

Internal Assessment Test - II

Sub:	SOFTWARE ENGINEERING						Code:	15CS42	
Date:	08 / 05 / 2017	Duration:	90 mins	Max Marks:	50	Sem:	4(A,B,C,D)	Branch:	CSE

Answer **FOUR FULL** questions selecting **AT LEAST ONE** question **from each part**

	Marks	OBE	
		CO	RBT
<b><u>PART A</u></b>			
1 (a) A program specification states that the program accepts 4 to 10 inputs that are five-digit integers greater than or equal to 10,000. Show equivalence partitions and possible test input values.	[5]	CO5	L3
(b) Explain Requirements-based testing with the help of an example.	[5]	CO5	L3
<b>OR</b>			
2 (a) Explain various interface types and interface errors.	[8]	CO5	L2
(b) Differentiate between verification and validation.	[2]	CO5	L1
<b><u>PART B</u></b>			
3 (a) Explain testing process with the help of a neat diagram.	[8]	CO5	L2
(b) Define test-driven development.	[2]	CO5	L1
<b>OR</b>			
4 (a) Explain software re-engineering with the help of a neat diagram.	[6]	CO4	L2
(b) Explain maintenance cost factors that result in high cost of maintenance.	[4]	CO5	L2

Internal Assessment Test - II

Sub:	SOFTWARE ENGINEERING						Code:	15CS42	
Date:	08 / 05 / 2017	Duration:	90 mins	Max Marks:	50	Sem:	4(A,B,C)	Branch:	CSE

Answer **FOUR FULL** questions selecting **AT LEAST ONE** question **from each part**

	Marks	OBE	
		CO	RBT
<b><u>PART A</u></b>			
1 (a) A program specification states that the program accepts 4 to 10 inputs that are five-digit integers greater than or equal to 10,000. Show equivalence partitions and possible test input values.	[5]	CO5	L3
(b) Explain Requirements-based testing with the help of an example.	[5]	CO5	L3
<b>OR</b>			
2 (a) Explain various interface types and interface errors.	[8]	CO5	L2
(b) Differentiate between verification and validation.	[2]	CO5	L1
<b><u>PART B</u></b>			
3 (a) Explain testing process with the help of a neat diagram.	[8]	CO5	L2
(b) Define test-driven development.	[2]	CO5	L1
<b>OR</b>			
4 (a) Explain software reengineering with the help of a neat diagram.	[6]	CO4	L2
(b) Explain maintenance cost factors that result in high cost of maintenance.	[4]	CO5	L2

**PART C**

- 5 (a) With the help of a neat diagram, explain software evolution process. [7]  
(b) Define three types of maintenance. [3]

**OR**

- 6 (a) What is program evolution dynamics? Explain Lehman laws. [2+8]

**PART D**

- 7 (a) Differentiate between milestones and deliverables. [2]  
(b) Draw a neat diagram to explain project planning process. [8]  
(c) Explain COCOMO-II model with a neat diagram [10]

**OR**

- 8 From the information given in the table, draw

- (a) Bar chart/Gantt chart [10]  
(b) Staff allocation chart [10]

Task	Effort (person-days)	Duration (days)	Dependencies
T1	15	10	-
T2	8	15	-
T3	20	15	T1 (M1)
T4	5	10	-
T5	5	10	T2, T4 (M3)
T6	10	5	T1, T2 (M4)
T7	25	20	T1 (M1)
T8	75	25	T4 (M2)
T9	10	15	T3, T6 (M5)
T10	20	15	T7, T8 (M6)
T11	10	10	T9 (M7)
T12	20	10	T10, T11 (M8)

CO5	L2
CO5	L2
CO5	L2
CO5	L1
CO4	L2
CO4	L2
CO4	L3
CO4	L3

**PART C**

- 5 (a) With the help of a neat diagram, explain software evolution process. [7]  
(b) Define three types of maintenance. [3]

**OR**

- 6 (a) What is program evolution dynamics? Explain Lehman laws. [2+8]

**PART D**

- 7 (a) Differentiate between milestones and deliverables. [2]  
(b) Draw a neat diagram to explain project planning process. [8]  
(c) Explain COCOMO-II model with a neat diagram [10]

**OR**

- 8 From the information given in the table, draw

- (a) Bar chart/Gantt chart [10]  
(b) Staff allocation chart [10]

Task	Effort (person-days)	Duration (days)	Dependencies
T1	15	10	-
T2	8	15	-
T3	20	15	T1 (M1)
T4	5	10	-
T5	5	10	T2, T4 (M3)
T6	10	5	T1, T2 (M4)
T7	25	20	T1 (M1)
T8	75	25	T4 (M2)
T9	10	15	T3, T6 (M5)
T10	20	15	T7, T8 (M6)
T11	10	10	T9 (M7)
T12	20	10	T10, T11 (M8)

CO5	L2
CO5	L2
CO5	L2
CO5	L1
CO4	L2
CO4	L2
CO4	L3
CO4	L3