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**MULTIPLE CHOICE QUESTIONS:**

1. E
2. C
3. C
4. D
5. B

**TRUE/FALSE:**

1. False
2. True
3. True

32. False

**SHORT ANSWER:**

1. The three types of interview questions are:
   1. Closed ended – Questions that require a specific answer. For example, how many requests do you process per day? An analyst can use this technique to when specific, precise information is required.
   2. Open ended – Questions that leave room for elaboration on the part of the interviewee. “For example, describe the biggest problem with the as-is system?” An analyst can use this technique to gather rich information and give the interviewee more control over the information revealed during the interview.
   3. Probing – Questions follow up on what has just been discussed in order to learn more and they are used when the interviewer is unclear about an interviewee’s answer. For example, “I’d like to understand your prior response in a bit more detail. Can you walk me through an example of exactly how you know when to invoice a customer?”
2. Document analysis is used to understand the as-is system. Effectively, it involves reviewing the documentation (if it exists) and examining the as-is system. Observation is when you are watching the processes being performed. Both techniques are good for understanding the as-is system (assuming documentation exists). However, if the documentation does exist, documentation analysis can be better for understanding more breadth of information. Observation is a good way to check the validity of information gathered from other resources such as interviews and questionnaires.
3. Interviews and Joint Application Design. The user involvement and cost of these techniques is higher than the other three options (e.g. questionnaires, document analysis, and observation). However, JAD is far better off when it comes to depth of information, breadth of information, and integration of information. In particular, JAD sessions are designed to improve integration because all information is integrated when it is collected, not afterward. JAD sessions also require the greatest effort because it typically involves multi-day offsite meetings for intense information gathering and discussion sessions.
4. A system proposal includes 10 pieces of information:
   1. Table of contents
   2. Executive summary
      1. Summary of all essential information to help an executive decide what parts of the proposal to read in more depth.
   3. System request
      1. The revised system form.
   4. Workplan
      1. The revised workplan after all analysis is complete.
   5. Feasibility analysis
      1. The revised feasibility analysis after all analysis is complete.
   6. Requirements definition
      1. A list of the functional and nonfunctional business requirements for the system.
   7. Functional model
      1. An activity diagram, a set of use-case descriptions, and a use-case diagram that illustrate the basic processes or external functionality that the system needs to support
   8. Structural model
      1. A set of CRC cards, class diagrams, and object diagrams that describe the structural aspects of the to-be system.
   9. Behavioral model
      1. A set of sequence diagrams, communication diagrams, behavioral-state machines, and a CRUDE matrix that describe the internal behavior of the to-be system.
   10. Appendices
       1. Contains additional material relevant to the proposal, often used to support the recommended system. This might include industry reports and statistics.
5. Non-functional requirements can include things like performance and usability, which have a major impact on software quality. Understanding these requirements is critical to the design process when decisions are made about the database, user interface, hardware, software, and the underlying architecture. Functional requirements can include things like a process a system needs to perform or information it needs to contain. Again, these requirements are critical to software quality because if the system behaves in unintended ways or does not contain the right information, then the system is useless.