

Name: Entry No:

EE767 Telecom Systems Subrat Kar 120 minutes; Please mark your answers in the space provided.

(d) AOTCAT = All of the choices (a,b,c) NOTCAT = None of the choices (a,b,c)

SAMPLE ANSWER : To mark choice D = all the choices (a,b,c)	A B C D E
1. For security, Bluetooth uses (a) FDMA (b) FSS (c) FH-DSS (d) AOTCAT (e) NOTCAT	A B C D E
2. ATM is at (a) Layer 1-2 (b) Layer 2-3 (c) Layer 3-4 (d) AOTCAT (e) NOTCAT	A B C D E
3. DWDM needs 40 nm optical filters (a) true (b) false (c) only at layer 3 (d) AOTCAT (e) NOTCAT	A B C D E
4. Frame relay is a ___ technology (a) access (b) edge (c) deep core (d) AOTCAT (e) NOTCAT	A B C D E
5. HLR is present in (a) EVDO (b) EVDV (c) CSMA (d) AOTCAT (e) NOTCAT	A B C D E
6. AuC is present in (a) TDM (b) 802.11 (c) dBASE (d) AOTCAT (e) NOTCAT	A B C D E
7. CBR/VBR are ___ layers (a) AAL (b) AAP (c) AAM (d) AOTCAT (e) NOTCAT	A B C D E
8. SS5 is a ___ layer (a) signaling (b) channeling (c) tunneling (d) AOTCAT (e) NOTCAT	A B C D E
9. E3 is a ___ link (a) layer-3 (b) layer-2 (c) layer-1 (d) AOTCAT (e) NOTCAT	A B C D E
10. The PDH links are ___ synchronous (a) fully (b) semi (c) quasi (d) AOTCAT (e) NOTCAT	A B C D E
11. Jitter is not compensated for in ___ (a) E1 (b) T1 (c) E3 (d) AOTCAT (e) NOTCAT	A B C D E
12. SNMP is a management protocol (a) True (b) false (c) sometimes (d) AOTCAT (e) NOTCAT	A B C D E
13. RMON is UDP/IP based (a) True (b) false (c) sometimes (d) AOTCAT (e) NOTCAT	A B C D E
14. CMIP is stateless (a) True (b) false (c) sometimes (d) AOTCAT (e) NOTCAT	A B C D E
15. IGMP and ICMP are interchangeable (a) true (b) false (c) sometimes (d) AOTCAT (e) NOTCAT	A B C D E
16. FTP uses two connections (a) true (b) false (c) sometimes (d) AOTCAT (e) NOTCAT	A B C D E
17. Rewriting VCI:VPI results in (a) switching (b) cell-dropping (c) call-dropping (d) AOTCAT (e) NOTCAT	A B C D E
18. GFC is at the UNI (a) true (b) false (c) sometimes (d) AOTCAT (e) NOTCAT	A B C D E
19. ATM does error ___ (a) detection (b) correction (c) defection (d) AOTCAT (e) NOTCAT	A B C D E
20. K1,K2 are for (a) protection (b) parity check (c) scrambling (d) AOTCAT (e) NOTCAT	A B C D E
21. BIP is calculated over the ___ frame (a) current (b) previous (c) previous two (d) AOTCAT (e) NOTCAT	A B C D E
22. Order-wire links get ___ kbps (a) 64 (b) 128 (c) a column (d) AOTCAT (e) NOTCAT	A B C D E
23. Alignment bytes are (a) mandatory (b) optional (c) sometimes checked (d) AOTCAT (e) NOTCAT	A B C D E
24. HPOH bytes are in the (a) VC (b) MSH (c) RSH (d) AOTCAT (e) NOTCAT	A B C D E
25. Pointers ensure (a) synchronicity (b) asynchronicity (c) anti-jitter capability (d) AOTCAT (e) NOTCAT	A B C D E
26. MSC are wired using SDH (a) true (b) false (c) sometimes (d) AOTCAT (e) NOTCAT	A B C D E
27. IMEI and IMSI are linked (a) in GSM (b) in CDMA (c) in TDMA (d) AOTCAT (e) NOTCAT	A B C D E
28. RLC occurs in all wireless networks (a) true (b) false (c) in RF networks only (d) AOTCAT (e) NOTCAT	A B C D E
29. ISUP handles ISDN (a) true (b) true in IP (c) true in SS5 (d) AOTCAT (e) NOTCAT	A B C D E
30. MTP 1 to 3 are packet based (a) true (b) true in SIGTRAN (c) true if E1 is used (d) AOTCAT (e) NOTCAT	A B C D E
31. MIBs are ___ databases (a) ASCII (b) ASN.1 (c) Relational	A B C D E
32. Telecom networks use SNMP while computer networks use CMIP (a) True (b) false (c) partly false	A B C D E
33. UNI ___ GFC subfields (a) has (b) does not have (c) avoids (d) AOTCAT (e) NOTCAT	A B C D E
34. Triple play involves (a) audio, video, speech (b) speech, data, video (c) audio, video, data (d) AOTCAT (e) NOTCAT	A B C D E

