

QUESTION BANK FOR JE/II/Tele

Objective:

1. No. of 20 watts loud speakers permitted to connect an 250 watt amplifier are (c)
(a) 5 (b) 15 (c) 12 (d) 20
2. Block circuits in RE area works on (c)
a) MW patch b) VF quad c) PET quad d) Carrier quad
3. To increase the ampere hour capacity of secondary cells, the cells are to be connected in (b)
a) Series b) Parallel c) Series and Parallel d) One above the other
4. No. of cable pairs required for 4 wire E&M working are (c)
a) One b) Four c) Three d) Six
5. Duplexer is used for (d)
a) To couple two different antennaes
b) To prevent interference between two antennas
c) To increase the speed of transmission
d) To allow one antenna to be used for reception and transmission
6. Inverter convert (b)
a) AC to DC b) DC to AC c) DC to DC d) AC to AC
7. For converting 2 wire to 4 wire the following is required (c)
a) Low pass filter b) High Pass filter c) Hybrid d) All these
8. In EC socket the transformer used have the impedance ratio (d)
a) 2:1 b) 1120 : 1120 c) 470 : 1120 d) 1120 : 600
9. In a hybrid transformer the loss is (b)
a) 2 db b) 3db c) 4 db d) No loss
10. A power amplifier gives a gain of 3 db when the input is 1 W the output is: (b)
a) 1.3W b) 2 W c) 3 W d) .3 W
11. Grid antenna is used in (c)
a) MW b) VHF c) UHF d) HF
12. Hybrid transformer is used in the following electronic exchange card (a)
a) LCC b) SPC c) TIC d) TGT
13. In electronic exchange the system software is written as (d)
a) E PROM b) E2 PROM c) RAM d) ROM
14. Which of the electronic exchange card is not redundant. (b)
a) X SC b) LCC c) PSU d) RGD

- 2
15. The processor used in a C DOT exchange is (a)
a) 65 CO2 b) 8085 c) Z80 d) 8031
 16. Control card used in C DOT exchange is (d)
a) SPC b) TIC c) RCT d) All the above.
 17. RE repeater are spaced at every (b)
a) 17 KM b) 40 KM c) 60 KM d) 1860 M
 18. The insertion loss of way station control telephone is (c)
a) 3 db b) 2 db c) 0.2 db d) 0.5 db.
 19. An UJT is a _____ device (c)
a) Bipolar b) Tripolar c) Unipolar d) Multipolar
 20. The characteristic impedance of VF circuit in RE cable is (a)
a) 600 Ohms b) 1120 Ohms c) 550 Ohms d) 1000 Ohms
 21. Aluminium cables are preferred in RE area because of (d)
a) It is light b) It is cheap c) It is while d) It has better screening factor
 22. Digital electronic exchange needs power supply of (d)
a) 50 V DC b) 48 V DC c) 52V DC d) 48± 4V DC
 23. The charging used in MW repeater stations is (d)
a) Float charging b) Boost charging c) Initial charging
d) Charge - discharge system
 24. The charectristic impedance of PET quad pair is _____ (b)
a) 600 Ohms b) 470 Ohms c) 1120 Ohms
 25. The loading coil section in RE cable is (a)
a) 915 m b) 1830 m c) 530m
 26. Cell tester is a _____ (b)
a) Ammeter b) Voltmeter c) Mulimeter
 27. The specific gravity of a fully charged cell will be (c)
a) 1240 b) 1280 c) 1200 d) 1160
 28. The attenuation of loaded cable is (a)
a) 0.25 db/km- b) 0.55 db/km c) 0.2 db/Km d) 0.65 db/km
 29. Parabolic antenna is _____ antenna (c)
a) UHF b) VHF c) MW d) RE
 30. Which of the MW frequency spectrum is used for Railway administration trunks (b)
a) 4125 - 4425 MHz b) 7125 - 7425 MHz c) 1200 - 1600 MHz

