

## PES University, Bengaluru (Established under Karnataka Act No. 16 of 2013)

UE17CS402

## OCTOBER 2020: IN SEMESTER ASSESSMENT B Tech 7 SEMESTER TEST-1

## UE17CS402 - Software Engineering

| Ti   | me:      | 2 Hrs. Answer All Questions Length of the answers should be proportional to marks allotted  Max Mark  | ks: 60 |
|--|----------|---|--------|
|  |          | Enumerate any 5 different phases of a SDLC with what is the focus and outcomes of each  | 5      |
| 1.   | a)       | phases (not more than 2-3 lines each)   |        |
|  | b)       | Contrast the following product lifecycle phases Introduction, Growth, Maturity, Discontinuance, Obsolescence with respect to revenue along with the rationale of why for each of the phases.  | 5      |
|  |          | Contrast the role of Product Owner and Scrum team participant in Agile SCRUM  | 2      |
| 2.   | a)<br>b) | What are the different steps involved in requirements engineering with 1 sentence for each indicating the focus of the steps  | 4      |
| 1  | c)       | Answer and indicate whether these are true or false.  In the answer booklet answer only as 2c-1 True or False. 2c-2  1. Documentation is not one of the deliverables in an Agile approach of Software   | 4      |
| The state of the s |          | <ol> <li>Documentation is not one of the deliverables in any gas appropriate provided provided in the deliverables in any gas appropriate provided provided in the subsequent includes both what is included and what is not included</li> <li>Requirements specification involves listing out all the features required for use in the subsequent phases of the development lifecycle</li> <li>Non function requirements are requirements which are not needed in the product</li> </ol> |        |
|  |          |   | 5      |
| 3.   | a)<br>b) | Discuss what is Risk and the steps (with 1 line description) involved in Managing Risks  Discuss briefly in max of 3-4 sentences each, one experience based and a formal formula-based estimation technique   | 4      |
|  |          |   | 3      |
| 1.   | a)       | Contrast Architectural Views, Styles and Patterns   | 5      |
|  | b)       | Enumerate at least 5 factors (with max 1-2-line description) that influence the architecture  | 3      |
|  | c)       | Discuss one design pattern of your choice describing the intention of the pattern, description and where it's used  |        |
|  |          | Contrast Coding standards and guidelines for an organization with at least 2 examples each  | 6      |
| 5.   | a)       | Contrast Coding standards and guidelines for an organization was  Discuss what you understand by the following with an example  | 4      |
|  | b)       | Defensive programming     Secure programming  |        |
|  |          |   | 3+3    |
| 6  | a)       | Discuss why you need Source Code management and discuss a tool with the basic features which you think is needed for the same   | 4      |
|  | b)       | Discuss the following terminologies in max one/two sentence each  1. Configurable Items  2. Baseline  | 7      |
|  | el v     | <ol> <li>SCM directories</li> <li>In an SCM environment 7.5.6 represents the release, version and revision with a 3-digit number scheme. Indicate which digit represents what, of the three release, version and revision.</li> </ol>   |        |