

Part-A

Directions : Fill up the appropriate preposition (Q.-1 to 5)

1. Baggage can be covered.....loss or accident during travel.
(A) against (B) with
(C) along (D) for
2. After the advice of his father, he was reconciled.....his wife.
(A) to (B) with
(C) by (D) in
3. The art exhibition is to be officially opened.....Wednesday.....2 p.m
(A) on; at (B) at; on
(C) from; on (D) on; from
4. He died from want.....medical aid
(A) with (B) against
(C) by (D) of
5. I am tired.....writing to him.
(A) with (B) of
(C) by (D) from
6. Re-arrange the sentence
(P) the Indian software industry (Q) both in volume and international acceptance (R) has grown
(S) over the years :
(A) S Q P R (B) S P R Q
(C) S R P Q (D) S P Q R

Directions : (Q-7 to 9) In the following exercises each question consists of a **bold** word in capital letters followed by four options. Select the option that is most similar in meaning to the **bold** word in capital letters.

7. **BENEVOLENT**
(A) Friendly (B) Charitable
(C) Affectionate (D) Helpful
8. **ACUMEN**
(A) Intelligence (B) Insight
(C) Wisdom (D) Knowledge
9. **ANOMALY**
(A) Annihilation (B) Anarchy
(C) Disturbance (D) Deviation

Directions—(Q. 10 to 15) Read the following passage carefully and answer the questions given below it. Certain words/phrases have been printed in **bold** to help you locate them while answering some of the questions.

A new analysis has determined that the threat of global warming can still be greatly **diminished** if nations cut emissions of heat-trapping greenhouse gases by 70% this century. The analysis was done by scientists at the National Centre for Atmospheric Research (NCAR). While global temperatures would rise, the most dangerous potential aspects of climate change, including **massive** losses of Arctic sea ice and permafrost and **significant** sea-level rise, could be partially avoided.

"This research indicates that we can no longer avoid significant warming during this century," said NCAR scientist Warren Washington, the study paper's lead author, "But, if the world were to implement this level of emission cuts, we could stabilize the threat of climate change", he added." Average global temperatures have warmed by close to 1 degree Celsius since the pre-industrial era. Much of the warming is due to human-produced emissions of greenhouse gases, **predominantly** carbon dioxide. This heat-trapping gas has increased from a pre-industrial level of about 284 parts per million (ppm) in the atmosphere to more than 380 ppm today. With research showing that additional warming of about 1 degree C may be the threshold for dangerous climate change, the European Union has called for **dramatic** cuts in emissions of carbon dioxide and other greenhouse gases.

To examine the impact of such cuts on the world's climate, Washington and his colleagues ran a series of global studies with the NCAR - based Community Climate System Model (CCSM). They assumed that carbon dioxide levels could be held to 450 ppm at the end of this century. In contrast, emissions are now on track to reach about 750 ppm by 2100 if unchecked. The team's results showed that if carbon dioxide were held to 450 ppm, global temperatures would increase by 0.6 degrees Celsius above current readings by the end of the century. In contrast, the study showed that temperatures would rise by almost four times that amount, to 2.2 degrees Celsius above current readings, if emissions were allowed to continue on their present course. Holding carbon dioxide levels to 450 ppm would have other impacts, according to the climate modelling study.

10. Why has the European Union called for dramatic cuts in carbon dioxide and greenhouse gas emissions ?
- (A) As global warming is not an issue of concern (B) As the temperatures may rise almost by an additional one degree and this may lead to severe climate change
- (C) As the NCAR has forced the European Union to announce the cuts (D) As all the nations have decided to cut emissions of carbon dioxide
11. What would **not** be one of the impacts of cutting greenhouse gas emissions ?
- (A) Temperatures will stop soaring (B) Ice in the Arctic sea would melt at a slower pace
- (C) The rise in sea level would be lesser (D) All of the above would be the impact
12. What would be the impact of unchecked greenhouse gas and carbon dioxide emissions ?
- (A) The temperature would rise from the current temperature by 2.2 degrees Celsius (B) The sea-level would rise by about 5.5 inches
- (C) The arctic ice would stabilize by 2100 (D) The arctic ice would reduce by one-fourth
13. What can be the most appropriate title of the above passage ?
- (A) A study of the rise in water level (B) A study of rise in temperatures
- (C) A study of the effects of greenhouse gas emissions (D) A study of the Arctic region

