# **BCA Fifth Semester Examination, Dec-2018**

## FIRST PAPER

## **Computer Graphics**

Paper Code: - 5611

### 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. (Words limit up to 20 words each)

10x1 = 10

- a) What is Computer Graphics?
- b) What is Aspect Ratio?
- c) Define PHIGS.
- d) What is Flood-filling Algorithm?
- e) What do you mean by Scaling?
- f) What is Transformation? Mention its types.
- g) Define Area Subdivision Method?
- b) Give an example for curve clipping.
- What do you mean by Polygon Clipping?
- j) What is Digital Image Processing?
- k) Define Quantization.
- 1) What are the steps to get reflected image through an arbitrary line?
- 2. Answer all the questions. Each question carries 5 marks. (Words limit up to 50 words each)

4x5 = 20

- a) Explain color model RGB. Compare it with HSV.
- b) Differentiate between circle and ellipse drawing algorithms.
- c) Write notes on the following:
  - (i) Cyrus-beck algorithm
  - (ii) Window and viewport.
- d) Write short notes on the following:
  - (i) Image compression
  - (ii) Resolution.

P.T.O.

### Part-II Unit-I 3. Differentiate between Random Scan Displays and Raster Scan Displays with suitable 10 examples. OR 10 Describe the functionalities of Refresh Cathode Ray Tube with suitable diagram. **Unit-II** 4. Write and explain Bresenham's line drawing algorithm and trace the algorithm for the 10 given points(2,1) to (10,12). OR Write short notes on the following: (i) Three-dimensional transformation 10 (ii) Area filling algorithm. **Unit-III** 10 5. Explain two dimensional viewing pipeline in detail. 10 Explain Cohen-Sutherland algorithm with suitable example. **Unit-IV** 6. How to capture and store a digital image? Discuss any two file formats for storage of a digital 10 image. OR 10 Write short notes on the following: (i) Digital image processing (ii) Image enhancement.

# BCA Fifth Semester Examination, Dec.-2018

## SECOND PAPER

## **Dot Net Technology**

Paper Code: - 5621

#### **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. (Words limit up to 20 words each)

10x1 = 10

- What is Dot Net Framework? Give a single line definition.
- b) Write four main components of dot net framework.
- c) What is the use of Microsoft Intermediate Language?
- d) What is the purpose of Metadata?
- e) What is the use of C# Programming Language?
- f) What are Events? Discuss with the help of an example.
- Does C# support Multiple Inheritance? Give one line justification.
- h) How ASP Dot Net is related to C#?
- What are Business Objects? Give any relevant example.
- j) What is a Data Adapter?
- k) What is the use of Namespace?
- 1) Why is it important to debug a program?
- 2. Answer all the questions. Each question carries 5 marks. (Words limit up to 50 words each)

4x5 = 20

- a) Explain the use of Common Language Runtime.
- b) Differentiate between Fage State and Session State with respect to ASP.Net.
- c) Discuss two validation controls with respect to ASP.Net.
- d) How ADO. Net is used to access data from a web page?

## Part-II Unit-I 3. Discuss in detail the architecture of Dot Net Framework. Also draw a neat labelled diagram. 10 a) Discuss the importance of Common Language specification with the help of a 5 suitable diagram. b) Mention and write short note on any two Dot Net applications. 5 Unit-II 4. Write short notes on the following with respect to C# programming language: a) Boxing and Unboxing 10 b) Categories of Data types OR 10 Discuss any five ASP .Net web controls with syntax and examples of each. Unit-III 5. "Rich Web Controls are task specific controls." Justify this statement with the help of some suitable examples. 10 OR Write an ASP.Net program to demonstrate the development and use of custom web control. 10 **Unit-IV** 5x2 **6.** Write short notes on the following:- (Any two) a) Data Set b) Data Table c) Data View Write a program to demonstrate the use of ADO.Net for accessing data from a database. 10

# **BCA Fifth Semester Examination, Dec-2018**

## THIRD PAPER

## **E-Commerce Application Development**

Paper Code: - 5631

#### 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. (Words limit up to 20 words each)

10x1 = 10

- (a) What is E-commerce?
- b) Differentiate between Traditional Commerce vs E Commerce.
- c) What do you mean by B2B? Give an example.
- d) What is Electronic Catalog?
- e) Define E cash and payment gateways.
- What do you understand by Technical Design?
- g) Define Supply Chain Management.
- Explain Verification and Validation.
- i) What do you understand by EDI Securities?
- j) How E-commerce helps in Business?
- k) What do you mean by Testing?
- 1) Explain Smart Card.
- 2. Answer all the questions. Each question carries 5 marks. (Words limit up to 50 words each)

4x5 = 20

- a) What are the advantages and disadvantages of traditional commerce?
- b) Describe E Purse and Electronic Fund Transfer.
- c) What is Detailed Design?
- d) What are the challenges and opportunities in implementation of planning?

P.T.O.

## Part-II Unit-I 3. What is the advantage and disadvantage of E-commerce? 10 OR 10 What are the various applications of E-commerce? Explain in detail with example. Unit-II 10 4. Explain the following. a) B2B b) B2C c) C2C d) The Value Chain Model OR 10 Define EDI. Explain its types and standards. **Unit-III** 10 5. Define Technical Design in detail. OR 10 Explain High Level Design in detail. **Unit-IV** 10 6. Define Testing in detail. OR What do you understand by Implementation? How can we apply it in E-commerce? 10

# BCA Fifth Semester Examination, Dec. - 2018

## FOURTH PAPER

## **Software Engineering**

Paper Code:-5641

#### 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. (Words limit up to 20 words each)

10x1 = 10

- b) Define Software Life Cycle.
- c) What is Encapsulation?
- d) List three major components of Software Project Plan.

a) What are the reasons for the failure of Water Fall Model?

- ( Define the term Modularization.
- f) What are the characteristics of Software Measurements?
- g) What are Test Cases?
- h) What is White Box Testing?
- i) What is the use of Architectural Design?
- j) What do you know about Verification And Validation?
- k) What is Data Dictionary?
- What do you mean by Decomposition Techniques ?
- 2. Answer all the questions. Each question carries 5 marks. (Words limit up to 50 words each)

4x5 = 20

- a) What is Process Model? Explain the working of Spiral Model.
- b) What is the importance of Metrics and measurement in Software Engineering?
- (c) Explain about DFD and also various symbols required to draw a DFD.
- d) What are the levels of testing?

## Part-II Unit-I 3. What is Software Design? Explain its objectives and principles. 10 OR What is the importance of Metrics and Measurements in Software Engineering? Explain various 10 types of Software Metrics. Unit-II 4. What do you mean by Software Cost Estimation? Discuss the COCOMO Model for cost 10 estimation. 10 Explain different Cost Estimation Techniques and their model. **Unit-III** 10 5. Why Software Design is an important process? Explain. 10 Explain about Architectural and Detail Design. **Unit-IV** 6. What are the objectives of Testing? Explain some testing strategies. 10 OR What are the levels of Testing? Explain about Integration Testing. 10