- 61. For converting 2 wire to 4 wire the following is required (c)
 a) low pass filter b) high pass filter c) Hybrid d) None of the above
- 62. In a 4:1 transformer 100V applied to primary the secondary voltage is (c)
 a) 400 V b) 200 V c) 25V d) 50V
- 63. If 3 capacitors of 2 μ fd each connected in parallel the net value is (b)
 a) 2 μ fd b) 6 μ fd c) 4 μ fd d) 1.5 μ fd
- 64. The diameter of the conductor in U.G cable is (c)
 a) 9 mm b) 18 mm c) 0.9 mm d) 19 mm
- 65. Bridge rectifier needs no. of diodes (a)
 a) 4 b) 2 c) 1 d) Not required
- 66. The frequency of Alternating current (b)
 a) 100 HZ/s b) 50 HZ/s c) 25 HZ/s d) 75 HZ/s.
- 67. What type of antenna is best suitable for MW communication (d)
 a) Yagi b) Rhombic c) Dipole d) Parabolic Antenna
- 68. Negative feedback reduces _____ in amplifiers. (a)
 a) Distortion b) Stability c) None of the above
- 69. Measurement of low MW power is done using (b)
 a) Transistor b) Thermocouple c) Voltmeter and ammeter d) None of the above
- 70. Derivation joint of Emergency Socket is (c)
 a) 10 T b) 20 T c) 5 T d) None of the above
- 71. What type of switching takes place in an Electronic Exchange (c)
 a) Analog switching b) Digital switching
 c) Both d) None of the above
- 72. One of the function of subscriber line interface card is (a)
 a) To A/D & D/A conversion b) Switching
 c) Generating Dial tone d) Generating RBT
- 73. Solar cells give (c)
 a) Constant A.C output b) Constant D.C output
 c) Variable D.C output d) Variable A.C output
- 74. The maximum distance to which a subscriber is connected to an Electric Exchange depends on (a)
 a) Loop resistance b) Soil resistance c) Earth resistance
- 75. In DTMF when you press a single button how many frequencies are transmitted. (b)
 a) One b) Two c) Three d) Multi - frequency

- 31. The size of RE cable having 2 PET and 12 VF quad is represented as (c)
 a) 2 + 0 + 12 b) 0 + 2 + 12 c) 0 + 12 + 2 d) 0 + 14
- 32. Float charge voltae adjusted per cell in (a)
 a) 2.16 V b) 2.4 V c) 1.8 V
- 33. The secondary voltage of 2:1 transformer will be _____ when primary voltage in 200 volts (a)
 a) 100 V b) 400 V c) 50V
- 34. Number of diodes used in bridge rectifier are (b)
 a) two b) four c) six
- 35. The following electrolyte is used in lead acid cell (a)
 a) Sulphuric Acid b) Nitric Acid c) Citric Acid
- 36. Electrolyte of specific gravity 1200 can be prepared by mixing acid and water in ratio (c)
 a) 1:5 b) 1:4 c) 1:3
- 37. A FET is _____ driven device (b)
 a) Current b) Voltage c) None of the above
- 38. A telephone exchange working on 50 volts drawing 6 amps current shall have batteries of capacity (b)
 a) 6000 AH b) 60 AH c) 600 AH
- 39. An SCR has _____ PN Junction (b)
 a) One b) Three c) Two
- 40. A resistance of 200 Ohms when connected to 20 volts supply will draw current of (a)
 a) 100 mA b) 1000 mA c) 10 mA
- 41. The diode that can be used as regulator is (b)
 a) PIN diode b) Zener diode c) Gun diode
- 42. A 'N' type semiconductor has more _____ (b)
 a) holes b) electrons c) protons
- 43. When a diode is biased in forward direction. its resistance will be (a)
 a) low b) high c) zero
- 44. An FET is a _____ device (b)
 a) unipolar b) bipolar c) multipolar
- 45. The feed back required in an oscillator has less noise due to (b)
 a) positive b) Negative c) none of the two
- 46. Frequency modulation has less noise due to (a)
 a) limiter b) discriminator c) detector