14. Which of the following statements is true in context of the passage ?
- (A) At present the carbon dioxide emission is about 284 ppm (B) The carbon dioxide emissions will be about 450 ppm at the end of this century if unchecked
- (C) The carbon dioxide emission was about 380 ppm during the pre-industrial era (D) The carbon dioxide emissions will be about 750 ppm at the end of this century if unchecked
15. What does the scientist Warren Washington mean when he says "we could stabilize the threat of climate change" ?
- (A) Climate change can be stopped completely (B) Climate change can be regularized
- (C) Climate change and its effects can be studied extensively (D) The ill-effects of the change in climate can be minimized

Directions—(Q. 16 to 18) Which of the phrases (A), (B), (C) and (D) given below each sentence should replace the phrase printed in **bold** in the sentence to make it grammatically correct ?

16. Although scared of heights, she **gather all her courage** and stood a top the 24-storey building to participate in the activities.
- (A) gathered all her courage (B) gathered all courageous
- (C) gather all courageous (D) is gathered all courage
17. Naturally, with everything **gone so well** for them, it was time for celebration.
- (A) go so well (B) going so well
- (C) gone as well (D) going as well
18. The ban was imposed by the state's commercial taxes department last Friday after protests by a certain community, which **had threat to burn** cinema halls screening the controversial movie.
- (A) had threats of burning (B) had threatened to burn
- (C) had threatened to burn (D) had threatened to burning

Directions—(Q. 19 to 20) Each question below has two blanks, each blank indicating that something has been omitted. Choose the set of words for each blank which best fits the meaning of the sentence as a whole.

19. Behaving in a and serious way, even in a situation, makes people respect you.
- (A) calm, difficult (B) steady, angry
- (C) flamboyant, tricky (D) cool, astounding
20. Alongwith a sharp rise in, a recession would eventually result in more men, women, and children, living in
- (A) crime, apathy (B) fatalities, poor
- (C) deaths, slums (D) unemployment, poverty

Direction- (Q21 to 25). Choose appropriate words to fill up the blanks.

21. She looksshe's going to be sick.
- (A) as if (B) like
- (C) as (D) unlike

22. The best way to learn a language isa little every day.
- (A) To speak (B) By speaking
(C) Speaking (D) None of the above
23. I'm fed up this exercise.
- (A) from doing (B) by doing
(C) with doing (D) doing
24. She has beenof murdering her husband.
- (A) Blamed (B) Accused
(C) Charged (D) None of the above
25. the better team, we lost the match.
- (A) Despite being (B) Even though being
(C) Although being (D) None of the above
26. Conjunctivitis is a disease of the—
- (A) liver (B) colon
(C) eyes (D) mouth
27. A test-tube baby means, fertilisation of the ovum and development taking place in the—
- (A) test-tube (B) test-tube and uterus respectively
(C) uterus (D) uterus and test-tube respectively
28. The southernmost point of peninsular India, that is, Kanyakumari, is
- (A) north of Tropic of Cancer (B) south of the Equator
(C) south of the Capricorn (D) north of the Equator
29. Who discovered circulation of blood in human body?
- (A) Edward Jenner (B) Joseph Lister
(C) William Harvey (D) Jonon Esals
30. Which of the following are true regarding Jhum cultivation in India?
- (i) It is largely practiced in Assam
(ii) It is referred to as 'slash and burn' technique
(iii) In it, the fertility is exhausted in a few years
- (A) I, II and III (B) II and III
(C) I and II (D) I and III
31. The Indus valley civilization specialised in—
- (A) Town planning (B) Architecture
(C) Craftsmanship (D) All of these

