

Enroll No

K.E.Society's  
**Rajarambapu Institute of Technology, Rajaramnagar**  
 (An Empowered Autonomous Institute, affiliated to SUK)  
**Unit Test -I (2025-26)**  
 F.Y. BCA

Q.P. Code
UT 3482

**Course Code: BC101**

**Course Name: Mathematics Foundation of Computer Science**

Day & Date: Wednesday, 15/10/2025

Time: 2:30 PM to 3:30 PM

Max Marks- 25

- Instructions:**
- 1) All questions are compulsory.
  - 2) Figures in rounded ( ) brackets within the question, indicate the scheme of marking for respective part of the question, whereas, figures in the first right column indicate total marks for that whole question.
  - 3) CO is the index number of the Course Outcome statement.
  - 4) The Bloom's taxonomy level (BL) for 1,2,3,4,5 and 6 is remember, understand, apply, analyze, evaluate and create respectively.
  - 5) Assume suitable data if necessary.
  - 6) Use of non-programmable calculators is allowed

		Question Statements	Marks	BT Level	COs
Q.1	A	Explain set, representation methods of set and types of set.	7	2	1
	B	Discuss the relation? Classify types of relation with example.	6	2	1
		<b>OR</b>			
	B	Define function. Explain properties of function and composition of function.	6	1	1
Q.2	A	Describe counting principles? Write basics of counting.	6	2	2
	B	Explain pigeonhole principle in details.	6	2	2
		<b>OR</b>			
	B	Explain permutations, combinations and binomial coefficient.	6	2	2

