PES University, Bangalore
(Established under Karnataka Act No. 16 of 2013)

UC16MC455

MAY 2017: END SEMESTER ASSESSMENT (ESA) MCA II SEMESTER

UC16MC455- SOFTWARE ENGINEERING

Time: 3 Hrs	Answer All Questions	Max Marks: 100

1.	a)	Describe generic process framework for software engineering.	10
	b)	Describe the useful information of component-based development process and discuss the steps incorporated in the model.	6
	c)	How to identify the task set for small projects? Discuss briefly.	4
2.	a)	Most agile process models recommend face-to-face communication. Yet today, members of a software team and their customers may be geographically separated from one another. Do you think this implies that geographical separation is something to avoid? Think of ways to overcome this problem and discuss briefly.	5
	b)	Discuss feature driven development agile method with a neat diagram.	5
	c)	Illustrate the working process of scrum with a necessary diagram.	10
3.	a)	Recharge your Paytm wallet and make an electricity bill payment through Paytm, use KSEB promocode to avail a cashback of 5% on your bill payment. Depict the given scenario into sequence diagram and identify the objects and specify all possible interactions among the objects.	10
	b)	Order food online through foodpanda India, 50% off on your first order. Use the voucher code FP50. If your location exceeds 10kms from the restaurants extra charges applies. Select your menu based on offers or combo. Draw level-0, level-1 and level-2 DFD which depicts the processes of foodpanda application.	10
4.	a)	Write a note on FURPS design quality attributes.	5
	b)	Discuss the concepts of functional independence in design engineering.	5
	c)	Describe the following architectural styles with a necessary diagram. (i) Data centered architecture. (ii) Layered architecture.	5*2
5.	a)	Discuss the steps required to perform statistical SQA.	4
	b)	Describe the key quality attributes of ISO 9126 standard in detail.	6
	c)	Describe the core steps of six sigma methodology. Briefly discuss the variations DMAIC method and DMADV method of six sigma methodology.	10