

EXAMINATION ANSWER BOOKLET



For completion by student:

Student Number	140 94 7 7	Seat Number	
Course	Bsc. Computing		
Module Title	System analysis and design	Module No	Cpu 5 00 6
Exam Date	15th August, 2017	Exam Time	10:00-12:00am

For office use only:

Question No:											Total	%
1st Mark												
Moderation												
Agreed Mark												

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Quest. No

(a) Different phases of SDLC:-

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(a) Requirement and gathering analysis

(b) Design

(c) Implementation or coding

(d) testing

(e) Deployment

(f) maintenance.

- Requirement and gathering analysis:- Business requirement are gathered in this phase. This phase is the main focus of project managers and stakeholders. Meetings with managers and stakeholders and users are held in order to determine the requirement e.g. Who is going to use the system?, How will they use the system? . etc

- Design :- In this phase the system and software design is prepared from the requirement specifications which were studied in the first phase. System design helps in specifying hardware and system requirement.

- Implementation/coding :- On receiving system design document, the work is divided in modules/units and actual coding is started. Since in this phase the code is produced, so it is the main focus for the developer. This is the longest phase for the software development life cycle.

- Testing :- After the code is developed, it is tested against the requirements to make sure ~~that~~ that the product is actually solving the need addressed and gathered during the requirement phase.

4(c) Interviews:- This method is used to collect information from groups or individuals. Analyst select the people who are related with the system for the interview. In this method, the analyst ~~is~~ sits face to face with the people and record their responses. The interviewer must plan in advance the type of question he/she is going to ask and should be ready to answer any type of question.

- questionnaire:- It is the technique used to extract information from number of people. This method can be adopted and used only by an skillful analyst. The questionnaire consist of series of questions framed together in logical manner. The questions are simple, Clear and to the point.

- Observation:- unlike the other fact finding techniques. In this method, the analyst himself visits the organization and observes and understand the flow of documents. working of the existing system. the users of the system etc. For this method to be adopted. It takes an analyst to perform this job. As he knows which points should be noticed and highlighted.

- Record view and background reading:- The information related to the system is published in the sources like newspapers, journals, document. This record review helps the analyst to get valuable information about the system and the organization. If an analyst is employed within the organization, that is the subject of the fact gathering exercise. then it is likely that he or she will already have a good understanding of the organization and its business object.

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(a) Sampling :- Document sampling can be used in two different ways :- first, the analyst will collect copies of blank and completed documents during the course of interview and observation session. These will be used to determine the information that is used by people in their work and the input and output from processes which they carry out either manually or using an existing computer system. Secondly, the analyst may carry out a statistical analysis of the documents in order to find out about patterns of data.

(b) feasibility study is an assessment of the practicality of a proposed project or system

Economic feasibility :- A economic feasibility study is conducted when a company wants to know if the proposed amount of capital and financing is sufficient to complete a project successfully.

- Marketing feasibility :- The marketing feasibility studies the market impact and penetration, such as demographics, target market, product testing and more.

- Technical feasibility :- If the company has the technological and know how and resource to achieve its goal

- Comprehensive feasibility :- A comprehensive feasibility study is an all-inclusive report that takes into consideration some of the most rational business practices one should take before undertaking any project.

36) CHARACTERISTICS of entities:-

- presence:- Simply put, the entity is present in reality e.g Think about the university and all its component. You know they exist this is what the presence is all about.

- Approval:- The organization has said in writing that they are going to either keep it or buy it. This means that all recorded entity are approved. e.g:- The computers, desk and every other item we have above to have been approved by those who run the university.

- Visibility:- It is tangible or intangible, while tangible is connected with anything that can be physically touched. Intangible is connected to those that cannot be touched.

Example of tangible entities:- Humans, objects that can be touched. Hence, they are tangible.

Example of intangible:- All the examples given under planned occasions and ideas are all intangible. They exist in our minds. We cannot touch them.

