P1106

[3864] - 423

B.E. (Information Technology)

SYSTEM OPERATIONS AND MAINTENANCE

(2003 Course) (414448)

Time : 3 Hours]　　　　　　　　　　　　　　　　　　*[Max. Marks : 100*

Instructions to the candidates:

1) Answers to the two sections should be written in separate sheet.

2) Use of logarithmic tables, slide rules and electronic pocket calculator is allowed.

3) Neat diagrams must be drawn wherever necessary.

4) Figures to the right indicate full marks.

5) Assume suitable data, if necessary.

SECTION - I

Q1) a) Service providers have been collecting experience with 3SSs for a long period of time, but message have never reached the right vendor. Why? What are the industry issues of OSS, BSS and MSS. **[8]**

b) Explain new business opportunities for support system vendors when services are offered in combinations. **[8]**

OR

Q2) a) With suitable diagram explain organizational structure of an average telecommunication provider. **[8]**

b) What are the strategic benefits offered after deployment of advanced support system? Explain with suitable example. **[8]**

Q3) a) Explain functions and protocols that support TMN services? **[8]**

b) Explain the significant differences between TINA and TMN. Give suitable example to justify your difference. **[8]**

OR

Q4) a) What is LDAP? Explain various attributes of LDAP. **[8]**

b) What are the goals of telecommunication service providers with middleware? When should middleware solutions be used in a telecommunication environment? **[8]**

Q5) a) With suitable diagram show the principle function of sales process. Show all input and output connections to the other processes and functions. Also identify the information sources for these processes. **[10]**

b) Explain functional areas of call-rating and discounting process. **[8]**

OR

Q6) a) Explain various functions of the Customer Interface Management process? **[10]**

b) What is IP Billing? Explain 4 categories of rating schemes. **[8]**

SECTION - II

Q7) a) Draw and explain structure of SNMP based management service. **[8]**

b) How manual service processing and centralized service processing are different? Explain. **[8]**

OR

Q8) a) What is workflow? Explain the benefits of workflow applications? **[8]**

b) Explain following principle functions of Service Configuration Process:-
   i) Align capacity (preorder)
   ii) CPE
   iii) Activate service **[8]**

Q9) a) Draw suitable diagram to explain overview of Management Operation Support System. **[8]**

b) What is management framework? Explain its architecture with neat diagram. **[8]**

OR

Q10) a) What is TBS? How other sub-systems support a critical aspects of customer service provisioning process. **[8]**

b) What is SiteScope? Explain the various monitors available with SiteScope. **[8]**

Q11) a) "The allocation of business process and support tools to people complicates the hiring process." Do you agree with the statement? What

are the various criteria for hiring network management staff? [8]

b) What is the need of maintaining job profiles? What items job profiles should include? Explain the profile of network operations manager. [10]

OR

Q12)a) What is the need of maintaining job profiles? What items job profiles should include? Explain the profile of call center operator. [10]

b) How knowledge management tools allow individual to query the enterprise Information base. Explain areas where service providers can be benefited from such tools. [8]

❦ ❦ ❦