(Following Paper ID and Roll No. to be filled in your Answer Books)

PAPER ID : MD34

M. TECH. (Sem.II)

THEORY EXAMINATION 2015-16

SOFTWARE QUALITY ASSURANCE

Time : **3** Hours   Total Marks : **100**

Note :   Attempt all questions. Each question carries equal marks.

1.   Attempt any two of the following :

   (a)   Explain Software Development life cycle as per the IEEE Standards.

   (b)   What is Software Quality Assurance? Illustrate its various components.

   (c)   Explain the Terms :

      (i)   CMM

      (ii) Six Sigma

2.   Attempt any two of the following :

   (a)   What are the various steps to develop and implement Software Quality Assurance Plan?

   (b)   What is a software Product? List its various characteristics. Illustrate the models of different classes of software product.

   (c)   What are the basic activities and tasks of software management process according to ISO? Elaborate the metrics for software maintenance with a suitable example.

3.   Attempt any two of the following :

(a)   Discuss the role and process of Malcom Balridge award to be given to organizations in general and software organizations in particular.

(b)   What are the ISO 9000 Quality Standards for Software.

(c)   Take a suitable case and implement the software quality metrics on it and analyze software metrics results.

4.   Attempt any two of the following :

(a)   Discuss the framework of the IEEE STD 1012 regarding verification and validation.

(b)   Discuss the Project integration management and Project quality management components of software quality.

(c)   Discuss various software quality indicators with reference to a software project of your choice.

5.   Write Short Notes on any FOUR of the following :

(a)   Software Testing

(b)   Measurement Theory

(c)   Cost of Software Quality

(d)   3 Sigma

(e)   Project Quality Control

(f)   SQA Framework

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