



UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

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IT2403: Systems Analysis and Design
Multiple Choice Question Paper

10th August, 2008
(TWO HOURS)

Important Instructions :

- The duration of the paper is 2 (two) hours.
- The medium of instruction and questions is English.
- The paper has **50 questions** and **12 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 (*All the incorrect choices are marked & no correct choices are marked*) to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.
If a page is not printed, please inform the supervisor immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

1) Which of the following is/are correct about information systems?

- (a) An Information system is an arrangement of people, data, processes and information technology that interact to collect, process, store and provide, as output, the information needed to support an organization.
- (b) Legacy systems are older information system applications which are important for day-to-day operations of a business but use technologies which are considered to be old or outdated now.
- (c) A Distributed system is a system in which all components are hosted by a central, multi-user system.
- (d) A Client-Server System is a distributed computing solution in which the presentation, presentation logic, application logic, data manipulation and data layers are distributed between client PCs and one or more servers.
- (e) Information systems in organizations capture and manage data to produce useful information that supports an organization and its employees, customers, suppliers and partners.

2) Which of the following is/are correct regarding stakeholders of an information system?

- (a) For any information system, large or small, there will be one or more System Owners.
- (b) A System Analyst is a technical specialist who translates system users' business requirements and constraints into technical solutions.
- (c) A System Designer is specialist who studies the problems and needs of an organization to determine how people, data, processes and information technology can best accomplish improvements for the business.
- (d) A System Builder is a technical specialist who constructs information systems and components based on the design specifications generated by the system designers.
- (e) System Users make up the vast majority of the information workers in any information system.

3) Information Systems can be classified according to the functions they serve as given below.

- (a) Management information systems
- (b) Executive information systems
- (c) Decision Support systems
- (d) Communication and collaboration systems
- (e) Web based systems

4) Which of the following is/ are correct regarding the skill(s) required by systems analysts?

- (a) They must be aware of both existing and emerging information technologies.
- (b) Systems Analysts must be able to communicate with business experts to gain an understanding of their problems and needs.
- (c) They need to be proficient in several programming languages and should have systems programming experience.
- (d) They should have good interpersonal relations skills.
- (e) The nature of the systems analyst's job requires a strong character and a sense of right and wrong.

5) Each of the blanks labelled **A – E** of the paragraph given below has to be filled with the most appropriate word selected from the phrases labelled (i) – (v).

- (i) Methodology
- (ii) Project Management
- (iii) Process Management
- (iv) Feasibility
- (v) Feasibility Analysis

....**A**..... is a measure of how beneficial the development of an information system would be to an organization.

....B.... is the activity by which feasibility is measured and assessed. ...C..... is an ongoing activity that documents , teaches, oversees the use of , and improves an organization's chosenD..... for systems development whereasE..... is the process of scoping, planning, staffing, organizing, directing and controlling a project to develop an information system at minimum cost, within a specified time frame and with acceptable quality.

- | | | | | | |
|-----|----------|----------|-----------|-----------|-----------|
| (a) | A – (v) | B – (iv) | C – (ii) | D – (iii) | E – (i) |
| (b) | A – (iv) | B – (v) | C – (ii) | D – (i) | E – (iii) |
| (c) | A – (ii) | B – (v) | C – (iii) | D – (iv) | E – (i) |
| (d) | A – (iv) | B – (v) | C – (iii) | D – (ii) | E – (i) |
| (e) | A – (iv) | B – (v) | C – (iii) | D – (i) | E – (ii) |

6) Which of the following is/are traditional basic system development phases?

- | | | | | | |
|-----|--------------------|-----|--------------------|-----|-----------------------|
| (a) | Systems Design | (b) | Systems Analysis | (c) | Requirements Analysis |
| (d) | Process Management | (e) | Project Management | | |

7) Consider the following diagrams

- (i) Structure Chart
- (ii) Entity Relationship diagram
- (iii) Functional Decomposition Diagram

Which of the above technique(s) provide(s) the beginning of an outline for drawing data flow diagrams?

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|-----|---------------------|
| (a) | (i) Only |
| (b) | (ii) Only |
| (c) | (iii) Only |
| (d) | (ii) and (iii) Only |
| (e) | (i) and (iii) Only |

8) Which of the following statements is/are correct regarding the scope definition phase of the system development life cycle?

