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| :---: | :---: |
| Name | A |
| Roll No. |  |
| Invigilator's Signature |  |
|  | $\begin{aligned} & \text { CS /MBIN / SEM-3 /MBIN-304/2009-11 } \\ & 2009 \end{aligned}$ |
| NETW | NORKING AND DBMS |

Time Allotted: 3 Hours
Full Marks : 70

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## GROUP - A <br> ( Objective Type Guestions)

1. Answer the following questions : $10 \times 1=10$
a) Write integrity rule 1 .
b) Define primary key.
c) Write SQL to display all the names of persons who are older than 25 years ?
d) What is a composite key?
e) What is a foreign key ?
f) What do you mean by store and forward protocol?
g) What is topology ?
h) What is attenuation ?
i) What do you mean by bandwidth ?
j) What is active repeater?

Answer any three of the following.
2. a) Discuss three levels of architecture of DBMS.
b) Write the advantages and disadvantages of DBMS.

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5+5
$$

3. a) Explain Generalization and Specialization.
b) Draw an ER diagram for student registration. $5+5$
4. a) Write the CODD commandments.
b) Write relational algebras for Union, Intersection and Set difference.
5. a) What do you mean by anomalies of a database ?
b) Define BCNF with suitable example.

## GROUP - C <br> ( Long Answer Type Guestions )

Answer any three of the following. $3 \times 10=30$
6. a) Write the design issues for the network reference model layers.
b) Write the differences between connection oriented and connectionless services.
7. a) Compare satellite and optical fibre.
b) Compare pure and slotted aloha.

8. Write the names and purposes of OSI reference model layers. 10
9. a) Write short note on X. 25 Networks.
b) Explain X. 25 frame format with a diagram. $5+5$

