



**K. K. Wagh Institute of Engineering Education & Research, Nashik**  
(An Autonomous Institute From A.Y. 2022-23)

	InSem Examination-IWinter 2023		
	Exam Seat No.:		
	Academic Year:2023-2024	Semester:I	
	Name of Programme: MCA	Pattern:2022	
	Name of Course:Data Communication and Network	Course Code:221003	
	Max. Marks:30	Duration:1	

**Instructions:** Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains \_01\_ page(s).
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question

**Question No. 1 Attempt following Question**

- a) Define Types of Networks with examples, advantages and disadvantages (8) CO1

**OR**

- b) Describe Transmission Medium in details. (8) CO1
- c) Show OSI Reference Model, TCP/IP Model in detail. (7) CO1

**OR**

- d) Describe Network Architectures and Network Devices in details. (7) CO1

**Question No. 2 Attempt following Question**

- a) Explain ARQ strategies: Error Detection and correction, Parity Bits (8) CO2

**OR**

- b) Describe Flow Control Protocols in detail. (8) CO2
- c) Explain Multiple Access Protocols in detail. (7) CO2

**OR**

- d) Describe Binary Exponential Back-off algorithm. (7) CO2