TBCS— 3.4

2017

Time : 3 hours

Full Marks : 80

Answer all questions

All questions carry equal marks

(COMPUTER GRAPHICS AND MULTIMEDIA)

1. (*a*) Explain the coordination system in computer graphics.

   (*b*) Distinguish between composite and inverse transformations.

   Or

   (*c*) Explain the terms morphing, projection and clipping.

   (*d*) How lines and curves are represented in graphics ?

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2. (*a*) What are the components of multi-media ? How are they represented ?

(*b*) What is sampling ? How is sound represented ?

Or

(*c*) Explain the working of some commonly used audio tools.

(*d*) What is computer animation ? Discuss some animation techniques.

3. (*a*) What are the hardware and software requirements for using Internet ? Write the role of ISP.

(*b*) Briefly, explain the use of the protocols : HTTP, FTP, and TCP/IP.

Or

(*c*) What is a webpage ? Write HTML code to develop the home page of a college.

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(*d*) Explain the following :

(*i*) IP address

(*ii*) URL

(*iii*) Web browser.

4. (*a*) Discuss the features of Adobe Photoshop for creating good quality pictures.

Or

(*b*) Explain the following in connection with adobe Photoshop :

(*i*) Filtering

(*ii*) Painting

(*iii*) Retouching.

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TBCS— 3.3

2017

Time : 3 hours

Full Marks : 80

Answer **all** questions

All questions carry equal marks

(SOFTWARE ENGINEERING AND UML)

1. (*a*) Explain the major steps the classical Waterfall model.

   (*b*) Which software development model is suitable for an office automation System ? Justify your answer.

   Or

   (*c*) Explain, how software development takes place following the spiral model.

   (*d*) Write the merits and demerits of evolutionary model.

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2. (*a*) Discuss the major activities in software project management.

(*b*) What is COCOMO ? How is it used for project cost estimation ?

Or

(*c*) What is Software Configuration Management ? Why is it necessary ?

(*d*) What are the risk involved in a software development project ? Explain different risk mitigation techniques.

3. (*a*) What is Requirement analysis ? How is it carried out ?

(*b*) Distinguish between function-oriented and object-oriented design.

Or

(*c*) Explain the use of USE CASE diagram. Draw a USE CASE diagram for a banking system.

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(*d*) Explain the significance of Cohesion and Coupling in software design ?

4. (*a*) What are the important design considerations while designing a user-friendly interface ?

(*b*) What is meant by software reliability ? Mention some of the important reliability parameters.

Or

(*c*) Differentiate between black-box testing and white-box testing.

(*d*) What is meant by software quality ? Discuss some of the important quality aspects of a software system.

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TBCS—3.2

2017

Time : 3 hours

Full Marks : 80

Answer **all** questions

All questions carry equal marks

(DATA COMMUNICATION AND COMPUTER NETWORK)

1. (*a*) Explain data communication in a point-to-point network ?

   (*b*) What is Carrier Sensed system ? How does it work ?

   Or

   (*c*) Differentiate between TDMA and TDM.

   (*d*) What is a asynchronous communication ? How is it different from synchronous communication ?

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2. (*a*) Explain the role of each layer of the OSI model.

Or

(*b*) Explain the following :

(*i*) HDLC frame format

(*ii*) Pooling/Selection protocol

(*iii*) Goal of layered protocol

(*iv*) Binary synchronous control.

3. (*a*) Explain the IEEE LAN standard with its important features.

(*b*) Explain the following :

(*i*) Token Ring

(*ii*) Packet Routing.

Or

(*c*) Distinguish between message switching and packet switching.

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(d) What is meant by LAN topology ? Discuss the working of some standard LAN topologies.

4. (a) Discuss the major features of TCP.

(b) What is a route discovery protocol ? Explain its working.

Or

(c) What is UDP ? How does it work ?

(d) Explain the file transfer mechanism in local area networks.

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