32. The Governor-General responsible for stopping the practice of sati by law was—
- (A) Lord Cornwallis (B) Lord William Bentinck
(C) Lord Wellesley (D) Lord Dalhousie
33. Which state has largest forest cover
- (A) Arunachal Pradesh (B) Haryana
(C) Madhya Pradesh (D) Assam
34. If the Prime Minister of India belonged to the Upper House of Parliament—
- (A) He will not be able to vote in his favour in the event of a no confidence motion (B) He will not be able to speak on the budget in the Lower House
(C) He can make statements only in the Upper House (D) He has to become a member of the Lower House within six months after being sworn in as the Prime Minister
35. To be appointed as Advocate-General of the State, the person should possess the qualifications necessary for appointment as—
- (A) A Judge of the Supreme Court (B) A Judge of the High Court
(C) A State Governor (D) Chief Minister of the State
36. The headquarters of Asian Development Bank are located at which among the following places?
- (A) Singapore (B) Manila
(C) Kuala Lumpur (D) Bangkok
37. The Reserve Bank of India keeps on changing various ratio/rates frequently. Why this is done?
- (1) To keep inflation under control.
(2) To ensure that Indian Rupee does not lose its market value.
(3) To ensure that Banks do not earn huge profits at the cost of public money.
- (A) Only 1 (B) Only 2
(C) Only 3 (D) All 1, 2 & 3
38. Which of the following is true about the National Rural Employment Guarantee Act?
- (1) It is applicable only in 100 rural districts.
(2) It gives a guaranteed employment of 100 days to all those who are eligible for the same and are also willing to take it.
(3) This Act is applicable only for men between the age of 21-65. Women do not get the benefit of the same.
- (A) Only 1 (B) Only 2
(C) Only 3 (D) All 1, 2 & 3
39. Which of the following important rivers of India does not originate from the Western Ghats?
- (A) Cauvery (B) Godavari
(C) Krishna (D) Mahanadi

40. What is the name of mobile wallet launched by State Bank Of India to provide various facilities ?
(A) MobiBank Easy (B) MobiWallet Easy
(C) MobiCash Easy (D) MobiCredit Easy
41. What is the rank of India in corruption perception Index ratings ?
(A) 90th (B) 91st (C) 92nd (D) 94th
42. Which movie was given National Tourism Awards by ministry of Tourism ?
(A) Life of pi (B) Barfi
(C) Dabang (D) None of these
43. How many strings does a violin have ?
(A) Four (B) Three (C) Two (D) Five
44. Commonwealth Games 2014 will be held at
(A) London (B) RiodeJanerio
(C) Melbourne (D) Glasgow
45. Name of the Nokia's mobile phone operating system
(A) Android (B) Windows
(C) Symbian (D) JAVA
46. If '245' means—'Art and Talent' in a certain code language, '316' means— 'Callous to Generous', '147' means— 'Callous and Polite' then what is the code used for 'to' ?
(A) Only 3 (B) Only 1 (C) 3 or 6 (D) Only 6
47. In each of the following questions one word is different from the rest. Find out the word which does not belong to the group
(A) Ginger (B) Tomato (C) Carrot (D) Beet
48. As 'Furniture' is related to 'Bench' in the same way 'Stationary' is related to what?
(A) Godown (B) Room (C) Pen (D) Chair
49. What will come next in the series 4, 9, 19, 39, 79, ?
(A) 169 (B) 159 (C) 119 (D) 139
50. A bus for Bombay leaves after every forty minutes from a bus stand. An enquiry clerk told a passenger that the bus had already left ten minutes ago and the next bus will leave at 10.45 a.m. At what time did the enquiry clerk give this information to the passenger ?
(A) 10.05 a.m (B) 9.55 a.m.
(C) 10.35 a.m. (D) 10.15 a.m.

