BCA Fifth Semester Examination, Dec. – 2019
FOURTH PAPER
Software Engineering
Paper Code:-42504

Time Allowed: Three Hours   **Maximum Marks: 70**

(1) No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

(2)All the parts of one question should be answered at one place in the answer book.

*(*Attempt all six questions.)

Part I (Question No. 1& 2) is compulsory & Part II (Question No. 3, 4 , 5 & 6) has internal choice.

Part-I

1. **Answer any 10 questions. Each question carries 1 mark.**   **10x1= 10**
    (Words limit up to 20 words each)

    a) What is Data Dictionary ?

    b) Explain Software Metrics.

    c) List the characteristics of good SRS.

    d) Define Fourth Generation Techniques in Software.

    e) Write the advantages of LOC based cost estimation.

    f) Define Software Prototyping.

    g) What are the goals of Software Designing?

    h) Define Abstraction.

    i) Write the importance of Software Architecture.

    j) Differentiate White – Box & Black – Box Testing.

    k) Define System Testing.

    l) What is Test Case? Give one example for test case.

2. **Answer all the questions. Each question carries 5 marks.**   **4x5 = 20**
    (Words limit up to 50 words each)

    a) Explain IEEE structure of SRS.

    b) Write the pros and cons of COCOMO Model.

    c) How do object oriented design and structured design differ?

    d) What is Integration Testing? How is it different from System Testing?

Part-II
Unit-I
3. What is SDLC ? Discuss details of documentation of each phase in SDLC. **10**

OR

    Design a system for an Insurance company. Draw DFD's for the system and also prepare the SRS document for the same. Clearly mention the assumption made if any. **10**

Unit-II
4. Explain Project Planning. Also describe Size Estimation & Cost Estimation with example. **10**

OR

    Why Project Planning is required for Software? What are various decomposition techniques? **10**

Unit-III
5. What is an Object Oriented Design? Discuss its advantages in developing a software system. **10**

OR

    What is the use of Software Design? Explain various coupling & cohesion methods used in software design. **10**

Unit-IV
6. What is Software Testing? Discuss various strategies & testing techniques. **10**

OR

    Write short notes on : **10**
    a) Validation and Verification
    b) Fault finding techniques

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B.C.A. (Sem. V)   E-Com. App. Dev.

BCA Fifth Semester Examination, Dec. – 2019
THIRD PAPER
E-Commerce Application Development
Paper Code:- 42503

Time Allowed: Three Hours   **Maximum Marks.70**

(1) No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.
(2)All the parts of one question should be answered at one place in the answer book.

(Attempt all six questions.)
Part I (Question No. 1& 2) is compulsory & Part II (Question No. 3, 4 , 5 & 6) has internal choice.

Part-I

1. **Answer any 10 questions. Each question carries 1 mark.**   **10x1= 10**
   (Words limit up to 20 words each)
   a) What is Electronic Commerce?

   b) What are the two key advantages of E – Commerce?

   c) Name two sectors for which E – Commerce applications are available in the market.

   d) What is EDI?

   e) What is Electronic Catalog?

   f) What is E – Purse?

   g) What is E – Cheque?

   h) What is the importance of planning in an application development?

   i) What is the purpose of payment gateways?

   j) What is Testing?

   k) Define Supply Chain Management.

   l) What do you mean by the technical design of an E – Commerce application?

2. **Answer all the questions. Each question carries 5 marks.**   **4x5 = 20**
   (Words limit up to 50 words each)
   a) Differentiate between traditional commerce and e – commerce.

   b) What is a Payment Gateway? Explain how it is related with an online banking service.

   c) Explain the importance of technical design for an e – commerce application development.

   d) What is Testing? Explain briefly different types of testing.

P.T.O.

Part-II
Unit-I

3. State and explain objectives of E – Commerce.   **10**

OR

State and explain various application of E – Commerce with appropriate example.   **10**

Unit-II

4. Explain the following.   **10**
    a) Supply Chain Management
    b) Digital Library
    c) Smart Cards
    d) EDI and its format

OR

Explain various E – Commerce Models.   **10**

Unit-III

5. What do you mean by Technical Construction? Explain using any contemporary example.   **10**

OR

Explain high level design with an example.   **10**

Unit-IV

6. What is Verification and Validation? Explain the challenges and opportunities in its
    implementation.   **10**

OR

What is implementation of planning? Explain challenges and issues related to it.   **10**

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BCA Fifth Semester Examination, Dec-2019
FIRST PAPER
Computer Graphics
Paper Code:- 42501

Time Allowed: Three Hours   **Maximum Marks.70**

(1) No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

(2)All the parts of one question should be answered at one place in the answer book.

