

Advanced Diploma in Information Technology
(ADIT) / Bachelor in Information Technology (BIT)

Term-End Examination

December, 2010

00256

CST-204 : ADVANCED TOPICS IN SOFTWARE
ENGINEERING

Time : 3 hours

Maximum Marks : 75

Note: There are two sections in this paper. Section-A is compulsory, Question number 1 to 10 carry 1 mark each. Question number 11 to 14 carry 5 marks each. Answer any three questions from Section-B. Each question of Section-B carries 15 marks.

SECTION - A

1. _____ of the software engineering process 1
include cost and effort applied.
- (a) Indirect measures
 - (b) Direct measures
 - (c) Maintenance Phase
 - (d) None of the above

2. _____ software metrics use a measure of the functionality delivered by the application as a normalization value. 1
- (a) Formation oriented
 - (b) Size oriented
 - (c) No
 - (d) None of the above
3. Software Project management begins with a set of activities that are collectively called _____. 1
- (a) Project planning
 - (b) SQA
 - (c) Effort estimation
 - (d) None of the above
4. As project size increases, the _____ among various elements of the software grows rapidly. 1
- (a) independence
 - (b) interdependence
 - (c) number of calls
 - (d) all of the above

5. _____ is measured by the degree of uncertainty in the quantitative estimates established for resources, cost, and schedule. 1

- (a) Quality
- (b) Risk
- (c) Storage Complexity
- (d) None of the above

6. _____ describes the data and control to be processed, function, performance, constraints, interfaces, and reliability. 1

- (a) Software Scope
- (b) Function point
- (c) LOC
- (d) None of the above

7. _____ is a software estimation model. 1

- (a) Water fall model
- (b) Spiral model
- (c) COCOMO
- (d) All of the above

8. _____ is a project scheduling methods. 1
- (a) PERT
 - (b) CPM
 - (c) Both (a) and (b)
 - (d) None of the above
9. _____ may be defined as a characteristic or 1
attribute of something.
- (a) Quality (b) Quantity
 - (c) Design (d) Analysis
10. A _____ is a software configuration 1
management concept that helps us to control
change without seriously impeding justifiable
change.
- (a) baseline (b) program
 - (c) project (d) None of the above
11. Explain Cyclomatic Complexity. 5
12. What is a Data Dictionary ? What are its 5
advantages ?
13. Explain Software Reliability. 5
14. Explain White Box testing. 5

SECTION - B

Answer *any three* questions from this section :

15. What is the role of a Systems Analyst ? What are the attributes required to become an effective Systems Analyst ? 15

 16. Explain Spiral Model, in detail. 15

 17. Explain different phases of Risk Management. 15

 18. Explain the process of estimating the cost of a Software Project. 15
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