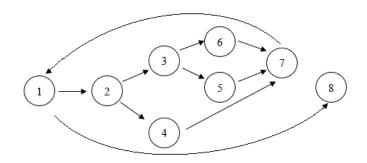
## ADAMAS UNIVERSITY **END-SEMESTER EXAMINATION: MAY 2021** (Academic Session: 2020 – 21) **Semester:** VI B.Tech CSE Name of the Program: Paper Code: **Paper Title:** Software Engineering ECS43104 **Maximum Marks:** Time duration: 40 3 Hrs **Total No of questions:** 8 2 **Total No of Pages:** (Any other information for the student may be mentioned here) Answer all the Groups Group A Answer all the questions of the following $5 \times 1 = 5$ a) To achieve a good design, model should have high coupling and low cohesion. 1. True or false? b) The potential risks are best detected by \_\_\_\_\_ (waterfall / RAD / spiral / prototyping) model. c) \_\_\_\_ (Duration / Critical / Linearly independent) path determines the duration of the project. d) \_\_\_\_ (Unit / Integration / System / Acceptance) testing checks whether the requirements in the SRS document are met. e) \_\_\_\_ (Efficiency / Reliability / Product features / Stability) is NOT a nonfunctional requirement. (1) **GROUP-B** Answer any three of the following $3 \times 5 = 15$ 2. What are the different types of cohesion? Explain each of them briefly. (2+3)**3.** Assume that the size of an organic type software product has been estimated to be 32,000 lines of source code. Assume that the average salary of software engineers be Rs. 15,000/- per month. Determine the effort required to develop the software product and the nominal development time. 4. Briefly describe the CASE tools. (5) 5. What are the essential features of an SRS document? (5) GROUP -C Answer *any two* of the following $2 \times 10 = 20$ 6. a) What are the different ways of calculating the cyclomatic complexity of a program. (7)

b) Calculate the cyclomatic complexity of the following flow graph:

(3)



(10)

- Write short notes on ANY ONE of the following:
  a) Software Development Lifecycle (SDLC)
  b) Software maintenance phase
  c) Software testing phase 7.
- 8. Explain the utilities of a Use Case model. (10)