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|-----|--|
| (a) | One purpose of this phase is to find out whether the problem is worth looking at. |
| (b) | The scope definition should include the scope of the project which may later change during the system development life cycle. |
| (c) | The participants in the scope definition phase primarily include system owners, system users and project managers. |
| (d) | System users are generally excluded from this phase because it is too early to get into the level of detail which will eventually be brought by them to the project. |
| (e) | This is the second phase of a typical project. |

9) The Scope definition phase is intended to be quick. Consider the following tasks:

- (i) Identify the baseline problems and opportunities.
- (ii) Negotiate baseline scope.
- (iii) Asses baseline project worthiness.
- (iv) Develop baseline schedule and budget.
- (v) Communicate the project plan.

The phase may typically include the following tasks.

- | | | | | | |
|-----|-----------------------------|-----|------------------------------|-----|--------------------------|
| (a) | (i) and (ii). | (b) | (i),(ii) and (iii). | (c) | (i), (ii),(iii) and (v). |
| (d) | (i) , (ii), (iii) and (iv). | (e) | (i),(ii),(iii),(iv) and (v). | | |

- 10) Consider the following statements related to Feasibility Checkpoints in the Software Development Life Cycle.
- (i) Feasibility of a project can change during the system development.
 - (ii) To reevaluate feasibility, there are different checkpoints in the development.
 - (iii) A project may be canceled, revised or continued at any checkpoint, despite whatever resources have been spent.

Which of the above statement(s) is/are correct?

- | | | |
|------------------------|---------------|-----------------------|
| (a) Only (i) | (b) Only (ii) | (c) Only (i) and (ii) |
| (d) Only (i) and (iii) | (e) All | |

- 11) Which of the following is/are correct regarding economic feasibility?

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|--|
| (a) It is a measure of the practicality of a technical solution, availability of technical resources and expertise. |
| (b) It is the measure of how well a proposed system solves the problems and takes advantage of the opportunities identified during the problem definition and problem analysis phases. |
| (c) It looks at the financial aspects of the system. |
| (d) It is a measure of how well the solution will be accepted in a given organization climate. |
| (e) It is a measure of the cost effectiveness of a project or solution. |

- 12) Which of the following is/are correct categories of feasibility tests?

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|------------------------------|
| (a) Operational Feasibility |
| (b) Legal Feasibility |
| (c) Cultural Feasibility |
| (d) Schedule Feasibility |
| (e) Cost/Benefit Feasibility |

- 13) Which of the following is/are correct regarding a Feasibility Analysis Matrix?

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|--|
| (a) It is a tool used to document only the similarities and differences between candidate systems. |
| (b) The columns of the matrix represent candidate solutions. |
| (c) The rows are added to describe the general solution and a ranking of the candidates. |
| (d) The rows of the matrix represent candidate solutions. |
| (e) is a tool used to rank candidate systems. |

- 14) Which of the following is/are correct regarding a Candidate System Matrix ?

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|---|
| (a) It is a tool used to rank candidate systems. |
| (b) Columns of the matrix represent candidate solutions. |
| (c) Rows of the matrix represent characteristics which differentiate among the candidates. |
| (d) The cells of the matrix document the characteristics which help the reader to understand the differences between options. |
| (e) It is a tool used to analyze candidate systems. |

- 15) Which of the following is/are **not** (a) fact finding technique(s)?

- | | | |
|-----------------------------|------------------------------|------------------|
| (a) Prototyping | (b) Research and site visits | (c) Interviewing |
| (d) Information Engineering | (e) Questionnaires | |

