

Total No. of Questions : 6]

SEAT No. :

P74

Oct./TE/Insem. - 193

[Total No. of Pages : 2

T.E. (Information Technology)

**SOFTWARE ENGINEERING AND PROJECT MANAGEMENT
(2015 Pattern) (Semester - I) (314443)**

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Q1 or Q2, Q3 or Q4 and Q5 or Q6.*
- 2) *Draw neat diagrams and assume suitable data wherever necessary.*
- 3) *Figures to the right indicate full marks.*

- Q1)** a) State different stakeholders involved in the project. [4]
- b) State and explain any 3 software engineering myths and reality. [6]

OR

- Q2)** a) What is meant by implicit and explicit requirements? [4]
- b) Define data modeling. Explain the following terms. [6]
- i) Data objects
 - ii) Data attributes
 - iii) Relationships

- Q3)** a) Explain the purpose of use case diagram. Draw and explain use case diagram for a library management system. [10]

OR

- Q4)** a) Draw and explain the class diagram for any web application. What is the use of Class Diagram? [10]

P.T.O.

- Q5) a)** The project manager has obtained the following optimistic, most likely, pessimistic times, in weeks relating to the various activities related to the construction of a bridge project: **[10]**

Activity sequence	Time Estimates (Weeks)		
	Optimistic	Most likely	Pessimistic
1-2	6	9	18
1-3	5	8	17
2-4	4	7	22
2-5	4	7	10
3-4	4	7	16
3-5	2	5	8
4-5	4	10	22

Draw a PERT diagram and mark clearly The Critical Path & what is the Probability that the power project would be successfully completed in 32 weeks?

OR

- Q6) a)** An assembly to be made from two parts 'x' and 'y'. Both parts must be turning a lathe. 'Y' must be polished and 'X' need not be polished. The sequence of activities together with their predecessors given below.

Activity	Description	Predecessor
A	Open work order	-
B	Get material 'X'	A
C	Get material 'Y'	A
D	'X' on lathe	B
E	'Y' on lathe	B, C
F	Polish 'Y'	E
G	Assemble 'X' and 'Y'	D, F
H	Pack	G

Draw the network diagram for above data. **[4]**

- b) Explain proposal and Contract in detail. **[6]**

