



BMSCOLLEGE OF ENGINEERING, BANGALORE-19

(Autonomous Institute, Affiliated to VTU)

Department Name:

FIRST INTERNALS

Course Code: 20CS5PCSEG

Course Title: Software Engineering

Semester: 5th A, B, C

Maximum Marks: 40

Date: 22/10/2020

Faculty Handling the Course: Latha N.R., Sheetal V.A.

Instructions: Internal Choice in PART C only

PART-A

Total 5 Marks

No.	Question	Marks
1	As an Software professional working for a reputed company, you have been approached by your friend to share a confidential information of the organization. Discuss the ethical dilemmas that this request raises and the professional and ethical responsibilities of software engineer that you would be violating if the request is addressed. State Code of Ethics and Professional Practice as specified by ACM/IEEE-CS joint task force.	5M

PART-B

Total 15 Marks

No.	Question	Marks
2a	Develop a set of use cases that could serve as a basis for understanding the requirements for an Library Management system with the help of a diagram.	5M
2b	Describe the structure of requirement document as specified by IEEE/ANSI.	5M
2c	Classify and explain the Non-functional requirements hierarchy diagram of an interactive coffee vending system that allows different people to find different flavors of coffee and select one.	5M

PART- C

Total 20 marks

No.	Question	Marks
3a	Design a template using structured natural language to capture the requirements of a system that monitors oxygen level of patients in a hospital intensive care unit.	10M
OR		
3b	i) Analyze the Automated Ticket Issuing system placed in a bus stand that issues tickets to the passengers for various destinations. Identify the principal viewpoints which might be taken into account and organize these using a view point hierarchy diagram. ii) Illustrate the different metrics used for specifying non-functional requirements.	10M
4a	i) Differentiate between Software Engineering and System Engineering. ii) Identify the enduring and volatile requirements for an Automatic washing machine that has different programs for different types of clothes.	10M
OR		
4b	Consider an Online furniture ordering System. •List the actors involved and explain the relevance of each actor. •Prepare the use case diagram for the system. •Prepare the sequence diagram for ordering furniture and online payment •Identify the Non-functional requirements and draw viewpoint hierarchy diagram	10M