BCA (Sem.–4)
SOFTWARE ENGINEERING
Subject Code : UGCA1921
M.Code : 79725
Date of Examination : 05-07-22

Time : 3 Hrs.
Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :
1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :

a) Define Software Engineering. What are the important roles of Conventional Component within the Software Architecture?

b) During the course of the project. the company decides that it wishes the new web-based application's interface to be made accessible to international users. How can this be achieved and what advantages would the company achieve by having an application that is accessible to international users?

c) Why Formal Methods are not widely used?

d) What is the difference between security and stress testing?

e) What is coupling? Name what are the different types of Coupling.

f) What are the different phases of Unified Process?

g) Define Bug. Error and Failure.

h) What are the umbrella activities of a software process?

i) Define Stakeholder.

j) Explain the concept of decision tree.

SECTION-B

2. How the Process Model differ from one another? Explain types of prescriptive process models. *'Spiral life cycle model is not suitable for products that are vulnerable to large number of risks'.* Comment on the statement.

3. What is SRS? Identify the problems one would face, if he tries to develop a large software product without using software engineering principles.

4. What is the difference between white and black box testing? Is determining test cases easier in black or white box testing? Is it correct to claim that if white box testing is done properly, it will achieve close to 100% path coverage?

5. What is requirement analysis? What are functional and non-functional requirements?

6. What is meant by the term cohesion in the context of software design? Differentiate architectural design and procedural design.

7. Why software development is not quick and easy method? Why a disciplined approach need to be adapt in software development of complex software? What is the role of embedded system in software development? Illustrate with the help of example. •