CENTRAL UNIVERSITY OF SOUTH BIHAR
Department of Computer Science
First Class Test Examination, Feb 2025

Subject: Software Engineering **Course Code: CSC82DC00804**
Semester : Second **Time: 01 Hours** **M. M.: 10** **Session: 2024-2026**

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1. Explain how the uses of software engineering principles help to develop software products cost-effectively and timely. **[02]**
2. Why do you feel that characteristics of requirements play a very significant role in the selection of a life cycle model? **[02]**
3. Who are the different categories of users of the SRS document? What are their expectations from the SRS document? **[02]**
4. Explain the RAD Model. What is RAD model advantages, disadvantages and when to use it? **[04]**

ANS 1: Software engineering's primary benefit is a structured approach of s/w development by adhering to well-defined processes and methodologies. Software engineering ensures that projects are completed on time within budget and to the required quality standards.

The uses of SE principles helps to develop sw products cost effectively and on time as explained below:

(1) Cost effectiveness : Structured software engineering practices help manage project cost effectively by ensuring efficient Resource Planning and utilisation. by using well defined process and methodologies, software engineering reduces the risk of budget overruns and delays. cost effective project management is crucial for both small and large scale projects, enabling organisation to achieve their goals without financial strain

(2) Timely Delivery : Software engineering methodologies ensure the timely delivery of software projects. These Frameworks promote iterative development, continuous feedback and regular updates. It ensures that the progress is going according to schedule and also maintains clients' satisfaction.

ANS 2 : This is because of following reasons :-

Types of requirements :-

(i) Functional vs Non - functional :-

Different life cycle models are suited for different types of requirements such as functional or Non - functional requirements

(ii) complexity :-

Requirements with high complexity may require more iterative or agile approach

Stability of Requirements :-

(i) stable vs changing : life cycle models like waterfall are suitable for stable requirements While iterative models are better suited for changing of requirements

(ii) Rate of change : Requirements that change rapidly may require more flexible or adaptive life cycle models

prioritization of requirement :

(i) Must haves vs Nice-to-Haves : Life cycle model can be chosen based on prioritization of requirements with official requirements addressed first .

ANS 3 : CLICK HERE FOR SEE ANSWER

ANS 4 : CLICK HERE FOR SEE ANSWER