

Total No. of Questions : 4]

SEAT No. :

**P8495**

[Total No. of Pages : 1

**Oct-22/BE/Insem-85**

**B.E. (Electronics)**

**MOBILE COMMUNICATION**

**(2019 Pattern) (Semester - VII) (404205A) (Elective - IV)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Answer the Q1 or Q2, Q3 or Q4.*
- 2) *Neat diagram must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Use of calculator is allowed.*
- 5) *Assume suitable data if necessary.*

- Q1)** a) Describe the evolution path of 2G system. [5]  
b) Explain in details Frequency Reuse concept. [5]  
c) With neat diagram explain umbrella cell approach for handoff mechanism. [5]

OR

- Q2)** a) Explain in short Trunking and Grade of service. [5]  
b) Explain with neat diagram microcell zone mechanism to improve coverage in cellular system. [5]  
c) Draw & Explain the Adjacent Channel Interference of Cellular System. [5]

OR

- Q3)** a) Draw the diagram and explain the Doppler shift effect. [8]  
b) Explain the free space propagation model with deriving its expression. [7]
- Q4)** a) Explain the two ray ground reflection model for propagation of signal with figure. [8]  
b) Explain RF pulse system for small scale multipath measurement. [7]

