PAPER ID-420392

Subject Code: KCS601

Roll No: | | | | | | | | | | | | | |

BTECH
(SEM VI) THEORY EXAMINATION 2021-22
SOFTWARE ENGINEERING

Time: 3 Hours *Total Marks: 100*

Note: Attempt all Sections. If you require any missing data, then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **2*10 = 20**

Q.No.	Questions	CO
(a)	Enlist characteristics of software.	1
(b)	Define SDLC.	1
(c)	Define software crisis.	2
(d)	Compare ISO 9000 and SEI-CMM.	2
(e)	Examine methods of finding cyclomatic complexity with example.	3
(f)	Explain Function oriented Design.	3
(g)	List the points of differences between Verification and Validation.	4
(h)	What are stub and driver?	4
(i)	Differentiate between adaptive and corrective maintenance?	5
(j)	List the points of differences between software Re-engineering and Reverse engineering.	5

SECTION B

2. Attempt any *three* of the following: **10*3 = 30**

Q.No.	Questions	CO
(a)	Explain prototyping model of SDLC. What are its advantages over conventional model? Explain with diagram.	1
(b)	Create a level-2 DFD of the Smart College Campus.	2
(c)	Differentiate between the features of Top-down and Bottom-up approaches of software design along with its advantages and disadvantages.	3
(d)	What is regression testing? Discuss the process of test case prioritization in regression testing?	4
(e)	Why is Software maintenance required? Explain types of maintenances with examples.	5

SECTION C

3. Attempt any *one* part of the following: **10*1 = 10**

Q.No.	Questions	CO
(a)	Discuss Spiral Model for Software development life cycle and highlight the Risk analysis in this context.	1
(b)	What is the need of SDLC? Discuss evolutionary development model in detail with the help of diagram.	1

4. Attempt any *one* part of the following: **10 *1 = 10**

Q.No.	Questions	CO
(a)	Discuss about decision tables and its components. Create a decision table. for the following scenario; a bookstore gets a trade discount of 25% for order more than 6 books;for order from libraries and individuals, 5% allowed on orders of 6-19 copies per book title; 10% on orders for 20-49 copies per book title; 15% on orders for 50 copies or more per book title.	2

PAPER ID-420392

Roll No: | | | | | | | | | | | | | |

BTECH
(SEM VI) THEORY EXAMINATION 2021-22
SOFTWARE ENGINEERING

(b)	Discuss the importance of software specification Document. And also explain the typical IEEE format of SRS document.	2

5. Attempt any *one* part of the following: 10*1 = 10

Q.No.	Questions	CO
(a)	With the help of example illustratethe concept of modularity and discuss why is "Low coupling –High cohesion is better for good software" along with the concept of functional independence.	3
(b)	What are the various software design strategies? Analyze the points of difference between Function Oriented Design and Object-Oriented Design.	3

6. Attempt any *one* part of the following: 10*1 = 10

Q.No.	Questions	CO
(a)	Explain Halstead software metrics in detail and mention what do you understand by token count?	4
(b)	Discuss the differences between black box and white box testing and explain how these techniques can be used simultaneously to test a system.	4

7. Attempt any *one* part of the following: 10*1 = 10

Q.No.	Questions	CO
(a)	Explain Risk management in detail. Also discuss the points that differentiate project risk from technical risk.	5
(b)	What is cost analysis in context of software? Explain COCOMO model with the help of schematic diagram.	5