PSCSCT08 - Paper-IV : Software Engineering

P. Pages : 2

GUG/S/23/11190

Time : Three Hours

1368

Max. Marks : 80

_____

Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat and well labelled diagram whenever necessary.
3. Avoid vague answers and write answers relevant and specific to questions only.

Either :-

1. a) What are the phases in software engineering? State the applications of software. **8**

b) Explain in brief the relationship of software engineering to programming languages. **8**

OR

c) Define software engineering. Discuss the characteristics of software. **8**

d) How to measure the quality of requirements in software? Explain it. **8**

Either :-

2. a) Write down the principles of software engineering. Define rigor and formality in software engineering. **8**

b) Explain with suitable example of object-oriented design in software engineering. **8**

OR

c) What is modularity in software engineering? Explain with suitable example. **8**

d) What are the objectives of software design? Explain the term data design. **8**

Either :-

3. a) Write down the characteristics of software requirement specification. Why use software specification. Explain it. **8**

b) Explain dynamic symbolic execution in detail. **8**

OR

c) Explain operational and descriptive specification styles. **8**

d) What is debugging? And its types. Why do we need debugging? Explain it. **8**

Either :-

4. a) What is software process model? What are the phases of waterfall model? Explain all the phases. **8**

b)	What is the importance of software engineering management in software process? What are the main components of project control? Write its purpose.	**8**

OR

c)	Explain in detail spiral model in software engineering.	**8**
d)	Write principles of risk management. Explain risk management activities.	**8**

5. Solve **all** the questions.

a)	What are the software engineering methodologies?	**4**
b)	What is Generality in software engineering? Explain in short with suitable example.	**4**
c)	What are the types of requirement verification ? Write its purpose.	**4**
d)	Write advantages and disadvantages of evolutionary model.	**4**

****