

Total No. of Questions : 6]

SEAT No. :

P49

[Total No. of Pages : 2

**APR. - 17/B.E./Insem. - 57**  
**B.E. (IT, E & TC & Comp. Engg.)**  
**UNIFIED COMMUNICATIONS & CONTACT CENTER**  
**APPLICATIONS**  
**(2012 Pattern) (Open Elective) (Semester - II)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Answer Q. 1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data if necessary.*

- Q1)** a) What are the limitations of analog telephony? [5]  
b) What is answer supervision and disconnect supervision? What is the significance of answer supervision? How is answer supervision and disconnect supervision provided by E & M circuits? [5]

OR

- Q2)** a) What are the different signaling mechanisms in E & M signaling circuits? Explain. [5]  
b) Explain E. 164 Numbering plan. [5]

- Q3)** a) Explain the differences between CAS and CCS. Which is a better form of signaling and why? [5]  
b) Write a short note on ISDN. Explain its layer 3 Message structure. [5]

OR

- Q4)** a) Max-Forward is a mandatory header field in SIP. Why? What will happen if you make Max-Forwards as optional parameter? [5]  
b) Draw a high level call flow of H. 323? [5]

**P.T.O.**

- Q5)** a) What is Session Border Controllers. [5]  
b) Explain protocol interoperability. [5]

OR

- Q6)** a) Draw and explain ISDN SIP message interpolation in an Enterprise PBX. [5]  
b) What are different enterprise topologies? Explain any one in detail. [5]

