Total No. of Questions : 8]

SEAT No. : ____

P9132

[Total No. of Pages : 2

[6179]-258

S.E. (Information Technology)
SOFTWARE ENGINEERING
(2019 Pattern) (Semester-IV) (214454)

Time : 2½ Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.***
2) ***Neat diagams must be drawn wherever necessary.***
3) ***Figures to the right side indicate marks.***
4) ***Assume suitable data, if necessary.***

Q1) a) What is software architecture? Explain data centered and object oriented style **[9]**

b) Explain the software quality guidelines and attributes of a software design **[9]**

OR

Q2) a) Explain the following fundamental software design concepts: **[9]**

i) Abstraction
ii) Architecture
iii) Patterns

b) How is interface analysis done? What parameters are considered? **[9]**

Q3) a) The project manager has obtained the following optimistic, pessimistic and most likely times in weeks related to the various activities of a power project. Draw a PERT network diagram and clearly mark the critical path, also what is the probability of power project to get completed in 32 weeks? **[9]**

Activity Sequence	Optimistic time	Most likely time	Pessimistic time
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

b) Explain the typical problems with IT cost estimation **[8]**

OR

Q4) a) What is WBS? Explain how to create WBS along with its benefits **[9]**

b) What do you mean by project scope? What are the key aspects of project scope document? **[8]**

Q5) a) What is a defect? State defect management process **[9]**

b) Write a short note on: **[9]**

i) Black Box testing

ii) Regression Testing

iii) Beta Testing

OR

Q6) a) Explain defect life cycle along with diagram also state the importance of defect reporting **[9]**

b) What is software testing? Enumerate seven principles of testing. **[9]**

Q7) a) Explain CASE taxonomy? **[9]**

b) What is risk? Explain risk management and risk responses **[8]**

OR

Q8) a) What is Software Reuse? Explain benefits and Drawbacks of software reuse. **[9]**

b) Write a short note on: **[8]**

i) JIRA

ii) KANBAN