

Seat No: \_\_\_\_\_

Enrollment No: \_\_\_\_\_

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**Diploma Engineering, Mid semester Examination**

**Semester: 5<sup>th</sup>**

**Subject Code: (03608301)**

**Subject Name: (Mobile and Wireless Communication)**

**Date: (09/08/2022)**

**Time: (1hr: 30min)**

**Total Marks: 40**

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**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

**Q.1 Answer any six out of Ten. (2 Marks Each) (12)**

1. List types of cells
2. What is Cluster?
3. What is Cell?
4. What is Frequency Reuse?
5. What is reuse distance?
6. What is advantages of frequency reuse?
7. From Frequency reuse how the capacity is measured?
8. What is Base Station?
9. What is Co-channel Interference?
10. Give Possible cluster size.

**Q.2 A) Explain cell splitting in cellular system. (03)**

- OR**
- A) Explain Co-channel Interference. (03)  
B) Explain Micro cell. (03)

- OR**
- B) Explain Macro Cell. (03)  
C) Explain Pico cell and Umbrella Cell. (04)

- OR**
- C) Explain Hard handoff. (04)  
D) Give full form of SIM, BSC, IMEI, HLR (04)

**Q.3 A) Explain Fixed Channel Assignment Strategies. (03)**

- OR**
- A) Explain Mobile Station. (03)  
B) Explain Dynamic Channel Assignment Strategies. (03)

- OR**
- B) Explain BTS. (03)  
C) Explain different types of Handover. (04)

- OR**
- C) Explain difference between FDMA, TDMA and CDMA. (04)  
D) Draw Architecture of GSM System. (04)