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								Code No.: 17652 (B) N/C

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD

Accredited by NAAC with A++ Grade

B.E. (I.T.) VII-Semester Main & Backlog Examinations, Dec.-23/Jan.-24 Software Quality and Assurance (PE-I)

Time: 3 hours

Max. Marks: 60

Note: Answer all questions from Part-A and any FIVE from Part-B

Part-A $(10 \times 2 = 20 \text{ Marks})$

Q. No.	Stem of the question	M	L	СО	PO
1.	Relate Quality assurance with Quality control. Justify your answer that QA is not QC.	2	2	1	1
2.	Outline the different components of SQA Architecture.	2	2	1	1
3.	List out the main tasks of review leader in the preparation stage?	2	1	2	1
4.	Distinguish between classic and real CASE tools.	2	2	2	1
5.	Compare Procedures and work instructions.	2	4	3	2
6.	Summarize about SCM audit.	2	2	3	1
7.	Name different types of software metrics?	2	1	4	1
8.	What are the limitations of software metrics?	2	1	4	1
9.	Is Bootstrap a Software Process Assessment and/or Improvement Methodology? Why? Justify your answer.	2	4	5	1
10.	How does managing a project is different from managing a department?	2	1	5	1
	Part-B (5 \times 8 = 40 Marks)				
11. a)	Classify the McCall's factor model and extend its components.	4	2	1	1
b)	Describe about five views of software quality and objectives of SQA.	4	1	1	1
12. a)	"The pre-maintenance SQA activities that must be carried out before beginning the necessary maintenance services are just as crucial as the pre-project SQA components ".Justify your option on this statement.	4	4	2	2
b)	Explain the expected benefits of using CASE tools for software system developers and software maintenance teams.	4	2	2	1
13. a)	Explain about documentation control and summarize the issues related to storage and retrieval.	4	2	3	1
b)	Illustrate about SQA activities related to the Staff training, Certification Corrective & preventive action.	4	3	3	2

14. a)	Analyze that the classic model for quality costs presents a general concept that classifies manufacturing quality costs into two classes.	4	4	4	2
	Examine any one class in detail.				
b)	Compare and contrast 4 types of quality costs with examples?	4	4	4	2
15. a)	Analyze the characteristics of capability maturity model integration levels.	4	4	5	2
b)	Describe about SQA project process standards.	4	1	5	1
16. a)	Demonstrate development and quality plan of SQA system.	4	2	1	1
b)	Classify the model of software methodologies and explain in detail each model.	4	2	2	1
17.	Answer any <i>two</i> of the following:				
a)	Outline the main contributions of checklists to software quality assurance.	4	2	3	1
b)	Compare and contrast process metrics and product metrics. Analyze any two process metrics with an example.	4	4	4	2
c)	Analyze the project management responsibilities?	4	4	5	2

M: Marks; L: Bloom's Taxonomy Level; CO; Course Outcome; PO: Programme Outcome

i)	Blooms Taxonomy Level - 1	20%
ii)	Blooms Taxonomy Level – 2	40%
iii)	Blooms Taxonomy Level – 3 & 4	40%
