Computer Science - ICS Part 2 Computer Science Chapter 3 Short Questions Preparation

Q1. Write the purpose of feasibility study.

Ans 1: The purpose of feasibility study is called preliminary investigation of the required database,It involves the area of identification and selection i.e which area or aspect is to be selected to start with.After the project is selected,it is allocated a specific fund and a proper planning is chalked out of its practical implementation.

Q2. State the purpose of physical database design.

Ans 1: Physical database design is the last stage of the database design process. The major objective of physical database design is to implement the database as a set of stored records, files, indexes, and other data structures that will provide adequate performance and ensure database integrity, security and recoverability.

Q3. Which activities are involved in data analysis?

Ans 1: Data analysis is an important analysis aspect while designing a database.It involves the following activities:

1. Data Flow Diagram
2. Decision Table
3. Decision Trees

Q4. Define E- Diagram.

Ans 1: 1) By connecting all the Data Objects along with their Relationship in the above manner, an ERD (Entity Relationship Diagram) is constructed .

2) Data modeling and the entity- Relationship Diagram provide the Analyst or Database administrator with a concise of a Data Processing Application or constructing a Physical Database.

Q5. What is meant by Data modeling?

Ans 1: Data modeling is the process of identifying the data objects and the relationship between them.
Ingredients of Data Modeling:

1. Entities/Object
2. Attributes
3. Relationship
4. Cardinaality
5. Modality

Q6. What is the importance of Project Planning?

Ans 1: In project planning a proper schedule is laid down to accomplish the activities of a project.All the cost factors are taken into consideration i.e the salaries of team members,their logistics involved,other expenses such as marriage gifts,insurance etc.

Q7. Define term analysis.

Ans 1: A systematic examination and evaluation of data or information by breaking it into its components parts to uncover their interrelationships is called analysis,The following are the types of analysis.

1. Data Analysis
2. Requirements Analysis
3. Project Analysis

Q8. What is the concept of Data Distribution Strategy?

Ans 1: **Data Distribution Strategy:**Many organizations today have distributed computing networks . For these organizations, a significant problem in physical database design is deciding at which nodes (or sites) in the network to physically locate the data.

Basic data distribution strategies:
a) Centralized b) Partitioned
c) Replicated d) Hybrids

Q9. What is difference between Relation and Relationship.

Ans 1: Relation:A two dimensional array or table of data containing descriptive information about an entity.The entity must have a unique identifier,which is composed of a combination of one or more attributes and each attributes must have one and only one value.

Ans 2: Relationship:The relationship indicated how the entities/Objects are connected or related to each other,

- All the relationship defines the relevant connections between both objects.
- All the relationship are bi-directional.

Q10. Define Cardinality.

Ans 1: The number of record in a relation is called the cardinality of relation.
1. Whether some occurrence (s) of object -1 are related to some occurrence (s) of object -2
2. It is expressed as one or many e.g.
a) A husband can have only one wife and
b) A Father can have many children .
3. The relationship can be
a) One to One b) One to many
c) Many to many d) Recursive e) None
