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SEAT No. :

**P5059**

**[6187]-462**

[Total No. of Pages : 1

**T.E. (Information Technology) (Insem)**  
**ADVANCED DATABASE MANAGEMENT SYSTEM**  
**(2019 Pattern) (Semester -I) (314445(B)) (Elective - I)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data, if necessary.*

**Q1)** a) Explain referential integrity and domain integrity constraint with suitable example. **[5]**

b) Explain basic properties of OODBMS. **[5]**

c) Explain Relational Data Model. **[5]**

OR

**Q2)** a) Explain Database schema with suitable example. **[5]**

b) What is OID? Explain properties of OID. **[5]**

c) Compare Relational and Object Oriented Databases. **[5]**

**Q3)** a) Explain Shared Disk and Shared Memory Parallel Database Architecture. **[5]**

b) Write short note on Parallel Query Optimization. **[5]**

c) Explain Fragmentation and Replication. **[5]**

OR

**Q4)** a) Explain parallel join operation. **[5]**

b) Explain step by step 2 phase commit protocol. **[5]**

c) Explain Distributed Transaction processing. **[5]**

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