- 16) Which of the following is a/are disadvantage(s) of fact finding through 'observation of the work environment'?
- (a) People usually feel uncomfortable while being watched.
 - (b) It is a relatively expensive method.
 - (c) Some tasks may not always be performed in the manner in which they are observed by the system analyst.
 - (d) Data gathering may be highly unreliable.
 - (e) Work being observed may not involve the level of difficulty or volume normally experienced during that time
- 17) Given below are some statements associated with requirement discovery methods. Identify the correct statement(s) from among them.
- (a) Use of online questionnaires provides a relatively expensive way of fact finding from a large number of individuals.
 - (b) A good analyst gets facts initially from existing documentation, forms and files.
 - (c) When using online questionnaires, the responses from users can be tabulated and analyzed quickly.
 - (d) 'Observations of the work environment' is also used when the validity of data collected through other methods is in question.
 - (e) 'Observation of the work environment' is often used when the complexity of certain aspects of the system prevents a clear explanation by the end users.
- 18) Which of the following is/are correct regarding identifying and analysing requirements?
- (a) Most important factor in building correct systems is to first clearly define what the system must do.
 - (b) System requirements specify what the information system must do, or what property / quality the system must have.
 - (c) System requirements which specify what the information system must do are frequently referred to as functional requirements.
 - (d) Functional requirement is a property or quality the system must have.
 - (e) Requirements analysis activity discovers and resolves the problems with the requirements and reach agreement on any modifications to satisfy the stakeholders.
- 19) Which of the following is/are correct regarding the requirements gathering technique 'Use of Questionnaires'?
- (a) Questionnaires allow the analysts to collect information and opinions from a large audience.
 - (b) Mostly suited for closed questions
 - (c) One disadvantage is that it does not guarantee that an individual will answer or expand on all the questions.
 - (d) Most expensive requirement discovery method
 - (e) Allows individuals to maintain anonymity
- 20) Which of the following is/are correct regarding requirements discovery methods?
- (a) A disadvantage of the prototyping technique is that the developers need to be trained in the prototyping approach.
 - (b) Discovery prototyping allows users and developers to experiment with the software and develop with an understanding.
 - (c) Prototyping does not help to determine feasibility and usefulness of the system.
 - (d) Prototyping minimizes the time spent for fact-finding and helps to define more stable requirements.
 - (e) Prototype can only simulate system functionality and is incomplete in nature.

- 21) Column A contains Requirements Discovery Methods. A Phrase from Column A has to be matched with the most appropriate phrase from Column B.

	Column A		Column B
(i)	Joint Requirement planning	A	Most analysts start with this method to get a pretty good feel of the system.
(ii)	Interviews	B	Most commonly used requirements discovering method
(iii)	Sampling of existing documentation	C	is a subset of a more comprehensive JAD technique.
(iv)	Prototyping	D	A technique used to gather information about system requirements, problems and preferences
(v)	Research and site visit	E	Allows analyst to quickly create mock forms and tables to simulate the implemented system.

The correct matching is

(a)	(i) & D	(ii) & C	(iii) & B	(iv) & E	(v) & A
(b)	(i) & C	(ii) & D	(iii) & A	(iv) & B	(v) & E
(c)	(i) & C	(ii) & B	(iii) & A	(iv) & D	(v) & E
(d)	(i) & D	(ii) & B	(iii) & C	(iv) & A	(v) & E
(e)	(i) & C	(ii) & B	(iii) & A	(iv) & E	(v) & D

The blanks in the Questions 22 – 26 have to be filled by selecting the most appropriate words/phrases from the list labelled (i) – (v). Note that one word/phrase may be used in more than one instance.

- (i) Entity Relationship Diagram
- (ii) Data Flow Diagram
- (iii) Context Data Flow Diagram
- (iv) Functional Decomposition Diagram
- (v) Event Diagram

What is the most appropriate way of filling each blank?

- 22) is a data flow diagram that shows the context for a single event.

(a)	(i)	(b)	(ii)	(c)	(iii)
(d)	(iv)	(e)	(v)		

- 23) is a model used to document the scope for a system. It is also called the environmental model.

(a)	(i)	(b)	(ii)	(c)	(iii)
(d)	(iv)	(e)	(v)		

- 24) serves as a meaningful context to help users validate the accuracy of each event to which the system must provide a response.

(a)	(i)	(b)	(ii)	(c)	(iii)
(d)	(iv)	(e)	(v)		

- 25) is a technique that shows the flow of data through a system and the work or processing performed by the system. It is a process model.

(a)	(i)	(b)	(ii)	(c)	(iii)
(d)	(iv)	(e)	(v)		

26) is technique used for data modeling.

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|-----|------|-----|------|-----|-------|
| (a) | (i) | (b) | (ii) | (c) | (iii) |
| (d) | (iv) | (e) | (v) | | |

27) Each of the blanks labelled **A – E** of the paragraph given below has to be filled with the most appropriate word selected from the phrases labelled (i) – (v). Note that one word or phrase might be used more than once.

