Solved Question Paper June 2012

System Analysis And Design

What is Joint Application Development (JAD) ? Explain six typical participants in a JAD. (10marks)

Joint Application development is a process in which group meetings are held to analyse the problem and define the requirements of the desired system. In JAD, each participant is expected to attend and actively participate.

The group includes: sponsor, the facilitator, the user manager and IT staff.

When JAD is used to find requirements, it is known as Joint Requirements Planning.

JAD session spans from 3-7 days but in special cases it may continue to two weeks. Success of JAD depends on proper planning.

Three steps to be followed for a successful JAD session :

- 1. Selection of a location for JAD session
- 2. Selection of JAD participants
- 3. Preparation of agenda items for JAD session.

JAD sessions are usually held in a location different from workplace. The meeting room should be equipped with white board, overhead projector, data projector, laptop, printer, scanner etc.. There should be name tags for each participant.

Preparation of the agenda is the key for the success of JAD session. Agenda must be brief, should mention the objective of the session. It must mention the item to be discussed in each session and the time allotted for each item. Agenda contains three parts namely, the opening, the body and conclusion.

Guidelines for successful JAD session:

- 1. Agenda should be followed strictly.
- 2. Topic should be completed within allotted time.
- 3. Ensure that the scribe is able to take notes.

- 4. Avoid the use of technical jargon unless essential.
- 5. Try to get group consensus.
- 6. Ensure that the participants follow the rules.

Disadvantages of Joint Application Development (JAD)

- Since it is a meeting of many people, there may not be sufficient time for everyone to speak.
- Only a few people may dominate the discussion. So, the outcome of the meeting will be the view of those who spoke most during the meeting.
- The problem with such meetings is that some people are afraid to speak out for fear that they may be criticized.

Explain : Cost Benefit Analysis(5marks)

Cost benefit analysis is done in economic feasibility. There are two types of costs associated with a project: the costs involved with development of the system and costs associated with operation and maintenance of the system.

System development cost can be estimated at the time of planning of the system and it should be refined in different phases of the project. Maintenance and operation costs are to be estimated before hand. These estimations are bound to changes as the requirements change during the development process. After the implementation, these costs may increase or decrease depending on the nature of the updates done to the system. System development cost is one time cost, but maintenance and operating costs are recurring costs. Different costs involve the following:

Cost of human resource: It includes the salaries of system analyst, software engineers, programmers, data entry operators, operational, and clerical staff. In short, it involves the amount going to be spent on the people involved.

Cost of infrastructure: This includes the cost of computers, cables, software etc.

Cost of training: Training on new technologies must be given to both the developing staff and operating staff. This must also be considered for calculating the cost of the system.

There are two components in economic feasibility: costs and benefits.

The cost includes tangible hardware, software costs, cost of human resources and some intangible costs. Tangible costs are saved by the system. Intangible costs are saved by the quality of the system. Application of the system should lead to efficiency. When the quality of system is high, then the effectiveness of the services provided by the organisations increase. Tangible benefits are those which can be quantified easily. They can be measured in terms of savings or profits. Intangible benefits are difficult to quantify. Intangible benefits include improving company goodwill, improving employee moral, better decision making etc.