SOFTWARE ENGINEERING

[Maximum Mark

Time : 2:30 Hours]

NOTES :

i) Attempt **all** questions.

ii) Students are advised to specially check the Numerical Data of question paper in both versions. If there is any difference in Hindi Translation of any question, the students should answer the question according to the English version.

iii) Use of Pager and Mobile Phone by the students is not allowed.

[2×5=10]

Q1) Attempt any two parts of the following :

a) What is open and closed system in software engineering? Explain with example.

b) How does stuctured design and object oriented design differ?

c) What is meant by software product give an example? What is the difference between programs and software product.

[2×5=10]

Q2) Attempt any two parts of the following :

a) What are the necessities of life cycle model in software engineering?

b) What are the 5 stages of waterfall model?

c) What is Agile methodology in software engineering? What is the main purpose of agile methodologies?

[2×5=10]

Q3) Attempt any two parts of the following :

a) What are the metrics for project size estimation?

b) What does cocomo model do? What is the advantage of cocomo model?

c) What is a software requirement specification? Explain with an example.

[2×5=10]

Q4) Attempt any two parts of the following :

a) Why is coupling and cohension important in software design?

b) Write short notes on any two

   i) Data flow diagram

   ii) Data dictionary

   iii) Decision trees & table.

c) What is structure coding techniques and what is good coding style?

[2×5=10]

Q5) Attempt any two parts of the following :

a) What is V-model? Explain with example and why it is used for?

b) What is black box and white box testing? Explain with example also tell about the difference between these two.

c) What is verification and validation in testing? What comes first validation or verification?