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1(a) Deployment:- After successfully testing the product is delivered/deployed to the customer for their use.

As soon as the product is delivered to the customer, the first the customer will do is beta testing. If any changes are required or if any bug is caught they will report to the engineering team. Once those changes are made or bugs are fixed then final deployment will happen.

- Maintenance:- once the customer starts using the developed system then the actual problems come up and need to be solved from time to time. This process is ^{where the game} taken for the developed product is known as maintenance.

1(b) System analysts and their role.

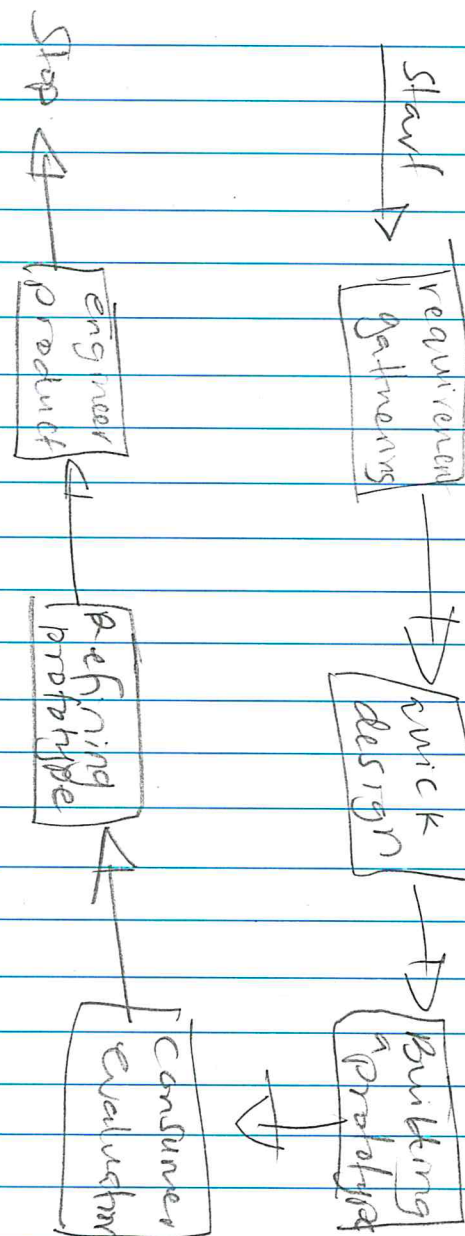
- System analysis is a process of collecting and interpreting facts, identifying problems and decomposition of system into its components.

System analyst systematically assess how users interact with technology and how business function by examining the inputting and processing of data and outputting of information with the intent of improving organizational process. Many improvements involve better support of user's work task and business functions through the use of computerized information system. The analyst must be able to work with people of all description and be experienced with computers.

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1b) The prototyping model is a system development method (SDM) in which a prototype is built and tested, and then reworked as necessary until an acceptable prototype is finally achieved from which the complete system or product can now be developed.



Sample of a prototype

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16) A Software development methodology across a system. In software engineering is a framework that is used to structure, plan and control the processes of developing an information system.

- Crystal methods
- Agile software development
- Dynamic system development model
- Extreme programming
- Feature driven development
- Joint Application
- Lean development
- Rapid application development
- Rational unified process.
- Scrum
- Spiral.

* Agile software development Methodology:-
is a Conceptual framework for undertaking software engineering projects.

Most agile methods attempt to minimize risk by developing software in short time boxes called iterations.

~~* Crystal methods:-~~

* Dynamic system development model:-
was developed in the UK in the mid 1990s. It is the evolution of rapid application (RAD) practices.

Here are some principles of a DSDM:-

- Active user involvement
- Reversible changes during development
- A focus on frequent delivery of product.

Quest. No

36) clients

- ring binders
- record
- booking
- caravan record
- car registration
- Touring pitch
- Arrival notification

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2(a)