- (i) Data type
- (ii) Domain
- (iii) Compound Attribute
- (iv) Attribute
- (v) Entity

A/An ...**A**..... is something about which the business needs to store data. A/An ...**B**..... is a class of persons, places, objects, events or concepts about which we need to capture and store data. A/An ...**C**..... is a descriptive property or characteristic of a/an**D**..... A student name is actually a**E**..... that consists of Last Name, First Name and Middle initial.

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|-----|------------------|------------------|-----------------|------------------|------------------|
| (a) | A – (v) | B – (ii) | C – (v) | D – (iii) | E – (iv) |
| (b) | A – (ii) | B – (iii) | C – (iv) | D – (i) | E – (v) |
| (c) | A – (iii) | B – (v) | C – (iv) | D – (v) | E – (ii) |
| (d) | A – (ii) | B – (iv) | C – (v) | D – (v) | E – (iii) |
| (e) | A – (v) | B – (v) | C – (iv) | D – (v) | E – (iii) |

28) Following are some statements associated with data flow diagrams (DFDs). Identify the correct statement(s) from among them.

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| (a) | DFD is a process model utilizing several notations to show data in terms of the entities and relationships described by that data. |
| (b) | DFDs are used for process modeling. |
| (c) | DFD is a diagram for a single event in the system. |
| (d) | There are several competing symbol sets for DFDs. |
| (e) | All processes in a DFD have to be decomposed. |

29) Given below are some statements associated with process modelling. Identify the correct statement(s) from among them.

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|-----|---|
| (a) | Logical process models show what a system is or does. |
| (b) | Physical process models are implementation independent. |
| (c) | Data flow diagrams might include processes which happens hourly, daily, weekly or yearly. |
| (d) | Physical process models show not only what a system is or does but also how the system is physically and technically implemented. |
| (e) | Logical process models show the system independent of any technical implementation. |

30) Given below are some statements associated with process modelling. Identify the correct statement(s) from among them.

- | | |
|-----|---|
| (a) | A context data flow diagram contains at least one process. |
| (b) | A logical data flow diagram is a technical pictorial representation that shows what a system is or does and how the system is physically and technically implemented. |
| (c) | A physical data flow diagram shows the system independent of any technical implementation. |
| (d) | An Entity relationship diagram is a tool used to show the top down functional decomposition and structure of a system. |
| (e) | A context data flow diagram is a process model used to document the scope for a system. |

31) Identify the basic concepts which underlie all process models.

- | | |
|-----------------------|-----------------|
| (a) Processes | (b) Data flows |
| (c) External Entities | (d) Data stores |
| (e) Use Cases | |

32) Which of the following is (are) correct regarding object modelling?

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|--|
| (a) The object modelling technique prescribes the use of methodologies and diagramming notations which are completely different from the ones used for data modelling and process modelling. |
| (b) Unified Modelling Language (UML) is a set of modelling conventions which are used to specify or describe a software system in terms of processes. |
| (c) The UML does not provide a method for developing systems. |
| (d) The UML provides only a notation that is now widely accepted as a standard for object modelling. |
| (e) Object modeling is a technique for identifying objects within the systems environment and identifying the relationships between those objects. |

33) Given below are some statements associated with Object modelling. Identify the correct statement(s) from among them.

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|--|
| (a) Object oriented approach to system development is based on the concepts of objects which exist within a systems environment. |
| (b) Data that represents characteristics of interest about an object is called an entity. |
| (c) Types of objects may include a person, place, thing or event. |
| (d) The set of things that an object can do and that correspond to functions which act on the objects data is called a behaviour. |
| (e) Object oriented analysis is concerned with defining static structure and dynamic behavior models of the information system instead of defining data and process models, which is the goal of traditional development approaches. |

34) Given below are some statements associated with Object modelling and Process modelling. Identify the correct statement(s) from among them.

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|--|
| (a) The approach in object modeling that seeks to discover and exploit the commonalities among object classes is referred to as generalization/specialization. |
| (b) In a Data flow diagram, it is possible to have a data flow connected directly from one external entity to another. |
| (c) In a Data flow diagram, it is possible to have a data flow connected directly from one data store to another. |
| (d) A Functional decomposition diagram partitions the system into logical subsystems and/or functions. |
| (e) Methods and/or attributes defined in an objects class can be inherited or reused by another object class. |

35) Which of the following is/are correct regarding Process modelling?