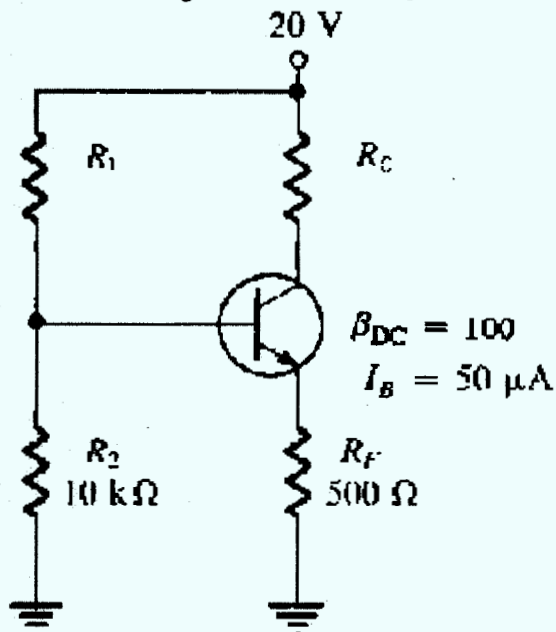
Part-B

1. Which data communication method is used to transmit the data over a serial communication link?
(A) simplex (B) half-duplex
(C) full-duplex (D) b and c
2. What is the minimum number of wires needed to send data over a serial communication link layer?
(A) 1 (B) 2
(C) 4 (D) 6
3. Which of the following types of channels moves data relatively slowly?
(A) wide band channel (B) voice band channel
(C) narrow band channel (D) none of above
4. Most data communications involving telegraph lines use:
(A) simplex lines (B) wideband channel
(C) narrowband channel (D) dialed service
5. A communications device that combines transmissions from several I/O devices into one line is a
(A) concentrator (B) modifier
(C) multiplexer (D) full-duplex line
6. How much power (roughly) a light emitting diode can couple into an optical fiber?
(A) 100 microwatts (B) 440 microwatts
(C) 100 picowatts (D) 10 miliwatts
7. The synchronous modems are more costly than the asynchronous modems because
(A) they produce large volume of data (B) they contain clock recovery circuits
(C) they transmit the data with stop and start bits (D) they operate with a larger bandwidth
8. Which of the following statement is correct?
(A) terminal section of a synchronous modem contains the scrambler (B) receiver section of a synchronous modem contains the scrambler
(C) transmission section of a synchronous modem contains the scrambler (D) control section of a synchronous modem contains the scrambler
9. In a synchronous modem, the digital-to-analog converter transmits signal to the
(A) equilizer (B) modulator
(C) demodulator (D) terminal

10. Which of the following communications lines is best suited to interactive processing applications?
- (A) narrow band channel (B) simplex lines
(C) full duplex lines (D) mixed band channels
11. Frames from one LAN can be transmitted to another LAN via the device
- (A) Router (B) Bridge
(C) Repeater (D) Modem
12. Which of the following condition is used to transmit two packets over a medium at the same time?
- (A) Contention (B) Collision
(C) Synchronous (D) Asynchronous
13. Two main measures for the efficiency of an algorithm are
- (A) Processor and memory (B) Complexity and capacity
(C) Time and space (D) Data and space
14. The indirect change of the values of a variable in one module by another module is called
- (A) internal change (B) inter-module change
(C) side effect (D) side-module update
15. Which of the following data structure is linear data structure?
- (A) Trees (B) Graphs
(C) Arrays (D) None of above
16. The operation of processing each element in the list is known as
- (A) Sorting (B) Merging
(C) Inserting (D) Traversal
17. Linked lists are best suited
- (A) for relatively permanent collections of data (B) for the size of the structure and the data in the structure are constantly changing
(C) for both of above situation (D) for none of above situation
18. The feature that database allows to access only certain records in database is:
- (A) Forms (B) Reports
(C) Queries (D) Tables
19. Which filter method lets you filter the records that match the selected field?
- (A) Filter by form (B) Filter by selection
(C) Auto filter (D) Advanced filter

