BICS-005

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

01455

Term-End Examination

June, 2012

BICS-005 : SOFTWARE ENGINEERING

Time : 3 hours *Maximum Marks : 70*

Note : Attempt **any five** questions. All questions **carry equal** marks.

1. (a) Differentiate between process and product . 4
      Which one is more important and why ?

   (b) Explain in detail the following software 10
       process models with a neat diagram

       (i) Incremental process model

       (ii) Evolutionary process model

2. (a) Briefly explain Data Flow Diagram and 7
      Construct a context diagram for the
      procedures followed in a restaurant for
      supplying food to the customer.

   (b) Describe the concepts of cohesion and 7
       coupling. State the difference between
       cohesion and coupling with a suitable
       example.

3. (a) Describe the various software cost 7
estimation techniques in brief. How is
COCOMO better than the other techniques ?

   (b) Explain with example diagram the 7
functional and behavioural modeling. How
do we model the software's reaction to some
external event ?

4. (a) How can metrics be helpful in software 7
process improvement ? Explain. Compare
function oriented metrics with size oriented
metrics.

   (b) What are the various software design 7
methodologies ? Discuss the role of
abstraction in software design.

5. (a) Explain software crisis from a programmer's 7
point of view.

   (b) What do you mean by Function Point 7
Analysis ? Mention any four features of it.

6. (a) Explain in detail the various testing 7
strategies.

   (b) With a suitable example explain about the 7
application of use cases in deriving the
scenarios.

7. Write short notes on *any two* : 7x2=14
   (a) CASE tools.
   (b) Boundary Value Analysis
   (c) Software Prototyping
   (d) Reverse Engineering