



SF-8326

B. E. III (Sem. VI) (Comp. Engg) Examination
May / June – 2011
Software Engineering

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशावैक निशानीवाणी विगतो उत्तरवडी पर अवश्य कभवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="checkbox"/> B. E. 3 (Sem. 6) (Comp. Engg.)	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="checkbox"/> Software Engineering	<input type="text"/>
Subject Code No. : <input type="text" value="8"/> <input type="text" value="3"/> <input type="text" value="2"/> <input type="text" value="6"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	<input type="text"/>
	Student's Signature

- (2) Give example(s) if necessary.
(3) Numbers on the right indicate marks.

- 1 (a) Answer the following : **20**
- (i) Define the following : **5**
- (a) Software requirement
- (b) Refactoring.
- (ii) Do as directed : **5**
- (a) Explain Data Flow Diagram.
- (b) Explain Encapsulation.
- (b) (i) Explain : User Interface Design Principles. **5**
- (ii) Explain Process Specification. **5**
- 2 Answer the following : **15**
- (i) Explain verification in the detailed design. **8**
- (ii) Define module coupling and cohesion. Discuss all types of coupling supported. **7**

OR

- (ii) What are software design patterns ? Differentiate **7**
between design patterns and frameworks.

- 3** Answer any **three** from the following : **15**
- (i) Describe requirements elicitation techniques.
 - (ii) Suggest guidelines for the effective use of colour in user interfaces.
 - (iii) Explain Risk identification.
 - (iv) What are different software cost estimation techniques.
- 4** Answer the following : **18**
- (a) Do the following : (any **five**) **10**
 - (i) Define Fault & Failure
 - (ii) Explain Milestones
 - (iii) Explain reactive and Proactive Risk strategies.
 - (iv) What is system testing ? How many types of system testing ?
 - (v) What is FTR ? Explain it.
 - (vi) What is Live Variables ?
 - (b) Explain COCOMO II model. **8**
- OR**
- (b) Give Mitigation, Monitoring and Management activities for the following risk : **8**
 - (i) Changes in requirement
 - (ii) End User Resist System
 - (iii) Late Delivery
 - (iv) Poor Comments in code.
- 5** Answer the following : **16**
- (i) What is Pair Programming ? Why Pair Program ? **6**
 - (ii) Explain Top Down Integration Testing and Bottom Up Integration Testing. **6**
- OR**
- (ii) Explain Test Driven Development (TDD) **6**
 - (iii) What are the differences between Black Box Testing and White Box testing ? **4**
- 6** Write a short note for the following : (any **four**) **16**
- (i) Four P's of effective software project management.
 - (ii) Alpha and Beta Testing
 - (iii) Objectives of Case
 - (iv) ISO9000 Quality Standards

- (v) Determine the Cyclomatic Complexity for the following program using flow graph.

```
procedure lower;  
integer x, y, z = 0;  
enter the value of x;  
enter the value of y;  
if x < y then  
z = x;  
else  
z = y;  
end lower.
```
