28. a.	Describe the configuration management and the major process that make it up.	10	2	3
	(OR)			
b.	Explain the role and importance of documentation in maintenance.	10	3	3
29. a.	Explain the role that technologies such as fourth-generation languages and object-oriented paradigms can play in achieving maintainability.	10	2	4
	(OR)			
b.	Discuss some general categories of the most commonly used maintenance tools.	10	3	4
30. a.	Discuss about data backups and restore in detail.	10	3	5
	(OR)			
b.	Write short notes on			
	i. Analyzing system logs	5	4	5
	ii. Operating System Updates	5		

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Reg. No. | | | | | | | | | | | | | | |

B.Tech. DEGREE EXAMINATION, MAY 2022

Seventh Semester

18CSE471T – SOFTWARE MAINTENANCE AND ADMINISTRATION

(For the candidates admitted from the academic year 2018-2019 to 2019-2020)

Note:

(i) **Part - A** should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.

(ii) **Part - B** should be answered in answer booklet.

Time: 2½ Hours Max. Marks: 75

PART – A (25 × 1 = 25 Marks)

Answer **ALL** Questions

	Marks	BL	CO	PO
1. Identify the strategies are used to guarantee that legacy systems continue to evolve. (A) Reverse Engineering and Re-engineering (B) Reverse Engineering and Re-structuring (C) Re-engineering and Re-documentation (D) Forward Engineering and Backward Engineering	1	2	1	
2. Modifying software to match changes in an ever-changing environment is referred to as _____ (A) Corrective Maintenance (B) Adaptive Maintenance (C) Perfective Maintenance (D) Preventive Maintenance	1	2	1	
3. Identify the incorrect maintenance model (A) Waterfall Model (B) Reuse-oriented Model (C) Iterative Enhancement Model (D) Quick Fix Model	1	1	1	
4. In how many categories software maintenance is classified? (A) 2 (B) 3 (C) 4 (D) 5	1	2	1	
5. The process of obtaining desired software from the specifications in hand (A) Re-engineering (B) Forward Engineering (C) Reconstructing (D) Re engineering	1	2	1	
6. The cost of maintenance is as high as _____ of the cost of entire software process cycle (A) 0.61 (B) 0.63 (C) 0.67 (D) 0.71	1	2	2	
7. ACT stands for _____ (A) Annual Component Traffic (B) Apply Component Traffic (C) Annual Change Track (D) Annual Change Traffic	1	2	2	

8. Identify which is a business goal of Re-engineering? 1 2 2
   (A) Cost Reduction (B) Time Reduction
   (C) Maintainability (D) Improve Product Quality and Reduce costs

9. Identify the key one factor that influencing code understanding 1 2 2
   (A) Acquiring Knowledge from code (B) Understand all the input Parameters to the function
   (C) Read all code line by line (D) Identify chunks of related code

10. Identify one of the following is not a cognition models for program understanding 1 2 2
   (A) Letorsky Model (B) Boehm's Model
   (C) Shneiderman and Mayer Model (D) Pennington Model

11. _____ enables us to gain insight into the process and the project by praiding a mechanism for objective evaluation. 1 2 3
   (A) Integration (B) Measurement
   (C) Maintenance (D) Development

12. _____ are used to pinpoint problem areas so that remedies can be developed and the software process can be improved 1 2 3
   (A) Project Maintenance (B) Project Specification
   (C) Project Metrics (D) Project Design

13. Reverse Engineering is the process of deriving the system design and specification from its 1 2 3
   (A) GUI (B) Database
   (C) Source Code (D) Architecture

14. The open source movement has meant that there is a huge reusable code base available at 1 1 3
   (A) Free of Cost (B) Low Cost
   (C) High Cost (D) Short period of Time

15. Identify the following is not an advantage of software reuse. 1 2 3
   (A) Lower Costs (B) Faster Software Development
   (C) High Effectiveness (D) Lower Risks

16. Identify one of the following is included in SRS 1 2 4
   (A) Cost (B) Design Constraints
   (C) Staffing (D) Delivery Schedule

17. The SRS document is also known as _____ specification 1 1 4
   (A) Black Box (B) White Box
   (C) Grey Box (D) Red Box

18. CASE stands for _____ 1 2 4
   (A) Component aid Software Engineering (B) Computer Application Software Engineering
   (C) Computer Aided Software Engineering (D) Computer Analysis Software Engineering

19. Identify one of the following is not a type of CASE tool 1 2 4
   (A) Diagram Tools (B) Process modeling Tools
   (C) Documentation Tools (D) Testing Tools

20. Identify one of the following 4GL invented at IBM and adopted by ANSI and ISO as the standard Language for managing structured data 1 3 4
   (A) SQL (B) Prolog
   (C) C (D) Java

21. Identify one of the following model has a major disadvantage in terms of the coding phase of a software life cycle model. 1 2 5
   (A) Spiral Model (B) Waterfall Model
   (C) RAD Model (D) 4GL Model

22. BIOS stands for _____ 1 3 5
   (A) Basic Input Output System (B) Basic Input Output Drive
   (C) Basic Input Output Device (D) Basic Input Output Serial bus

23. The CPU and memory are located on the _____ 1 2 5
   (A) Expansion board (B) Motherboard
   (C) PCI Slots (D) I/O drive

24. Software patch means _____ 1 2 5
   (A) Required Fix (B) Critical Fix
   (C) Emerging Fix (D) Routine Fix

25. Identify one of the following is a specific instance of a baseline or configuration item 1 3 5
   (A) Software (B) Configuration
   (C) Version (D) Status Accounting

PART – B (5 × 10 = 50 Marks) Marks BL CO PO

Answer **ALL** Questions

26. a. Explain the differences between a software life cycle and a software process. 10 2 1

(OR)

b. Enumerate the factors that can affect your understanding of a program 10 2 1

27. a. i. Give the reasons why it is important to reuse programs instead of writing them from scratch. 5 1 2

ii. Explain the guidelines for choosing maintenance measures. 5 2 2

(OR)

b. Discuss reverse engineering, forward engineering, re engineering and restructuring. 10 3 2