

JEI JKT

PART-A (GENERAL AWARENESS)

Choose the Correct Answer

(20 x 1 Mark = 20 Marks)

1. Who among the following environmentalists initiated chipko movement in the Himalayas?
a) Medha patkar b) Bairam Khan c) Sunder Lal Bahuguna d) Salman Khan
2. In The United Nations Organization has its Headquarters at
a) Bali b) Hague c) New York, USA d) Washington DC
3. Professor Amartya Sen received the Nobel Prize in this field.
a) Literature b) Electronics c) Economics d) Geology?
4. In which year did the Bhopal gas tragedy occur?
a) 1884 b) 1984 c) 1974 d) 1964
5. At room temperature, which is the only metal that is in liquid form?
a) Iron b) Aluminum c) Mercury d) Silver
6. Washing soda is the common name for
a) Sodium Carbonate b) Calcium Bicarbonate c) Sodium Bicarbonate d) Calcium Carbonate
7. First Train started in India?
a) 1851 b) 1852 c) 1853 d) 1854
8. In diesel engine, ignition is caused by
a) Spark b) Automatic starter c) Compression d) Friction
9. Read the Following Railway Headquarters and Identify which is False?
a) South - Central Railway - Secunderabad
b) Central railway - Bhopal
c) South Railway - Chennai
d) North Railway - New Delhi
10. How many bits in a byte?
a) 4 b) 8 c) 16 d) 32

11. our computer has gradually slowed down. What's the most likely cause?
a) Overheating
b) Your processor chip is just getting old
c) Adware/spyware is infecting your PC
d) You dropped a sandwich in your computer
12. Friction can be reduced by changing from
a)rolling to sliding b)sliding to rolling c)dynamic to static d)potential energy to kinetic energy
13. In the world in terms of Railway Net work system India ranks:
a) second b) first c) fourth d) third
- 14.GST(Goods & Services Tax) has been implemented in which year?
a) 2018 b)2017 c) 2020 d) 2019
15. B. C. Roy Award is given in the field of –
a) Music b) Journalism c) Medicine d) Environment
16. Which is the highest gallantry award in India?
a) Param Vishishtat Seva Medal
b) Param Vir Chakra
c) Kirti Chakra
d) Vir Chakra
17. Carbon, diamond and graphite are together called:
a) Allotrope b) Isomers c) Isomorphs d) Isotope
- 18.The headquarters of the UNESCO is at –
a) Rome b) Geneva c) New York d) Madrid
- 19) Who is the finance minister of India ?
a) Smt. Nirmala Sitharaman b) Shri Nitin Jairam Gadkari
c) Shri Piyush Goyal d) Shri Raj Nath Singh
- 20) The Rajiv Gandhi Khel Ratna Award will be renamed by which name?
a) Milkha Singh Khel Ratna Award
b) Indira Gandhi Khel Ratna Award
c) Major Dhyan Chand Khel Ratna Award
d) Mary Kom Khel Ratna Award

PART-B (GENERAL INTELLIGENCE & REASONING)

Choose the Correct Answer

(20 x 1 Mark = 20 Marks)

- 1) Pride is to lion as shoal is to
a) Teacher b) Student c) Self-respect d) Fish
- 2) Candid is to indirect as honest is to
a) Frank b) Wicked c) Truthful d) Un-truthful
- 3) Question has an underlined word followed by four answer choices. You will choose the word that is a necessary part of the underlined word
Desert:
a) Cactus b) Arid c) Oasis d) Flat
- 4) Look carefully for the pattern, and then choose which pair of numbers comes next
(42 40 38 35 33-31 28.....)
a) 25 22 b) 26 23 c) 26 24 d) 25 23
- 5) Question has an underlined word followed by four answer choices. You will choose the word that is a necessary part of the underlined word.
Gala:
a) Celebration b) Tuxedo c) Appetizer d) Orator
- 6) Read each sentence to find out whether there is any grammatical error in it. The error, if any will be in one part of the sentence. The letter of that part is the answer. If there is no error, the answer is 'D'. (Ignore the errors of punctuation, if any).
a) We discussed about the problem so thoroughly
b) on the eve of the examination
c) that I found it very easy to work it out
d) No error.
- 7) In each question below are given two statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. Read the conclusion and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts
Statements: All mangoes are golden in colour. No golden-coloured things are cheap.
Conclusions: I. All mangoes are cheap.
 II. Golden-coloured mangoes are not cheap
a) Only conclusion I follows
b) Only conclusion II follows
c) Either I or II follows
d) Neither I nor II follows
- 8) In these series, you will be looking at both the letter pattern and the number pattern. Fill the blank.
JAK, KBL, LCM, MDN, _____
a) OEP b) NEO c) MEN d) PFQ

