

**Total No. of Questions : 08**

**M.Tech.(IT) (2015 & Onwards)/(CSE Engg.) (2015 to 2017) (Sem.-1)**

# ADVANCED SOFTWARE ENGINEERING

**Subject Code : MTCS-101**

**Paper ID : [72629]**

**Time : 3 Hrs.**

**Max. Marks : 100**

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

1. A. What is purpose of COCOMO model? Explain COCOMO-I and COCOMO-II in detail.  
B. What is the purpose of using formal methods? Which phase of SDLC involve this method? Explain Z-specification with example.
2. Explain the objective of project planning process. Explain in detail cost and Schedule estimation Techniques with example.
3. Draw basic building block of CASE with integration architecture. Explain the concept of shared CASE repository in detail with diagram.
4. What is the significance of client/ server system? Take an example of client/server system application and model the system. Discuss issues related to the testing of the proposed client/server system.
5. Explain the concept of component based software engineering with example.
6. What are the attributes of web based applications? As a Web Engineer, identify at least FIVE major challenges in the design and development of an image-hosting site, where users can upload their images to a central server and the images can be retrieved via a web link or an API.
7. What is significance of reengineering and forward engineering? In what areas of software industry reengineering and forward engineering are the best applicable practice?
8. A. Explain the concept of Bootstrap methodology.  
B. What are the various ISO standards in Software Quality? Explain in detail.