35. Cells in a single message have a common (a) VCI (b) VPI (c) VCI:VPI (d) AOTCAT (e)NOTCAT	ABCDE
36. A banyan-switch is ____ (a) self-routed (b) centrally routed (c) 3-stage (d)AOTCAT (e)NOTCAT	ABCDE
37. ATM has ____ physical layer (a) native (b) no (c) SONET as its (d)AOTCAT (e)NOTCAT	ABCDE
38. CLP is set in ____ traffic (a) CBR (b) VBR (c) UBR (d)AOTCAT (e)NOTCAT	ABCDE
39. ____ is connectionless (a) AAL4 (b) AAL3 (c) AAL2 (d)AOTCAT (e)NOTCAT	ABCDE
40. There is no sequencing in ____ (a) AAL5 (b) UDP (c) Network Time Protocol (d)AOTCAT (e)NOTCAT	ABCDE
41. STS1 frames run at ____ Mbps (a) 51.84 (b) 55.84 (c) 84.58 (d)AOTCAT (e)NOTCAT	ABCDE
42. PDH is mappable into ____ (a) SDH (b) STM-16 (c) 622.08 Mbps (d)AOTCAT (e)NOTCAT	ABCDE
43. Fixed one-byte offset in pointers fit in ____ (a) H1 (b) H2 (c) H3 (d)AOTCAT (e)NOTCAT	ABCDE
44. LMDS is a ____ wireless technology (a) fixed (b) point-multipoint (c) point-point (d)AOTCAT (e)NOTCAT	ABCDE
45. C- and L-band occur in (a)CWDM (b) DWDM (c) VSAT (d)AOTCAT (e)NOTCAT	ABCDE
46. WiMax has a range of ____ kms (a) 10 (b) 50 (c) 100 (d)AOTCAT (e)NOTCAT	ABCDE
47. The Physical layer if WiMax is (a)OFDM (b) QPSK (c) 64QAM (d)AOTCAT (e)NOTCAT	ABCDE
48. WiMax needs (a) LOS (b) licensed frequencies (c) no video inputs (d)AOTCAT (e)NOTCAT	ABCDE
49. WiFi uses FHSS/DHSS (a) true (b) false (c) true in 802.11d (d)AOTCAT (e)NOTCAT	ABCDE
50. For a file sharing network a ____ WiFi LAN is used (a) adhoc (b) peer-to-peer (c) 802.11s (d)AOTCAT (e)NOTCAT	ABCDE
51. Pre-Unified Licensing 2003, ____ was used to achieve roaming. (a) GPRS (b) EDGE (c) WLL (d)AOTCAT (e)NOTCAT	ABCDE
52. ____ has a appellate role (a) TDSAT (b) TRAI (c) WPC (d)AOTCAT (e)NOTCAT	ABCDE
53. ____ exist (a) NTP'94 (b) NTP'99 (c) Broadband Policy 2004 (d)AOTCAT (e)NOTCAT	ABCDE
54. Broadband is defined as greater than ____ (a) 256 kbps (b) 256 KBPS (c) 256 kilobaud /s (d)AOTCAT (e)NOTCAT	ABCDE
55. NIXI connects (a) villages (b) metros (c) international VSAT gateways (d)AOTCAT (e)NOTCAT	ABCDE
56. Access providers can provision VoIP India-wide (a) true (b) true in Metros (c) false (d)AOTCAT (e)NOTCAT	ABCDE
57. EVDV is a ____ service (a) voice (b) video (c) data (d)AOTCAT (e)NOTCAT	ABCDE
58. PONs use (a) WDM (b) 622 Mbps to 2.5 Gbps rates (c) power-splitters (d)AOTCAT (e)NOTCAT	ABCDE
59. At the Layer 3, DSL uses (a) ATM (b) SONET (c) CAP/QAM (d)AOTCAT (e)NOTCAT	ABCDE
60. PINX signaling is ____ compliant (a) SIGTRAN (b) Q.931 (c) QSIG (d)AOTCAT (e)NOTCAT	ABCDE
61. The S/T-reference point is ____ specific (a) vendor (b) customer (c) ITU (d)AOTCAT (e)NOTCAT	ABCDE
62. The ____-reference point is vendor specific (a) U (b) S (c) T (d)AOTCAT (e)NOTCAT	ABCDE
63. A example of a codec used in VoIP is ____ (a) G.264 (b) H.323 (c) G.729 (d)AOTCAT (e)NOTCAT	ABCDE
64. Speech in DECT uses (a) ADPCM (b) bearer capability (c) two paired timeslots (d)AOTCAT (e)NOTCAT	ABCDE
65. Bluetooth's equivalent of ATM's SAR layer is (a) HID (b) L2CAP (c) HID + L2CAP (d)AOTCAT (e)NOTCAT	ABCDE
66. For IrDA at upto 115 kbps, we use IrDA-____ (a) SIR (b) MIR (c) FIR (d)AOTCAT (e)NOTCAT	ABCDE
67. GSM is used as 5.3 GHz (a) True (b) False (c) not yet (d)AOTCAT (e)NOTCAT	ABCDE
68. EIR user the ____ to block calls (a) IMSI (b) IMEI (c) VLR (d)AOTCAT (e)NOTCAT	ABCDE
69. LAPDm is a layer ____ protocol in GSM (a) 1 (b) 2 (c) 3 (d)AOTCAT (e)NOTCAT	ABCDE
70. VSAT uplinks use ____ (a) TDMA (b) DAMA (c) TDM (d)AOTCAT (e)NOTCAT	ABCDE