- 103) In CDOT 128P RAX maintenance panel is connected through _____ link (c)
 a) HDC b) HLDC c) RS232C d) HSBC
- 104) For extending a control circuit to a way station the joint to be made with the main cable is ----- (a)
 a) Derivation joint b) Transformer joint c) T - joint
- 105) In CDOT 128P RAX the subscriber no. is 5637, the exchange code is (d)
 a) 5637 b) 563 c) 56 d) 5

106) Match the following:

- | | |
|------------------------|-----------------------|
| 1) Train loco control | a) Yagi antenna (2) |
| 2) VHF | b) RE Area (1) |
| 3) Bridge Rectifier | c) SLIC (4) |
| 4) Electronic Exchange | d) Noise (5) |
| 5) Psophometer | e) Diode (3) |

- | | |
|------------------------|-----------------------|
| 1) Block circuit | a) Router (4) |
| 2) Spectrum Analyser | b) PCM (3) |
| 3) Sampling theory | c) MW (2) |
| 4) Digital Network | d) 960 Channels (5) |
| 5) Harris MW equipment | e) PET quad (1) |

- | | |
|--------------------------|--------------------------|
| 1) Pulse code modulation | a) EC Socket (2) |
| 2) PT set | b) Bridge Megger (5) |
| 3) inductance | c) Sampling Theory (1) |
| 4) RE cable | d) Henries (3) |
| 5) Earth Resistance | e) 1120 Ohms (4) |

- | | |
|----------------------|---------------------------|
| 1) Protective device | a) Diesel generator (3) |
| 2) Carbon Microphone | b) Fuse (1) |
| 3) HSD Oil | c) PA system (2) |
| 4) Cone type speaker | d) Watts (5) |
| 5) Power | e) Indoor PA system (4) |

- | | |
|-----------------------|-----------------------------------|
| 1) Filter Component | a) Farads (2) |
| 2) Capacitance | b) Ripple (1) |
| 3) Crystal Oscillator | c) High Gain Amplifier (5) |
| 4) NOT | d) High Frequency Stability (3) |
| 5) OP amplifier | e) Inverter (4) |

76. What is the frequency Band of VHF (d)
a) 3 to 30 KHZ b) 30 to 300 KHZ
c) 3000 KHZ to 30 MHZ d) 30 MHZ to 300 MHZ
77. Transistor is (b)
a) 2 Terminal device b) 3 Terminal device
c) 4 Terminal device d) None of the above
78. Leak amplifier is used in (c)
a) Mw equipment b) 2 wire control system c) 4 wire control system
79. Best Screening effect is in the following cable (b)
a) Lead sheathed b) Aluminium sheathed
c) PVC coated d) Iron armoured
80. A matching transformer having the turn ratio of 2:1 and the primary coil resistance is 50 Ohms. What should be the resistance of Secondary coil for impedance match. (c)
a) 100 Ohms b) 200 Ohms c) 25 Ohms d) 50 Ohms
81. In Frequency diversity, no of frequencies used (b)
a) 1 b) 2 c) 4
82. AGC is used in Radio & MW receivers for (b)
a) Controlling frequency of local Oscillator
b) To counter - act the effect of variation in input carrier level on the demodulated output
83. FM Demodulation is done by (a)
a) Frequency discriminator
b) Diode detector
c) Transistor detector
d) Bridge diode circuit
84. PIN diode is used as: (c)
a) Rectifier b) Amplifier c) Switch d) Stabilizer
85. Load current = 25 amps . Battery capacity is 200AH. what capacity of charger you will choose (d)
a) 5A b) 10A c) 20A d) 30A
86. Wave properties for MW communication is (c)
a) Sky wave b) Ground wave c) Space wave d) Ionospheric wave
87. Two resistors of 1000 each are connected in parallel (d)
a) 2000 b) 200 c) 1000 d) 500
- 88) The approximate terminal voltage of LA cell (a)
a) 2V b) 1.5V c) 1.0 V d) 1.35V

