



WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 4th Semester Examination, 2021

CMSACOR09T-COMPUTER SCIENCE (CC9)

SOFTWARE ENGINEERING

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

GROUP-A

1. Answer any **four** questions from the following: 2×4 = 8
- (a) What are drivers and stubs?
 - (b) What is SQA?
 - (c) What is feasibility analysis?
 - (d) Describe any two cost benefit evaluation methods.
 - (e) What is cyclomatic complexity?
 - (f) Define alpha testing.
 - (g) What are the characteristics of SRS?

GROUP-B

Answer any four questions from the following

8×4 = 32

2. List the various phases of waterfall model. Why spiral model is called meta model? 6+2
3. Draw and explain DFD for ATM transaction system. 8
4. What is COCOMO model? Suppose a project is planned to develop in Java and the number of Function Points is 500 and LOC/FP ratio is 50. Estimate the effort, development time and average number of persons required to complete the project. (Assume a=2.5 and b=1.0). 2+6
5. Write the C function to find the maximum of three integer numbers. Now draw the control flow graph for that C function. Also find its cyclomatic complexity using possible methods. 3+3+2

6. Explain the software requirement analysis and specification. Discuss various methods for requirement gathering. 4+4
7. Differentiate white box and black box testing. What is decision tree? Define software risk. What is project scheduling? 2+2+2+2
8. Write short notes on: (any *two*) 4+4
- (a) Data dictionary
 - (b) Regression testing
 - (c) Cohesion
 - (d) Smoke testing.

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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