- 9) In these series, you will be looking at both the letter pattern and the number pattern. Fill the blank.
 P5QR, P4QS, P3QT, _____, P1QV
 a) PQW b) PQV2 c) P2QU d) PQ3U
 b)
- 10) This Problem consists of three statements. Based on the first two statements, the third statement may be true, false, or uncertain.
 Blueberries cost more than strawberries.
 Blueberries cost less than raspberries.
 Raspberries cost more than strawberries and blueberries.
 If the first two statements are true, the third statement is
 a) True b) False c) Uncertain d) None of the above
- 11) Read the question carefully and choose the correct answer.
 At the baseball game, Henry was sitting in seat 253. Marla was sitting to the right of Henry in seat 254. In the seat to the left of Henry was George. Inez was sitting to the left of George. Which seat is Inez sitting in?
 a) 251 b) 254 c) 255 d) 256
- 12) Find the number that fits somewhere into the middle of the series. Some of the items involve both numbers and letters.
 Look at this series: F2, ____, D8, C16, B32, ... What number should fill the blank?
 a) A16 b) G4 c) E4 d) E3
- 13) Find the number that fits somewhere into the middle of the series. Some of the items involve both numbers and letters.
 Look at this series: 83, 73, 93, 63, ____, 93, 43, ... What number should fill the blank?
 a) 33 b) 53 c) 73 d) 93
- 14) Deepak said to Nitin, "That boy playing with the football is the younger of the two brothers of the daughter of my father's wife." How is the boy playing football related to Deepak?
 a) Son b) Brother c) Cousin d) Brother-in-law
- 15) If A + B means A is the sister of B; A x B means A is the wife of B, A % B means A is the father of B and A - B means A is the brother of B. Which of the following means T is the daughter of P?
 a) P x Q % R + S - T
 b) P x Q % R - T + S
 c) P x Q % R + T - S
 d) P x Q % R + S + T
- 16) A, B, C, D and E are sitting on a bench. A is sitting next to B, C is sitting next to D, D is not sitting with E who is on the left end of the bench. C is on the second position from the right. A is to the right of B and E. A and C are sitting together. In which position A is sitting ?
 a) Between B and D
 b) Between B and C
 c) Between E and D
 d) Between C and E
- 17) Six friends are sitting in a circle and are facing the centre of the circle. Deepa is between Prakash and Pankaj. Priti is between Mukesh and Lalit. Prakash and Mukesh are opposite to each other. Who is sitting opposite to Priti ?
 a) Prakash b) Deepa c) Pankaj d) Lalit

18) If South-East becomes North, North-East becomes West and so on. What will West become?
a) North-East b) North-West c) South-East d) South-West

19) If CAT = 12, then MAN = ?
a) 15 b) 14 c) 16 d) 10

20) If $64+12=460$ and $25+8=212$ then $43+8=?$
a) 360 b) 376 c) 332 d) 356

PART -C (ARITHMETIC)

Choose the Correct Answer

(20 x 1 Mark = 20 Marks)

1) If the sum of two numbers is 55 and the H.C.F. and L.C.M. of these numbers are 5 and 120 respectively, then the sum of the reciprocals of the numbers is equal to:

- a) 55/601 b) 601/55 c) 11/120 d) 120/11

2) A, B and C start at the same time in the same direction to run around a circular stadium. A completes a round in 252 seconds, B in 308 seconds and c in 198 seconds, all starting at the same point. After what time will they again at the starting point ?