*(*Attempt all six questions.)

Part I (Question No. 1& 2) is compulsory & Part II (Question No. 3, 4 , 5 & 6) has internal choice.

Part-I

1. **Answer any 10 questions. Each question carries 1 mark.**   **10x1= 10**
   (Words limit up to 20 words each)

   a) How you define the term 'Computer Graphics'?

   b) What is Resolution?

   c) What do you understand by the term 'Pix Map'?

   d) Enlist various types of Clipping.

   e) Define Pixel.

   f) What is Frame Buffer?

   g) Where is the Video Controller used?

   h) Discuss 'Convolution'.

   i) What is Transformation?

   j) Discuss the term 'Translation'.

   k) What is Rotation?

   l) Discuss the term 'Scaling'.

2. **Answer all the questions. Each question carries 5 marks.**   **4x5 = 20**
   (Words limit up to 50 words each)

   a) Write the important applications of Computer Graphic.

   b) Differentiate Plasma Panel Display and Thin Film Electroluminescent Display.

   c) List out the merits and demerits of Penetration techniques.

   d) Discuss 'Thresholding' in brief.

P.T.O.

Part-II
Unit-I

3. Discuss and illustrate the working of Colour CRT monitors and Flat Panel Displays.　　**10**

OR

Discuss the following :-　　**10**
  a) GKS and PHIGS
  b) RGB and CMYK

Unit-II

4. Explain 2 – D Transformation and 3 – D Transformation in detail with suitable example.　　**10**

OR

Discuss DDA algorithm for line drawing with the help of suitable example.　　**10**

Unit-III

5. Discuss and differentiate between 'Windows' and 'Viewport' with the help of suitable example and illustration.　　**10**

OR

Explain Cyrus – beck Algorithm in brief with example.　　**10**

Unit-IV

6. What is 'Digital Image Processing'? Discuss its various application areas in brief.　　**10**

OR

Explain 'Anti – aliasing' with the help of example.　　**10**

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BCA Fifth Semester Examination, Dec. – 2019
SECOND PAPER
Dot Net Technology
Paper Code:- 42502

Time Allowed: Three Hours   **Maximum Marks.70**

(1) No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

(2)All the parts of one question should be answered at one place in the answer book.

*(***Attempt all six questions.***)*
Part I (Question No. 1& 2) is compulsory & Part II (Question No. 3, 4 , 5 & 6) has internal choice.

Part-I
1. **Answer any 10 questions. Each question carries 1 mark.**   **10x1= 10**
   (Words limit up to 20 words each)
   a) What is the goal of Dot Net?

   b) What is Common Intermediate Language (CIL)?

   c) What is Manifest?

   d) Write the importance of Namespace.

   e) What is garbage collector?

   f) What is the role of JIT compiler?

   g) What is Validation Control?

   h) Briefly define the concept of Page State and how is it different from Session State?

   i) What is OLEDB?

   j) What is the concept of Debugging?

2. **Answer all the questions. Each question carries 5 marks.**   **4x5 = 20**
   (Words limit up to 50 words each)

   a) Draw a neat and labelled diagram of dot net framework.

   b) Explain the different stages of ASO.NET Page Life Cycle.

   c) Write ASP.NET code for showing the implementation of AdRotator control.

   d) What is ADO.NET Data Adapter? Discuss any two methods of Data Adapter.

Part-II
Unit-I
3. Write notes on the following with respect of DOT NET.   **5+5**
   (a) Common Language Runtime   (b)Common Language Specification

P.T.O.

OR

(a) What are assemblies in DOT NET? Where are they stored? **5**
(b) Discuss some of the features of DOT NET. **5**

Unit-II

4. Write a note on inheritance with respect to C# programming. Also discuss various types of inheritance in C# programming. **10**

OR

Discuss the following with respect to web controls of ASP. NET with the help of suitable examples. **5x2**
(a) Any one input web control
(b) Any one display control
(c) Any one action control, and
(d) Any one selection control
(e) Any one databound control

Unit-III

5. "Rich web controls are built with multiple HTML elements and contain rich functionality". Justify this statement with the help of suitable examples. **10**

OR

Write code for the following with respect to validation control: (any two) **5+5**
(a) Required Field Validator Control
(b) Range Validator Control
(c) Compare Validator Control

Unit-IV

6. Discus the following with respect to ADO quoting some suitable example for each. **5x2**
(a) Connection Object
(b) Command Object
(c) Recordset Object
(d) Record Object
(e) Field Object

OR

Write notes on the following: **5+5**
(a) Data Views
(b) SQL Managed Providers

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