

**B.Tech. VIEP - COMPUTER SCIENCE AND
ENGINEERING (BTCSVI)**

Term-End Examination

December, 2012

BICS-005 : SOFTWARE ENGINEERING

Time : 3 hours

Maximum Marks : 70

*Note : Attempt **any seven** questions. All questions carry **equal** marks. Answer all questions in **English** language only.*

1. (a) "Software does not wear out". Justify this statement. 4
- (b) How programming product is different from a program ? Is software a programming product ? Explain by giving suitable examples. 6
2. (a) What is software analysis ? What are the various steps required during the analysis process. 7
- (b) Explain the required skills of a project Manager. 3
3. (a) Differentiate between the waterfall model and spiral model. Describe their relative merits and demerits. 7
- (b) What are software metrics ? Explain. 3

4. (a) How important do you think good software architecture is to good detail design ? 4
- (b) What is coupling ? How it differ from cohesion ? Explain with the help of examples. 6
5. (a) Draw a DFD to show the working of a library up to 1st level. Also draw and explain the context diagram. 6
- (b) How logical design is different from physical design ? Explain with examples. 4
6. (a) What is testing ? Explain black-box testing and white-box testing. 5
- (b) Differentiate between alpha testing and beta testing describing their relative advantages and uses. 5
7. (a) What is a test case ? What are its components ? Explain with the help of suitable example. 5
- (b) What is SRS ? Explain the properties of good SRS. 5
8. (a) What is software design ? Explain various software design steps. 4
- (b) What is constructive cost model ? Explain all categories of COCOMO model in detail. 6

9. (a) Make boundary value test suit for the system 4
having the following requirements.
- (i) $30 \leq X \leq 60$
 - (ii) $50 \leq Y \leq 100$
- (b) What is risk containment ? How does it 6
differ from risk management ?
10. Write short notes on : 4x2.5=10
- (a) Debugging
 - (b) Feasibility study
 - (c) Software crises
 - (d) Protect scheduling
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