Total No. of Questions : 10]

SEAT No. :

P3390

[Total No. of Pages : 2

[5353] - 593
T.E. (IT)
SOFTWARE ENGINEERING AND PROJECT MANAGEMENT
(2015 Pattern)

Time : 2½ Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) ***Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.***
2) ***Draw neat diagrams and assume suitable data wherever necessary.***
3) ***Figures to the right indicate full marks.***

Q1) a) Explain any 5 types of software along with an example. **[5]**

b) What is data modeling? Explain following terms in data modeling : **[5]**

- Data objects.
- Data attributes.
- Relationships.

OR

Q2) a) What are different processes in project time management? **[5]**

b) How to prioritize software requirements based on Kano Analysis? **[5]**

Q3) a) What is meant by network diagram? What are different ways of drawing the network diagram. **[5]**

b) Explain spiral model in detail. **[5]**

OR

Q4) a) Explain in detail following UML diagrams stating purpose and applicability **[6]**

i) Use case diagram.

ii) Activity diagram.

b) Discuss software myths and realities in customer perspective. **[4]**

P.T.O.

Q5) a) Draw and explain concept of SCRUM. **[8]**

b) Explain concept of burn-down chart with a diagram. **[8]**

OR

Q6) a) Explain Pair Programming and its benefits. **[8]**

b) Explain Agile manifesto and agility principles. **[8]**

Q7) a) What is Software Risk Management? What are the risks associated with software projects? How do project managers manage such risks. **[10]**

b) Differentiate between Software Quality Assurance & Software Quality Control. **[8]**

OR

Q8) a) Define and explain importance of Software Quality Assurance. Explain various factors that affect Software Quality. **[10]**

b) Explain different statistical tools used quality control. **[8]**

Q9) a) What is the goal of cleanroom testing? Discuss in brief statistical use testing. How do we certify a software component in cleanroom testing? **[8]**

b) What is configuration management repository? Discuss role and features of SCM repository. **[8]**

OR

Q10) a) What are the challenges of global software development? **[8]**

b) Explain in detail ERP implementation life cycle. **[8]**