Bihar Engineering University, Patna **End Semester Examination - 2022**

Course: B. Tech. Code: 105504

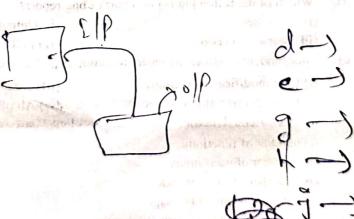
Semester: V Subject: Software Engineering Time: 03 Hours Full Marks: 70

Instructions:-

- (i) The marks are indicated in the right-hand margin.
- (ii) There are NINE questions in this paper.
- (iii) Attempt FIVE questions in all.

4 4	교육의 지역 경에는 전에 대기에게 열려가 되는 위원에 가지됐다. 나를 된다고 있다.	owing (Any seven question only): [2 x 7 = 14]
(a)	The spiral model was originally (i) IBM	(ii) Barry Boehm
	•	
45-	(iii) Pressman	Tigoria en (iv) Royce and and an arrange and arrange and
(b)	Measure of reliability is given by	
	(i) mean time between success	MTBF
	mean reliable	(iv) MTTR
(c)		use of a CASE tool?
	• • • • • • • • • • • • • • • • • • • •	s and design (SA/SD)
	(ii) It maintains the data dictiona	
	(iii) It checks whether DFDs are	e balanced or not
		ole system. Jahung 20 han abunda umban misina la A.O.
(d)-		ue to assess the quality of test cases is
		o constituent mean to dispersion to exist the contract of
1	(ii) validation	The state of the s
	(iii) verification	
	(iv) performance analysis	
<u>√(e)</u>		I for student program?
	(i) Waterfall model	
	(ii) Built – and – fix model	
	(iii) Spiral model	
	(iv) Rational unified model	
(f)	Which of the following is not a	
	(i) Test case	(ii) Output
	(iii) Software version	LOC
JEY	Independent modules are easier	to maintain and test because of
	(i) code modification is limited	(ii) reusable modules are possible
	(iii) error propagation is reduced	All of the above
Att.	In size-oriented metrics, metrics	are developed based on the
3. 5.	(i) number of functions	
/	(ii) number of user inputs	
	(iii) number of lines of code	
	(iv) amount of memory usage	
GX	Classes communicate with one a	another via
-0	(i) processed information	(ii) interfaces (iii) messages (v) coupling
-05	Software is not considered to be libraries and documentations.	e collection of executable programming code, associated
	(i) Statement is true	(ii) Software is only data structures with algorithms
<i>f</i> -	(iii) Statement is false	(iv) Statement underestimates software
1		P.T.O.

			生活をよることが、「資料料」が利力のよう。株式	
-	12	Expla	in in detail the classical waterfall model with help of a neat and labelled diagram.	[14]
, Q	.3_		What is prototyping model? Explain the problems and advantages of prototyping in	[7]
			detail. Develop a test case for any testing technique for 'student admission system'.	[7]
Q		(b)	Define cohesion and coupling. Explain various types of each of them. What are CASE tools? With a suitable diagram, explain the categories of CASE tools.	[7] [7]
<u>e</u>			are the different COCOMO models? Explain the phases involved in the detailed DMO model.	[14]
Q.	6	(a)	What are the types of user-interface design?	[7]
Ų.			Explain the stages of object-oriented design process.	[7]
, Q.	((a) (b)	short notes on the following: Unified modelling language Object-oriented analysis modelling Object-oriented design concepts and methods	[5+5+4=14]
Explain coding standards, coding guidelines and code review techniques in detail.			[14]	
Q.5		a) V b) [What is software quality? Discuss software quality attributes. Discuss the differences between object-oriented and function-oriented designs.	[7] [7]
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