- a) 26 minutes and 18 seconds
b) 42 minutes and 36 seconds
c) 45 minutes
d) 46 minutes and 12 second

3) The G.C.D. of 1.08, 0.36 and 0.9 is:

- a) 0.03 b) 0.9 c) 0.18 d) 0.108

4) Two trains of equal length are running on parallel lines in the same direction at 46 km/hr and 36 km/hr. The faster train passes the slower train in 36 seconds. The length of each train is:

- a) 50 m b) 72 m c) 80 m d) 82 m

5) Two trains are running at 40 km/hr and 20 km/hr respectively in the same direction. Fast train completely passes a man sitting in the slower train in 5 seconds. What is the length of the fast train?

- a) 23 m
b) $23\frac{2}{9}$ m
c) $27\frac{7}{9}$ m
d) 29 m

6) What is the difference between the compound interests on Rs. 5000 for $1\frac{1}{2}$ years at 4% per annum compounded yearly and half-yearly?

- a) Rs. 2.04 b) Rs. 3.06 c) Rs. 4.80 d) Rs. 8.30

- 7) Three times the first of three consecutive odd integers is 3 more than twice the third. The third integer is:
a) 9 b) 11 c) 13 d) 15
- 8) The difference between the length and breadth of a rectangle is 23 m. If its perimeter is 206 m, then its area is:
a) 1520 m² b) 2420 m² c) 2480 m² d) 2520 m²
- 9) Given that $10^{0.48} = x$, $10^{0.70} = y$ and $x^2 = y^z$, then the value of z is close to:
a) 1.45 b) 1.88 c) 2.9 d) 3.7
- 10) $\frac{(469 + 174)^2 - (469 - 174)^2}{(469 \times 174)} = ?$
a) 2 b) 4 c) 295 d) 643
- 11) The average of 20 numbers is zero. Of them, at the most, how many may be greater than zero?
a) 0 b) 1 c) 10 d) 19
- 12) The cost price of 20 articles is the same as the selling price of x articles. If the profit is 25%, then the value of x is:
a) 15 b) 16 c) 18 d) 25
- 13) A lent Rs. 5000 to B for 2 years and Rs. 3000 to C for 4 years on simple interest at the same rate of interest and received Rs. 2200 in all from both of them as interest. The rate of interest per annum is:
a) 5% b) 7% c) 10% d) 7 $\frac{1}{8}$ %
- 14) A man took loan from a bank at the rate of 12% p.a. simple interest. After 3 years he had to pay Rs. 5400 interest only for the period. The principal amount borrowed by him was
a) 2000/- b) 10000/- c) 15000/- d) 20000/-
- 15) $1397 \times 1397 = ?$
a) 1951609 b) 1981709 c) 18362619 d) 2031719
- 16) $(1^2 + 2^2 + 3^2 + \dots + 10^2) = ?$
a) 330 b) 345 c) 365 d) 385
- 17) If 60% of $\frac{3}{5}$ of a number is 36, then the number is :
a) 80 b) 100 c) 75 d) 90
- 18) Find the odd one out (1, 4, 9, 16, 20, 36, 49)
a) 1 b) 9 c) 20 d) 49
- 19) The average of 20 numbers is zero. Of them, at the most, how many may be greater than zero?
a) 0 b) 1 c) 10 d) 19
- 20) If the average marks of three batches of 55, 60 and 45 students respectively is 50, 55, 60, then the average marks of all the students is:
a) 53.33 b) 54.68 c) 55 d) None of these

PART-D (TECHNICAL KNOWLEDGE)

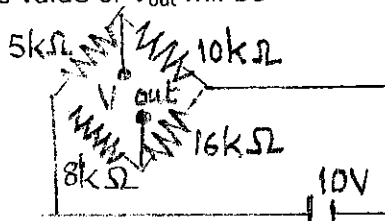
(90 x 1 Mark = 90 Marks)