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|---|
| (a) CASE tools provide facilities to describe data flows, data stores and elementary processes to a data dictionary. |
| (b) Data flow diagrams will prove very effective in identifying processes, but they are not good at showing the logic inside those processes. |
| (c) Structured English is a language syntax for specifying the logic of a process. |
| (d) Structured English concern itself with technical issues such as declarations, initialization and linking. |
| (e) Information Engineering is a process modeling approach. |

36) Identify the correct process description methods used in process modeling.

(a) Structured English	(b) Decision Tables	(c) Context Model
(d) Candidate Matrix	(e) Decision Trees	

37) Which of the following diagrams is/ are UML diagrams?

(a) Class	(b) Use case	(c) Sequence
(d) Communication	(e) Deployment	

38) Consider the following statements.

- (i) Flow chart generation from an existing program is an example for Forward Engineering.
- (ii) Computer aided systems modeling is an example for an automated tool for developers.
- (iii) A Case repository is also known as an encyclopedia.

Which of the above statements is / are true regarding automated tools?

(a) Only (i)	(b) Only (iii)	(c) Only (i) and (ii)
(d) Only (ii) and (iii)	(e) All	

39) Which of the following statements is / are true regarding automated tools?

(a) Application development environment (ADE) is an intergraded software development tool.
(b) A help authoring tool which is used to write online help systems is a facility provided by an Application development environment.
(c) Version control tools permit the ADE to integrate with CASE tool products as well as other ADEs and development tools.
(d) Process manager and project manager application tools are intended to support cross life-cycle activities.
(e) System analysts can be replaced entirely by tools. Thereby the product quality can be increased.

40) Match the terms in the first column with the definitions or examples in the second column.

(i)	Presentation Layer	(A)	includes all the logic and processing required to support the actual business application and rules
(ii)	Application Logic Layer	(B)	includes all the commands and logic required to store and retrieve data to and from the database
(iii)	Data Manipulation Layer	(C)	editing input data/ formatting output data
(iv)	Presentation Logic Layer	(D)	Actual data in the database
(v)	Data Layer	(E)	the actual user interface which presents inputs and outputs to the user

(a)	(i)-A, (ii)-C, (iii)-E, (iv)-B, (v)-D
(b)	(i)-C, (ii)-D, (iii)-E, (iv)-B, (v)-A
(c)	(i)-D, (ii)-C, (iii)-A, (iv)-E, (v)-B
(d)	(i)-B, (ii)-E, (iii)-C, (iv)-D, (v)-A
(e)	(i)-E, (ii)-A, (iii)-B, (iv)-C, (v)-D

41) Match the expression in column A with the most appropriate word in column B.

Column A		Column B	
(i)	An active, model that end-users can see, touch, feel, and experience	(A)	Square Symbol
(ii)	The symbol used to represent a decision in a structure chart	(B)	System analysis
(iii)	Emphasize on the technical or implementation concerns of the system.	(C)	Prototype
(iv)	A model – driven approach for system design	(D)	Diamond Symbol
		(E)	System design
		(F)	Information Engineering

- | | |
|-----|--------------------------------|
| (a) | (i)-F, (ii)-D, (iii)-E, (iv)-B |
| (b) | (i)-C, (ii)-D, (iii)-E, (iv)-F |
| (c) | (i)-C, (ii)-A, (iii)-B, (iv)-E |
| (d) | (i)-C, (ii)-A, (iii)-E, (iv)-F |
| (e) | (i)-F, (ii)-A, (iii)-B, (iv)-C |

42) A Modern structured design decomposes the system’s processes into manageable components. When decomposing, the modules should be

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|-----------------------|----------------------|----------------------|
| (a) Highly Cohesive. | (b) Loosely Coupled. | (c) Tightly Coupled. |
| (d) Loosely Cohesive. | (e) Adaptable. | |

43) Which of the following statements is/are true regarding physical data flow diagrams?

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|---|
| (a) Any type of non computerized file can be represented using a physical data flow. |
| (b) They model the technical and human decisions to be implemented as part of an information system. |
| (c) Physical processes, data flows, external agents and data stores make up the physical data flow diagram. |
| (d) A physical process represents the import data from another information system across a network. |
| (e) The external agents will remain the same when transforming the logical DFD to the physical DFD. |

44) Consider the following statements.

- (i) System design is also known as physical design.
- (ii) JRP is the merger of various structured techniques with *prototyping* techniques and *joint application development* techniques to accelerate systems development.
- (iii) JAD emphasize participative development among system owners.

