Roll No. ☐☐☐☐☐☐☐☐☐☐

S. No. of Question Paper : 9609

Unique Paper Code : 62347626   **HC**

Name of the Paper : Software Engineering

Name of the Course : B.A. (Programme) Computer Application

DSE-3

Semester : VI

Duration : 3 Hours   Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

The paper has two sections. Section A is compulsory.

Attempt any *five* questions from section B.

Parts of a question must be answered together.

Section A

1. (*i*)   There are *two* types of metrics used for software

development, give their names. Define each.   3

(ii) How does a phased process help in achieving high Quality and Productivty, when it seems that we are doing more tasks in a phased process as compared to an ad-hoc approach ?   3

(iii) What are functional and non functional requirements in context of software requirement analysis ?   3

(iv) List any *four* essential attributes of a good software product.   4

(v) What are the drawbacks of Waterfall model ?   3

(vi) Briefly describe the block box testing.   3

(vii) What do you mean by psychology of testing ?   3

(viii) "Problem analysis should be the integral part of software engineering process". Justify this statement.   3

Section B

2. (a) What are major software engineering challenges, explain any two in detail.   5

(b) Briefly describe the software management process.   5

3   (a)   What is time-boxing process model ? Under what circumstances, it is recommended ?   5

    (b)   What is an iterative model in software development process ? Explain its advantages.   5

4   (a)   Explain software configuration management process in detail.   5

    (b)   Describe any *two* characteristics of Software Requirement Specification document.   5

5   (a)   What is the use of Data Flow Diagram (DFD) in problem analysis ? Explain DFD with a suitable example.   5

    (b)   What are various phases of software development process ? Explain any *two* in detail.   5

6   (a)   Describe any two components of Software Requirement Specification document.   5

    (b)   What does the capability Maturity Model (CMM) determine ? Explain.   5

7　　(a)　What is the significance of boundary analysis testing ?　　　　5

　　　(b)　Show and briefly describe the levels of software testing with the help of a diagram.　　　　5

8　　(a)　Write the general structure of a requirement document.　　　　5

　　　(b)　How prototyping is used in requirement analysis ? 5