

DipIETE – CS

Time: 3 Hours

JUNE 2014

Max. Marks: 100

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE: There are 9 Questions in all.

- Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.
- The answer sheet for the Q.1 will be collected by the invigilator after 45 minutes of the commencement of the examination.
- Out of the remaining EIGHT Questions answer any FIVE Questions. Each question carries 16 marks.
- Any required data not explicitly given, may be suitably assumed and stated.

Q.1 Choose the correct or the best alternative in the following: (2×10)

- a. System builders, technology specialists who construct the information system based on the _____
- | | |
|-----------------|--------------------------|
| (A) application | (B) design specification |
| (C) analysis | (D) design skills |
- b. _____ are an extension of the business entities, attributes, relationships and rules
- | | |
|----------------------|---------------------|
| (A) data customer | (B) data technology |
| (C) data requirement | (D) data books |
- c. Improved productivity is possible _____
- | | |
|---------------------------------|----------------------------|
| (A) through automation of tasks | (B) documentation |
| (C) reverse engineering | (D) information flow chart |
- d. _____ is a technique that focuses on modelling data
- | | |
|--------------------------------|-----------------------------|
| (A) object oriented analysis | (B) information engineering |
| (C) rapid architected analysis | (D) model driven analysis |
- e. When use case modelling is performed two primary artifacts involved are _____
- | | |
|---|---|
| (A) Use case diagram and use case narrative | (B) Information and skills |
| (C) Database and data models | (D) Object modelling and object technique |

Code: DC59 Subject: ANALYSIS & DESIGN OF INFORMATION SYSTEMS

- f. The _____ approach is centered around a technique referred to as object modelling
- (A) technical oriented (B) message oriented
(C) object oriented (D) system oriented
- g. _____ displays a complete screen of characters at a time
- (A) system (B) paging
(C) pointers (D) user
- h. The degree to which class is connected to or relies upon other classes is called _____
- (A) sequence (B) design
(C) coupling (D) package
- i. Under _____ approach both the old and new systems are operated for some time period
- (A) parallel conversion (B) location conversion
(C) staged conversion (D) variation conversion
- j. A bar chart called _____ is used to depict project tasks against a calendar
- (A) Flow chart (B) Gantt chart
(C) PERT chart (D) Management chart

**Answer any FIVE Questions out of EIGHT Questions.
Each question carries 16 marks.**

- Q.2** a. Explain important trends in today's information systems for business drivers with a neat diagram. (8)
- b. Who are the stakeholders involved in the information systems? (4)
- c. Write a short note on role of the network in information systems. (4)
- Q.3** a. Explain the software development life cycle with an example. (8)
- b. What are the differences between Rapid Application development and Model Driven development strategy? (8)
- Q.4** a. What do you understand by problem analysis phase, explain. (8)
- b. What is system analysis approach? Explain model-driven analysis approach. (8)

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- Q.5** a. Explain briefly user-centered development and use-case modelling. Give benefits of use-case modelling. (8)
- b. Explain the concept relationships that underlie all data models. (8)
- Q.6** a. What is object modelling? Explain the process of object modelling. (8)
- b. What is object oriented analysis? Explain object class relationships. (8)
- Q.7** a. Write the user interface design guidelines. (6)
- b. Explain question-answer dialogues. (6)
- c. What is operating system and web browsers of user interface technology? (4)
- Q.8** a. Explain the system of object oriented design. (8)
- b. Compare the differences between strategy pattern and adapter pattern. (8)
- Q.9** a. What is system construction? Give detailed explanation of the implementation phase. (8)
- b. Write short notes on any **TWO** of the following:
- (i) system obsolescence
 - (ii) system recovery
 - (iii) technical support
 - (iv) system enhancement
- (4×2)