Which of the above statements is/ are true regarding system design?

- | | | |
|-----------------------|------------------------|----------------|
| (a) Only (i) | (b) Only (ii) | (c) Only (iii) |
| (d) Only (i) and (ii) | (e) Only (i) and (iii) | |

45)

Consider the following question answer pairs

- (i) Q: What serves as a blueprint for the detailed design and implementation?
A: Application Architecture
- (ii) Q: What are the issues which should be addressed during the database design?
A: Programming data structures and their impact on performance and flexibility, record size and storage volume requirements
- (iii) Q: What is the purpose of designing the system database?
A: Designing editing controllers to ensure the accuracy of input data.

Which of the above question / answer pair is correct regarding system design tasks?

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|-------------------------|
| (a) Only (i) |
| (b) Only (i) and (ii) |
| (c) Only (ii) and (iii) |
| (d) Only (i) and (iii) |
| (e) All |

46)

Consider the following statements.

- (i) Gantt charts are more effective when you want to study the relationships between tasks.
- (ii) PERT chart is a simple horizontal bar chart that depicts project tasks against a calendar.
- (iii) PERT stands for Project Evaluation and Review Technique

Which of the above statements is/are correct?

- | | | |
|-----------------------|------------------------|----------------|
| (a) Only (i) | (b) Only (ii) | (c) Only (iii) |
| (d) Only (i) and (ii) | (e) Only (i) and (iii) | |

47)

Match the terms in first column with appropriate definitions in second column.

(i)	Database Server	(A)	A server that hosts services which ensure that all database updates for a transaction succeed or fail as a whole
(ii)	Groupware Server	(B)	A server that hosts internet or intranet web sites
(iii)	Transaction Server	(C)	A server that hosts services for groupware
(iv)	Application Server	(D)	A server that hosts one or more databases
(v)	Web Server	(E)	A server that hosts application logic and services for an information system

- | |
|---|
| (a) (i)-A, (ii)-C, (iii)-E, (iv)-B, (v)-D |
| (b) (i)-C, (ii)-D, (iii)-E, (iv)-B, (v)-A |
| (c) (i)-D, (ii)-C, (iii)-A, (iv)-E, (v)-B |
| (d) (i)-B, (ii)-E, (iii)-C, (iv)-D, (v)-A |
| (e) (i)-E, (ii)-A, (iii)-B, (iv)-C, (v)-D |

48) Given below are some statements associated with prototyping. Identify the correct statement(s) from among them.

- (a) Prototyping increases creativity since it allows quick feedback.
- (a) An approved prototype is equivalent to a paper design specification.
- (b) Prototyping encourages shortcuts through the life cycle.
- (c) Prototypes negate the requirement for the system analysis phase.
- (d) The scope and the complexity of the system can quickly expand beyond original plans.

(49) Each of the blanks labelled (I) – (IV) of the paragraph given below has to be filled with the most appropriate word selected from the phrases labelled (A) – (G).
A file server system is a ----(I)-----based solution in which a ----(II)-----computer hosts only the ----(III)---layer. All other layers of the information system application are implemented on the ----(IV)---Computer.

- A. Client
- B. Data
- C. WAN
- D. Application
- E. LAN
- F. Server
- G. Distributed data

Which of the following gives the correct mapping?

- (a) (I)-C, (II)-F, (III)-D, (IV)-A
- (b) (I)-C, (II)-A, (III)-B, (IV)-F
- (c) (I)-E, (II)-F, (III)-B, (IV)-A
- (d) (I)-E, (II)-A, (III)-D, (IV)-F
- (e) (I)-G, (II)-F, (III)-C, (IV)-A

50) Each of the blanks labelled (I) – (III) of the paragraph given below has to be filled with the most appropriate word selected from those labelled (A) – (F).

Project management is the process of -----(I)-----, planning, -----(II)-----, organizing, directing, and controlling the development of an acceptable system at a -----(III)-----cost within a specified time frame.

- A. Analyzing
- B. Scoping
- C. Implementing
- D. Staffing
- E. Minimum
- F. Maximum

Which of the following gives the correct mapping?

- (a) (I)-B ,(II)-C, (III)-F
- (b) (I)-D,(II)-A, (III)-E
- (c) (I)-D ,(II)-B, (III)-E
- (d) (I)-B ,(II)-A, (III)-E
- (e) (I)-B ,(II)-D, (III)-F