20. By Grouped Report you understand
- (A) Type of report generated by the Report Wizard (B) Type of report that present records sorted in ascending or descending order as you specify
- (C) Type of report that displays data grouped by fields you specified (D) None of these
21. What is the size of Data & Time field type?
- (A) 1 (B) 8
- (C) 225 (D) 50
22. What do you need if you should enforce many-to-many relationship between two tables?
- (A) Parent table (B) Child table
- (C) Junction table (D) Many-to-many relationship can't be created in database
23. Which of the following field type is used to store photograph of employees?
- (A) Memo (B) Picture
- (C) OLE (D) Photo
24. Which of the following method can be used to add more tables in a database?
- (A) Design View (B) Table Wizard
- (C) By Entering Data (D) All of above
25. The options like Save, Open Database, Print are available in
- (A) Home tab (B) Backstage View tab
- (C) File menu (D) Database Tools tab
26. Clipping is the result of
- (A) the input signal being too large. (B) the transistor being driven into saturation.
- (C) the transistor being driven into cutoff. (D) all of these
27. Which transistor bias circuit arrangement provides good stability using negative feedback from collector to base?
- (A) base bias (B) collector-feedback bias
- (C) voltage-divider bias (D) emitter bias
28. Which transistor bias circuit arrangement has poor stability because its Q-point varies widely with β_{DC} ?
- (A) base bias (B) collector-feedback bias
- (C) voltage-divider bias (D) emitter bias
29. What is the most common bias circuit?
- (A) base (B) collector
- (C) emitter (D) voltage-divider

30. Refer to this figure. Determine I_C .



- (A) 5 μA (B) 5 mA
(C) 0 mA (D) 10 mA
31. At saturation the value of V_{CE} is nearly _____, and $I_C =$ _____.
- (A) zero, zero (B) V_{CC} , $I_{C(sat)}$
(C) zero, $I_{(sat)}$ (D) V_{CC} , zero
32. The devices that provide the means for a computer to communicate with the user or other computers are referred to as:
- (A) CPU (B) ALU
(C) I/O (D) none of these
33. The software used to drive microprocessor-based systems is called:
- (A) assembly language (B) Firmware
(C) machine language code (D) BASIC interpreter instructions
34. All computer programs for a machine are called:
- (A) software (B) firmware
(C) hardware (D) none of these
35. The 8085A is a(n):
- (A) 16-bit parallel CPU (B) 8-bit serial CPU
(C) 8-bit parallel CPU (D) none of these
36. Because microprocessor CPUs do not understand mnemonics as they are, they have to be converted to _____.
- (A) hexadecimal machine code (B) binary machine code
(C) assembly language (D) all of these

37. A register in the microprocessor that keeps track of the answer or results of any arithmetic or logic operation is the:
- (A) stack pointer (B) program counter
(C) instruction pointer (D) Accumulator
38. How many buses are connected as part of the 8085A microprocessor?
- (A) 2 (B) 3
(C) 5 (D) 8
39. The ASCII code for letter A is
- (A) 1100011 (B) 1000001
(C) 1111111 (D) 0010011
40. The register in the 8085A that is used to keep track of the memory address of the next op-code to be run in the program is the:
- (A) stack pointer (B) program counter
(C) instruction pointer (D) accumulator
41. How many flip flops are required to produce a divide by 32 device
- (A) 4 (B) 6
(C) 5 (D) 7
42. Collection of interconnected networks sometimes called ?
- (A) Internet (B) Wireless network
(C) Mobile Network (D) None of these
43. Which of the following is wrong example of network layer ?
- (A) X.25 Level 2-ISO (B) Source Routing and Domain Naming Usenet
(C) Internet Protocol(IP) - ARPANET (D) X-25 Packet Level Protocol (PLP) - ISO
44. Mobile computers and personal digital assistant (PDAs) are the examples of ?
- (A) Radio broadcasting (B) Wireless network
(C) Geosynchronous (D) LAN
45. ATM (Asynchronous Transfer Mode) is fundamentally a..... technology?
- (A) Circuit switching (B) Packet switching
(C) Narrow band (D) None of these
46. Which of the following is a variation of Frequency Division Multiplexing (FDM) ?
- (A) Time Division Multiplexing(TDM) (B) Pulse Code Multiplexing(PCM)
(C) Wavelength Division Multiplexing(WDM) (D) None of these

