P3652

[4959]-1145

B.E. (Information Technology, Computer Engineering & Electronics and Telecommunications)

UNIFIED COMMUNICATIONS AND CONTACT CENTER APPLICATIONS

(2012 Pattern) (Open Elective) (Semester-II)

Subject Code

414464 E : Open Elective (Information Technology)

410452 : Elective-IV (Computer Engineering)

404192 : Elective-IV (Electronics and Telecommunications)

Time : 2½ Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.*

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 is ACD? Explain role of an ACD in a Contact Center. **[8]**

b) What are agent states? Explain typical states of a Contact Center Agent. **[8]**

OR

Q2) a) What is CTI? What are types of CTI? What are the server and agent side CTI functionalities? **[8]**

b) Explain the functionalities of PABX, ACD, Self Service and CTI in an Inbound Call Center. **[8]**

Q3) a) Explain the core components of Workforce Optimization with a brief description and advantage of each. **[8]**

b) What are campaigns? Explain briefly different phases of campaign management and execution. **[8]**

OR

Q4) a) What is outbound CPA and call classification? Explain how call classification is done at a high level and how it helps outbound contact centers. **[8]**

b) What is blending? How does it work? **[8]**

P.T.O.

Q5) a) What is WebSocket and how it differs from other communication protocols over HTTP? **[8]**

b) What are UCaaS and CCaaS and list five key advantages of this? **[8]**

OR

Q6) a) What is NAT and how STUN protocol help NAT traversal in case of WebRTC? **[8]**

b) What is virtualization and explain the role of hypervisor in the same context? **[8]**

Q7) a) What are the mandatory information elements in an ISDN Setup message? Why are these mandatory in a setup message? **[8]**

b) What is the difference between SIP dialog, transaction and session? Why do you need to increment cSeq number for subsequent request in a dialog? **[8]**

OR

Q8) a) What do you mean by stateless proxy servers? Why they are useful? What are drawbacks? **[8]**

b) Explain the call flow for a basic ISDN call flow. **[8]**

Q9) Write notes on: **[6]**

a) BYOD.

b) Wink start signaling.

OR

Q10) Write notes on: **[6]**

a) Real Time Speech Analytics.

b) Difference between CAPEX and OPEX in cloud computing paradigm.

●●●●●