



**WEST BENGAL STATE UNIVERSITY**  
B.Sc. Programme 6th Semester Examination, 2022

**MSGDSE03T-COMPUTER SCIENCE (DSE2)**

**SOFTWARE ENGINEERING**

Time Allotted: 2 Hours

Full Marks: 50

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.*

**GROUP-A**

1. Answer any **five** questions from the following: 2×5 = 10
- (a) What do you mean by a software process?
  - (b) What are the major responsibilities of a software project manager?
  - (c) What do you mean by software crisis?
  - (d) What is data dictionary?
  - (e) Define DFD.
  - (f) What is regression testing?
  - (g) What is cohesion?

**GROUP-B**

2. Answer any **five** questions from the following: 8×5 = 40
- (a) What are the major phases of Spiral model? Explain all the phases. 2+6
  - (b) What do you mean by structured programming methodology? What are the characteristics and components of SRS? 3+5
  - (c) What do you mean by functional requirements? What do you mean by feasibility study? Distinguish between programs and software products. 2+2+4
  - (d) Explain Norden's model in the context of staffing requirements for a software project. What is Delphi estimation? 6+2
  - (e) Explain when you should use PERT charts and when you should use Gantt charts while you are performing the duties of a project manager. 4+4
  - (f) Briefly explain Spiral model. Which model is best in which scenario? Make a comparison study for all the software life cycle model. 5+3
  - (g) Write down the major differences between work breakdown structure and activity network model. 5+3
  - (h) Explain critical path method. What do you mean by black box testing? 5+3
  - (i) Write a short note on Classical Waterfall model. What are the disadvantages of Waterfall model? 5+3

**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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