47. One security method is encryption. But encryption does nothing to keep digital pests and hackers out. To accomplish this goal, we need ?
- (A) Router (B) Bridges
(C) Hubs (D) Firewalls
48. HTTP refers to ?
- (A) Hyper Text Transfer Protocol (B) Hyper Text Transmission Protocol
(C) Hyper Text Tie Protocol (D) None of these
49. Why was the OSI developed ?
- (A) Manufacturers disliked the TCP/IP protocol (B) The rate of data transfer was increasing exponentially
(C) Standards were needed to allow any two systems to communicate (D) None of these
50. Auto dialing allows ?
- (A) You to dial up phone numbers by typing them on the keyboard (B) A personal computer to answer incoming calls without human assistance
(C) Both A and B (D) None of these
51. Sending a file from your personal computer's primary memory or disk to another computer is called ?
- (A) uploading (B) hang on
(C) logging on (D) downloading
52. What device is similar to an RTD but has a negative temperature coefficient?
- (A) Strain gauge (B) Thermistor
(C) Negative-type RTD (D) Thermocouple
53. The resistive change of a strain gauge
- (A) is based on the weight placed upon it, but can be many thousands of ohms (B) is usually no more than 100 Ω
(C) is based on the gauge factor, but is typically less than an ohm (D) has a positive temperature coefficient
54. The silicon-controlled rectifier can be turned off
- (A) by a negative gate pulse (B) by forced commutation
(C) with the off switch (D) when the breakover voltage is exceeded
55. The output voltage of a typical thermocouple is
- (A) less than 100 mV (B) greater than 1 V
(C) Thermocouples vary resistance, not voltage. (D) None of these

56. The connections to a thermocouple
- (A) can produce an unwanted thermocouple effect, which must be compensated for
 - (B) produce an extra desirable thermocouple effect
 - (C) must be protected, since high voltages are present
 - (D) produce an extra desirable thermocouple effect and must be protected, since high voltages are present
57. RTDs are typically connected with other fixed resistors
- (A) in a pi configuration
 - (B) in a bridge configuration
 - (C) and variable resistors
 - (D) and capacitors in a filter-type circuit
58. Holding current for an SCR is best described as
- (A) the minimum current required for turn-off
 - (B) the current required before an SCR will turn on
 - (C) the amount of current required to maintain conduction
 - (D) the gate current required to maintain conduction
59. What is the moving part of a linear variable differential transformer?
- (A) Primary
 - (B) Secondary
 - (C) Diaphragm
 - (D) Core
60. Where does a computer add and compare data?
- (A) Hard disk
 - (B) Floppy disk
 - (C) CPU chip
 - (D) Memory chip
61. Which of the following registers is used to keep track of address of the memory location where the next instruction is located?
- (A) Memory Address Register
 - (B) Memory Data Register
 - (C) Instruction Register
 - (D) Program Register
62. A complete microcomputer system consists of
- (A) microprocessor
 - (B) memory
 - (C) peripheral equipment
 - (D) all of these
63. CPU does not perform the operation
- (A) data transfer
 - (B) logic operation
 - (C) arithmetic operation
 - (D) all of these
64. A stack is
- (A) an 8-bit register in the microprocessor
 - (B) a 16-bit register in the microprocessor
 - (C) a set of memory locations in R/WM reserved for storing information temporarily during the execution of computer
 - (D) a 16-bit memory address stored in the program counter