47. Beta in grounded emitter circuit is very high due to (b)
a) base current is equal to collector current
b) base current is small compared to collector current
c) base current is higher than collector current
48. A metallic sheath is provided in RE cable to (b)
a) to reduce cross-talk b) to reduce induce voltage
c) to reduce weight of the cable
49. In RE cable the insulation resistance will be (c)
a) less than 10 mega ohms b) more than 10 mega ohms
c) above 20 mega ohms
50. UPS generates _____ (a)
a) AC voltage b) DC Voltage C) None of the above
51. VF repeater needs (a)
a) 24 V DC b) 24 V AC c) 12 V DC d) 12 V AC
52. SMPS stands for (c)
a) Signal Modulator Power Supply
b) Series Motor Power Supply
c) Switch Mode Power Supply
53. The following type of loud speaker should be used for outdoor functions (c)
a) Woofer Type b) Column type c) Horn type
54. Frequency modulation gives _____ noise (a)
a) Less b) More c) No noise
55. The measure of electrical output of a microphone for a given input sound pressure is known as (a)
a) sensitivity b) selectivity c) fidelity
56. The following fault cannot be detected by electronic exchange (a)
a) break in line b) short between two lines c) earth fault
57. Filter is used for (c)
a) Suppressing Ripples b) Smoothing DC c) Both the above
58. Converter converts (c)
a) AC to DC b) DC to AC c) DC to DC d) AC to AC
59. Loud Speakers are always connected in parallel on (c)
a) Voltage Matching b) Impedance Matching c) Both of them d) None of them
60. A 1:2 transformer secondary will be rated as (when primary is 300V) (b)
a) 100V b) 600V c) 150V d) 50V

- 89) 0 + 17 + 3 quad cable will have ___ PET quads (c)
a) 0 b) 17 c) 3 d) 20
- 90) The VF repeaters in RE area are located at every (a)
a) 40 to 50 Kms b) 70 to 80 Kms c) 17 to 19 Kms d) 100 Kms
- 91) Positive feed back used in _____ (b)
a) High gain amplifier b) Oscillator c) None of the above
- 92) Antenna commonly used for microwave links are (c)
a) loop antenna b) log-periodic c) parabolic antenna d) rhombic antenna
- 93) The normal dialing speed of a telephone is (a)
a) 10 pulses per second. B) 20 pulses per second. C) 1 pulse per second.
d) None of the above.
- 94) The main functions of RCP card in CDOT 128P RAX is (d)
a) Call processing b) Administration c) Maintenance d) all the above
- 95) The main functions of maintenance console in CDOT 128P RAX (d)
a) Call processing b) On hook / Off hook status c) distributing of tones
d) Operation and Maintenance
- 96) In CDOT 128P PBX conference card supports ___ conference (b)
a) One 8 party b) two 4 party c) three 6 party d) None of the above
- 97) What is the connector used to connect a Telephone instrument and the lines (a)
coming from the exchange at the subscriber premises
a) RJ11 b) RJ21 c) RJ45 d) RJ 61
- 98) What arrangement is done in the telephone instrument to arrest the high voltage (b)
like lightening on the line
a) LC network b) MOV R c) fuse d) None of the above.
- 99) What is the control system used in Electronic exchange? (a)
a) Stored Program control b) Wire logic control c) Electromagnetic control
d) None of the above.
- 100) In functional block diagram of SPC exchanges, what is the type of memory used (b)
for call store?
a) Permanent b) Temporary c) Semi-permanent d) all the above.
- 101) In electronic exchange what is the function most frequently used with (a)
less software complexity?
a) Scanning of line status. b) Call processing c) fault localizing
d) all the above.
- 102) Which is the circuit used for voice switching? (c)
a) Scanner b) Marker c) Distributor d) MDF