptive and Non preemptive scheduling algorithm

Q-3

- (A) Explain concept of virtual memory. Also explain demand paging as a method of implementing virtual memory concept with advantages and disadvantages. [5]
- (B) Explain Optimal page replacement algorithm with example. [5]
- (C) Do as directed: [4]
  1. Explain memory management with linked list in brief.
  2. Explain best fit strategy to select free hole from set of available holes.

Handwritten calculations:

$$\begin{array}{r} 3 \overline{) 2.33} \\ \underline{3} \phantom{0} \\ 10 \\ \underline{9} \phantom{0} \\ 10 \\ \underline{9} \phantom{0} \\ 10 \end{array}$$

Handwritten calculations:

$$\begin{array}{r} 5-33 \\ 3 \overline{) 16} \\ \underline{9} \\ 7 \\ \underline{6} \\ 10 \\ \underline{9} \\ 10 \end{array}$$

