

Mid Semester Examination - I

Synoptic
September 2019

Max. Marks: 20

Class: F.Y.

Course Code: MCA12

Name of the Course: Software Engineering

Date : 17/9/19 Time: 12-1

Duration: Hrs

Semester: I

Branch: M.C.A.

Instruction:

- (1) All questions are compulsory
- (2) Draw neat diagrams
- (3) Assume suitable data if necessary

Q No.		Max. Marks	CO	Bloom's level
Q.1	Discuss four P's for effective Project management.			BL-2
(a)	People, Product, Project, Process			
	(1.25 each * 4 = 5 marks)			
(b)	OR			
	Describe three real-life situations in which the customer and the end user are the same. Describe three situations in which they are different.			
	Three real-life situations in which the customer and the end user are the same. (2.5 marks)			
	Three real time situation when the customer are the End user.			
	1:-component software like			
	A:-joomla cloner			
	B:-metamod			
	C:-Ajax modules designer			
	As above all are the software component in which the customer as the developer use it to design the interface and become end user and the other user only navigate through these module. There are number of plug-in available which is customer need and use it as a enduser like, jquery etc			
	2:-CAD Software			
	A:Autocad			
	B:allycad			
	In the cad software category as you can see that the customer is civil engineer which uses this software as a enduser and implies in service			
	The customer to whom it give after modeling are not directly use the Software so they are not end user.			
		5 Marks	CO 3	

3:-CMS(Content management systems)

A:-wordpress

B:joomla

C:smf

D:-phpbb bulletin

This above are the example the developer or the customer are end user in this which they use the product but the third hierarchy of user are not end user

Three situations in which they are different

(2.5 marks)

A:-railway reservation system

B:-Airline reservation system

C:-online poll system

As you can see that all of these are purchased by the customer or client and they are used by end-user us not by them.

In railway reservation system the railway board is customer answer are user

In Airline reservation system the air company is customer and we are user similar in online poll system.

Q.2 Consider a project with the following functional units :

- Number of user inputs = 50
- Number of user outputs = 40
- Number of user enquiries = 35
- Number of user files = 06
- Number of external interfaces = 04

Functional Type	Simple	Average	Complex
user inputs	3	4	6
user outputs	4	5	7
user enquiries	3	4	6
user logic files	7	10	15
user internal files	5	7	10

Assuming all complexity adjustment factors and weighing factors as Complex, Find out the **Function Points (FP)** for the project.

Take complex weight for 5 functional types.

(1 mark)

Design table

BL-3

5
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rks

CO
3

Measurement parameter	Count	Weighting Factor(Average)	Total
Number of user inputs	50	4	=200
Number of user outputs	40	5	=200
Number of user enquiries	35	4	=140
Number of user files	6	10	=60
Number of external interfaces	4	7	=28

(1 marks)

Function point = FP = UFP x VAF

(1 mark)

UFP = Sum of all the complexities i.e. the 5 parameters provided in the question,

Take for complex(=5)

(1 mark)

VAF = Value added Factor i.e. $0.65 + (0.01 * TDI)$,

(1 mark)

TDI = Total Degree of Influence of the 14 General System Characteristics.

Q.3	Identify and explain which model will you use for developing large government projects .Mention the reasons behind your choice of a particular life cycle? Spiral Model [1mark] Diagram [3marks] Explanation [1mark]	5	CO	
Q.4	Can you apply Waterfall software process model while developing Banking Management system? Justify in your own words. Waterfall Model Diagram [2 mark] Explanation with advantages [3 mark]	5	CO	