Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India

(Autonomous College Affiliated to University of Mumbai)

QUIZ 1 (10-Feb-2021)	
Max. Marks : **15**	**Duration: 15 Minutes**
Class : **TE Computer**	**Semester: VI**
Course Code : **CE 63**	**Branch : Computer Engineering**
Name of the Course: Software Engineering	

Instructions:
   (1) All Questions are Compulsory
Name: Vishal Salvi
UID: 2019230069

Question No.		Max. Marks	CO
1)	The incremental model of software development is **a) A reasonable approach when requirements are well defined.** b) A good approach when a requirements keep changing. c) The best approach when customer demands a quick release d) A revolutionary model that is not used for commercial products.	**1**	CO1
2)	Evolutionary software process models a) Are not iterative in nature b) Cannot accept requirements changes **c) Do not generally produce throwaway systems** d) All of the above.	**1**	CO1
3)	Which of the following is NOT a typical artifact of the Scrum framework? a) Product Backlog **b) SRS** c) Product increment d) Sprint Backlog	**1**	CO1
4)	The spiral model of software development a)Is an iterative model. b) Used in large and complex projects. c) Includes project risks evaluation during each iteration **d) All of the above**	**1**	CO1

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5)	In the Spiral model the radius of the spiral at any point represents a)the level of risk b)the progress made in the current phase **c)the cost incurred in the project till then** d)None of these	**1**	CO1
6)	What does NOT belong to cornerstones of the agile manifesto? a) Individuals and interactions over processes and tools b) Working software over comprehensive documentation **c) Following plan over responding to change** d) Customer collaboration over contract negotiation	**1**	CO1
7)	Conversion of Adjusted Function Point Count to LOC count is dependent on a) Team Size b) Project Duration **c) Programming Language** d) Cost Drivers	**1**	CO2
8)	User wants to add/change Customer data, delete Customer data, wants to inquire on Customer, and also requires 1 report on Customer with calculated data. Identify transactional functions (EI/EO/EQ) and data functions (ILF/EIF) Ans:	**1**	CO2

	Q.8) • Data Functions: Customer ILF • Transaction Functions: Add customer EI Change customer EI Delete customer EI Inquire on customer EQ Report 1 on Customer EQ		
9)	You are managing a software project with an initial budget estimate of 2 million USD. During interim cost and schedule performance analysis, you figured out that: You should have spent $500,000 till now based on your initial plans and 1,000 man/days of schedule activities You spent $600,000 till now and completed 1,100 man/days of schedule activities which should have cost $450,000 based on your initial plans. Calculate CPI and SPI	**2**	CO2

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Q.9)

$$PV = \$\ 500,000$$
$$AC = \$\ 600,000$$
$$EV = \$\ 450,000$$

$$CPI = \frac{EV}{AC}$$

$$= \frac{\$\ 450,000}{\$\ 600,000}$$
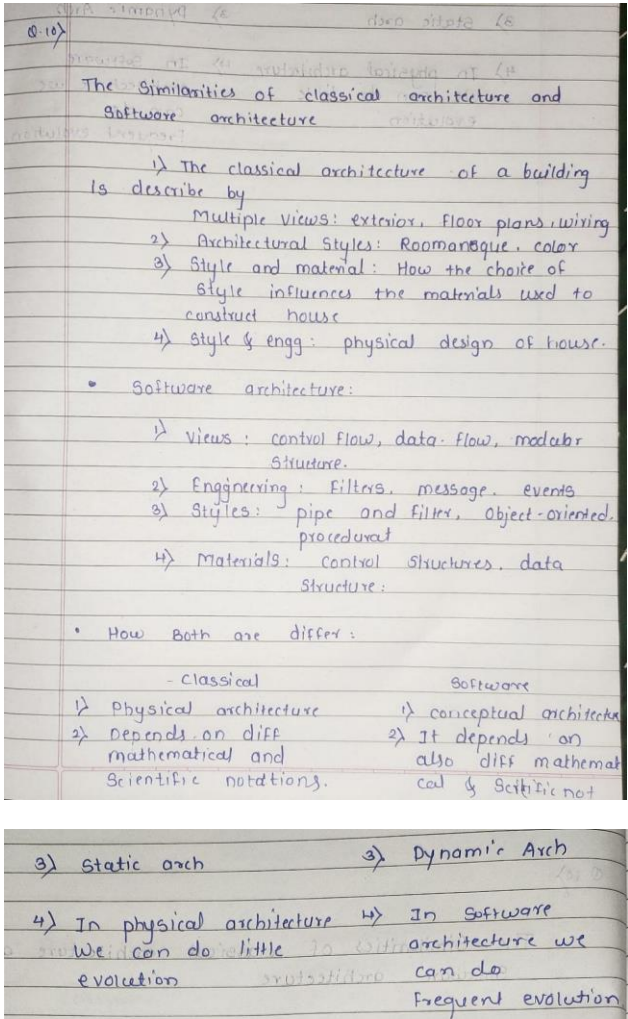
$$\therefore CPI = 0.75$$

$$SPI = \frac{EV}{PV}$$

$$= \frac{\$\ 450,000}{\$\ 500,000}$$

$$\therefore SPI = 1.10$$

10)	Using the architecture of a house or building as a metaphor, draw comparisons with software architecture. How are the disciplines of classical architecture and the software architecture similar and how they differ?(2 points each)	2 + 3	CO4
	Discuss architecture of Watsapp system design with help of a diagram. (not exceeding 1 page)		

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WP System arch.