

(Following paper code and roll no. to be filled by student at the answer books)

PAPER CODE:(BNC-101)	ROLL NO.																
----------------------	----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

BBS COLLEGE OF ENGINEERING & TECHNOLOGY
PRAVAGRAJ

FIRST SESSIONAL EXAM (2025-2026)

COURSE: MCA

SEM: 1st

SUBJECT: Fundamental of Computers and Emerging Technologies

MAX MARKS: 20

MAX TIME: 1:30 HR

NOTE: 1. QUESTION PAPER CONTAINS THREE PARTS.

2. ALL SECTIONS ARE COMPULSORY.

(SECTION A)

[5 X 1 = 5]

Q1. ATTEMPT ALL FROM THE FOLLOWING:

- Define the term Operating System.
- Compare computer hardware and software with example.
- Write an algorithm to check whether a given number is even or odd.
- What is non-volatile memory?
- What is the difference between algorithm and pseudo code?

(SECTION B)

[4 X 2 = 08]

Q2. ATTEMPT ANY FOUR OF THE FOLLOWING:

- ~~/~~ Discuss multiprogramming, multitasking and multiprocessing operating system.
- ~~/~~ How command based is different from GUI based operating system?
- c. Discuss some differences between LANs and WANs.
- ~~/~~ Write the difference between application software and system software.
- ~~/~~ Write the pseudo code to calculate the factorial of a number.
- f. Differentiate among assembler, compiler and interpreter.

(SECTION C)

[2X3.5= 7]

Q3. ATTEMPT ANY TWO OF THE FOLLOWING:

- Define the term algorithm. Discuss its characteristics. Write an algorithm to find maximum of three numbers.
- b. What is topology? Describe four basic topologies with their respective advantages and limitations.
- c. Build a flow chart to check whether given year is a leap year or not. Give any two inputs to show the working.