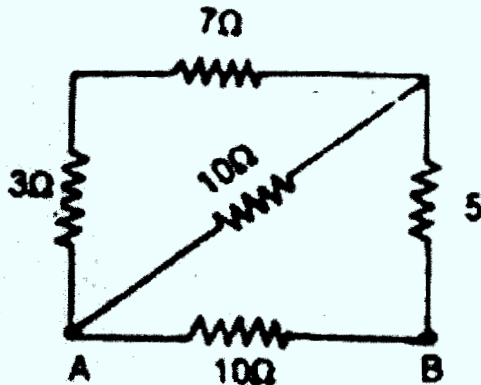
65. A stack pointer is
- (A) a 16-bit register in the microprocessor that indicate the beginning of the stack memory. (B) a register that decodes and executes 16-bit arithmetic expression.
- (C) The first memory location where a subroutine address is stored. (D) a register in which flag bits are stored
66. The branch logic that provides decision making capabilities in the control unit is known as
- (A) controlled transfer (B) conditional transfer
- (C) unconditional transfer (D) all of these
67. Interrupts which are initiated by an instruction are
- (A) internal (B) external
- (C) hardware (D) software
68. A time sharing system imply
- (A) more than one processor in the system (B) more than one program in memory
- (C) more than one memory in the system (D) none of these
69. A certain fiber-optic cable has the following characteristics: $n_1 = 1.82$ and $n_2 = 1.73$. What is the value of θ_c ?
- (A) 71.90° (B) 0.95°
- (C) 18.1° (D) 1.81°
70. An AM demodulator can be implemented with a linear multiplier followed by a _____ filter.
- (A) low-pass (B) high-pass
- (C) band-pass (D) band-stop
71. The intermediate frequency in a standard AM receiver is
- (A) 455 Hz. (B) 455 kHz.
- (C) 4.55 MHz. (D) none of these
72. In order for a light ray to propagate along a fiber-optic cable, what must the relationship be between the angle of incidence and the critical angle?
- (A) $\theta_i > \theta_c$ (B) $\theta_i < \theta_c$
- (C) $\theta_i = \theta_c$ (D) none of these
73. Light may be propagated along a fiber-optic cable in which of the following modes?
- (A) multimode step index (B) single-mode step index
- (C) multimode graded index (D) all of these
74. In AM, the carrier is changed by a modulating signal. What parameter of the carrier is changed?
- (A) amplitude (B) frequency
- (C) pulse width (D) phase

75. For a four-quadrant linear multiplier, what is the output voltage, given input voltages of $V_x = +2\text{ V}$ and $V_y = -10\text{ V}$?
- (A) $+2\text{ V}$ (B) $+1\text{ V}$
 (C) -2 V (D) -1 V
76. The output spectrum of a _____ modulator includes upper-side and lower-side frequencies and the carrier frequency.
- (A) balanced (B) standard amplitude
 (C) imbalance (D) None of these
77. Amplitude modulation is a _____ process.
- (A) multiplication (B) division
 (C) sum/difference (D) None of these
78. What does VCO stand for?
- (A) Visually-Controlled Organization (B) Voltage-Controlled Oscillator
 (C) Voltage-Centered Oscilloscope (D) None of these
79. A phase-locked loop (PLL) is a feedback circuit consisting of a
- (A) phase detector. (B) low-pass filter.
 (C) VCO (D) all of these
80. If a 1 MHz carrier is amplitude modulated with a 5 kHz audio signal, the upper-side frequency is _____ kHz.
- (A) 1005 (B) 1000
 (C) 995 (D) None of these
81. The voltage levels for a negative logic system
- (A) must necessarily be negative (B) could be negative or positive
 (C) must necessarily be positive (D) must necessarily be either zero or -5 V
82. The output Q_n of a J-K flip-flop is zero. It changes to 1 when a clock pulse is applied. The inputs J_n and K_n are respectively
- (A) 1 and X (B) 0 and X
 (C) X and 0 (D) X and 1
83. The larger the RAM of a computer, the faster is its speed, since it eliminates
- (A) need for ROM (B) need for external memory
 (C) frequency disk I/O s (D) need for a data-wide path
84. DB, DW and DD directives are used to place data in particular location or to simply allocate space without preassigning anything to space. The DW and DD directories are used to generate
- (A) offsets (B) full address of variables
 (C) full address of labels (D) offsets of full address of labels and variables

85. The number of bits needed to address 4K memory is
 (A) 6 (B) 8
 (C) 12 (D) 16
86. The decimal value for the Binary Coded coded number 00010010 is
 (A) 6 (B) 10
 (C) 12 (D) 18
87. The Boolean expression $(A+C\div D)(B+D+C)$
 (A) $AB + CB$ (B) $AB+C+\div D$
 (C) $A+BC+D$ (D) $A+B+CD$
88. A full adder takes..... Input/s and produces..... Output/s
 (A) one, two (B) two, two
 (C) three, two (D) two, three.
89. How many 1 are present in the binary representation of $15 \times 256 + 5 \times 16 + 3$?
 (A) 8 (B) 9
 (C) 10 (D) 11
90. Which of the following combinations of gates does not allow the implementation
 (A) OR gates and inverters only (B) NAND gates only
 (C) OR gates and exclusive – OR gates only (D) OR gates and NAND gates.
91. Which logic circuit is the fastest?
 (A) TTL (B) DTL
 (C) RTL (D) All have same speed.
92. The main advantage of flip-flops over transistor circuit is
 (A) immunity from noise (B) low heating
 (C) low propagation delay time (D) high propagation.
93. When n resistances each of value r are connected in parallel, then resultant resistance is x . When these n resistances are connected in series, total resistance is
 (A) nx (B) mx
 (C) x/n (D) $n^2 x$.
94. Resistance of a wire is r ohms. The wire is stretched to double its length, then its resistance in ohms is
 (A) $r/2$ (B) $4r$
 (C) $2r$ (D) $r/4$.

