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ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE – 2008
INFORMATION SYSTEM ANALYSIS & DESIGN
SEMESTER - 2

Time : 3 Hours]

[Full Marks : 70

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following : 10 ∞ 1 = 10

i) A Feasibility study should focus on

- a) Operational feasibility
- b) Technical feasibility
- c) Economic feasibility
- d) All of these.

ii) Cost-Benefit analysis

- a) compares the cost with the benefits, of introducing a Computer based system
- b) estimates the hardware and software costs
- c) evaluates the tangible and non-tangible factors
- d) all of these.

iii) The outcome of the analysis of SDLC phase is

- a) preparation of Program Specification Document
- b) preparation of file layout and Screen Design Document
- c) preparation of 'pseudo codes'
- d) none of these.

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iv) In which software, development problem solving stages are the results delivered ?

- a) Status quo
- b) Problem definition
- c) Technical development
- d) Solution integration.

v) A system can be defined as the

- a) orderly grouping of independent components not linked together according to a plan to achieve a specific objective.
- b) orderly grouping of independent components linked together according to a plan to achieve a specific objective.
- c) orderly grouping of dependent components linked together according to a plan to achieve a specific objective.
- d) orderly grouping of interdependent components linked together according to a plan to achieve a specific objective.

vi) Which of the following statements are true ?

- a) In a system the central objective is of prime importance.
- b) BCNF is stronger than the 3NF.
- c) Feasibility study is not required in the system development life cycle.
- d) In system development life cycle testing is done before the design phase.

vii) Economic feasibility is also known as

- a) Cost benefit analysis
- b) Demand supply analysis
- c) Both (a) and (b)
- d) None of these.

viii) The most important feature of Spiral model is

- a) Quality Management
- b) Maintenance
- c) Risk Assessment
- d) None of these.

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- ix) SRS stands for
 - a) Software Requirement Specification
 - b) System Requirement Specification
 - c) System Rectification Standard
 - d) None of these.

- x) BCNF is a type of
 - a) Indexing
 - b) DFD
 - c) Normalisation
 - d) None of these.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following.

3 ∞ 5 = 15

- 2. Discuss the different Project Management Activities.
- 3. What is System Analysis ? What are the roles of a System Analyst ?
- 4. What are Cohesion and Coupling ?
- 5. What is data dictionary ? Why is it needed ?
- 6. What are super key and candidate key ?

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following.

3 ∞ 15 = 45

- 7. a) What are the important elements of a System ? 5
- b) What is Transitive Dependency ? Illustrate with examples. 5
- c) What is the difference between First and Third Normal Forms ? 5
- 8. a) What factors must be considered prior to system selection ? 5
- b) What is the difference between Unit Testing and System Testing ? 5
- c) What is post-implementation review ? Explain. 5

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9. a) What do you mean by normalization ? 3
- b) Define primary key and foreign key with examples. 4
- c) Explain 1st NF, 2nd NF & 3rd NF with example. 8
10. a) What is DFD ? Discuss different symbols used in DFD. 4
- b) Differentiate between Logical DFD & Physical DFD. 2
- c) Draw a Physical DFD for a Payroll System of any Organization. 5
- d) Draw a DFT for a Quiz Software. 4
11. a) Distinguish between software verification and software validation. 6
- b) The discount policy has following conditions for the customers. If customers is from the 'book stores' :
- Get a trade discount of 25% if orders for 6 or more copies per book title.
- If customer is from 'Libraries and individuals' :
- 5% allowed on order of 6 – 19 copies per book title
- 10% on orders for 20 copies per book title and
- 15% on orders for 50 copies or per book title.
- Develop a process description in 3 ∞ 3
- i) Structured English
- ii) Decision Table
- iii) Decision Tree.

END

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