95. Two resistances R_1 and R_2 give combined resistance of 4.5 ohms when in series and 1 ohm when in parallel. The resistances are
- (A) 3 ohms and 6 ohms
 (B) 3 ohms and 9 ohms
 (C) 1.5 ohms and 3 ohms
 (D) 1.5 ohms and 0.5 ohms.

96. Five resistances are connected as shown in figure below. The equivalent resistance between the points A and B will be



- (A) 35 ohms
 (B) 25 ohms
 (C) 15 ohms
 (D) 5 ohms
97. The form factor is ratio of
- (A) peak value to rms value
 (B) rms value to average value
 (C) average value to rms value
 (D) none of these
98. The turns ratio required to match an 80Ω source to a 320Ω load is
- (A) 80
 (B) 20
 (C) 4
 (D) 2
99. The induced voltage across a stationary conductor in a stationary magnetic field is
- (A) zero
 (B) reversed in polarity
 (C) increased
 (D) decreased
100. If a loop in a basic dc generator suddenly begins rotating at a faster speed, the induced voltage
- (A) remains unchanged
 (B) reverses polarity
 (C) increases
 (D) decreases

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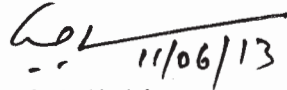
To,
AGM (IT)
O/o CGMT, Patna

No. BR/DGM (A)/XV/E-V/X-1/2012

Dated: 11.06.2013

Sub: Uploading Answer Key of LICE JTO (T)-2012 under 35% and 15%
quota exam held on 02/06/2013.

Kindly upload above answer key on INTRANET for information to
candidates.


(A.S. Abdullah)
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"cum" Exam Coordinator
Bihar Telecom Circle, Patna

**Answer Key of LICE JTO (T) under 35% and 15% quota held on
2/6/2013**

BSNL- Bihar Telecom Circle

Part-A	
1	a
2	a
3	a
4	d
5	b
6	b
7	d
8	a
9	d
10	b
11	d
12	a
13	c
14	b
15	d
16	a
17	b
18	c
19	a
20	d
21	a
22	b
23	c
24	c
25	a
26	c
27	b
28	d
29	c
30	a
31	d
32	b
33	c
34	a
35	b
36	b
37	d
38	b
39	d
40	c
41	d
42	a
43	a
44	d
45	c
46	c
47	b
48	c
49	b
50	d

Part-B			
1	c	51	a
2	b	52	b
3	c	53	c
4	c	54	b
5	c	55	a
6	a	56	a
7	b	57	b
8	c	58	c
9	a	59	d
10	c	60	c
11	b	61	d
12	b	62	d
13	c	63	d
14	c	64	c
15	b	65	a
16	a	66	c
17	b	67	d
18	c	68	b
19	b	69	a
20	c	70	a
21	b	71	b
22	c	72	a
23	c	73	d
24	d	74	a
25	c	75	c
26	d	76	b
27	b	77	a
28	a	78	b
29	d	79	d
30	b	80	a
31	c	81	b
32	c	82	a
33	a	83	c
34	a	84	d
35	c	85	d
36	b	86	c
37	d	87	b
38	b	88	c
39	b	89	a
40	b	90	d
41	c	91	a
42	a	92	c
43	a	93	d
44	b	94	b
45	b	95	c
46	c	96	d
47	d	97	b
48	a	98	d
49	c	99	a
50	c	100	c

*Ans 11.6.13
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