Choose the Correct Answer

1. Which of the following is the fastest?
a) CPU b) Magnetic tapes and disks c) video terminal d) sensors, mechanical controllers
2. Program Status Word (PSW) contains various (different) status of
a) CPU b) ALU c) program d) registers
3. Control Memory Address Register is present in
a) ALU b) Instruction Register Unit c) Control Unit d) Disk Control Interface Unit
4. For using passwords on the Internet a software is used so that the password is not intercepted easily. It is called
a) Coding b) Malware c) Virus d) Encryption
5. Which of the following are machine level languages?
a) C++ b) Java c) Python d) None of these
6. Which of the following statements is incorrect?
a) Microsoft windows is GUI
b) LINUX is GUI
c) More than 5000 kB data can be stored in a DVD
d) A 1 TB flash drive can store 2 million files each of size 1 MB
7. In 4 wire electric circuit, the black conductor is used for
a) Phase b) Neutral c) Earth wire d) Armour
8. Best protection is provided by HRC fuses in case of
a) Over circuits b) Short circuits c) Overloads d) Parallel circuit
9. A relay used for protection of motors against overload is
a) Impedance relay b) Electromagnetic attraction type
c) Thermal relay d) Buchholz's relay
10. Fuse wire, protection, system is usually not used beyond
a) 10 A b) 25A c) 50A d) 100A
11. The MOSFET switch in its on-state may be considered equivalent to
a) Resistor b) Capacitor c) Inductor d) Battery
12. Zener Diode is a
a) Reverse biased diode b) Forward biased diode
c) Variable voltage source d) Constant current source
13. A Zener diode has a Zener resistance of 5Ω . If the current through the Zener diode changes from 10mA to 20mA, the change of voltage across the Zener diode will be
a) 0.05V b) 0.075V c) 0.1V d) 0.5V
14. A combination of AND function and NOT function results in
a) OR gate b) inversion c) NAND gate d) NOR gate

15. Which gate is formed by inverting output of the AND gate?
 a) OR gate b) NOR gate c) NAND gate d) none of these
16. A half adder includes
 a) a NAND gate with OR gate b) a AND gate with XOR gate
 c) only AND gate d) neither OR nor XOR nor AND gate
17. Which mode is there in extracting information from storage?
 a) read mode b) write mode c) read and write mode d) neither read nor write mode
18. Read and write capabilities are available in
 a) RAM B) ROM c) both (a) and (b) d) none of these
19. Which is ultraviolet light erasable and electrically programmable?
 a) ROM b) RAM c) PROM d) EPROM
20. Which of the following is a universal gate?
 a) AND b) OR c) NOR d) XOR
21. How many numbers of NOR are gates required to realize AND gate?
 a) 2 b) 4 c) 3 d) 5
22. NAND gate is called a universal gate because
 a) it is most commonly used
 b) all logical functions can be realized by use of NAND gates alone
 c) all minimization techniques can be applied to it
 d) it can realize AND and NOT functions

23. In the Wheatstone bridge shown in the given figure, if the resistance in each arm is increased by 0.05%, then the value of V_{out} will be



- a) 50mV b) 5m V c) 0.1V d) zero
24. The most serious source of error in ac Bridge measurement is
 a) eddy currents b) leakage currents c) residual imperfectness d) stray fields
25. Disadvantages of shunts for use at high currents is/are
 a) difficult to achieve good accuracy with shunts
 b) Power consumption of the shunts is large
 c) Metering circuit is not electrically isolated from the power circuit
 d) all of these
26. At high frequency, accuracy of all the measuring meters
 a) increases b) decreases c) remains same d) depends upon type of meter
27. In order to get back the original signal from the sampled signal, it is necessary to use
 a) low pass filters b) high pass filter c) band-pass filters d) band-reject filters
28. TDM
 a) can be used with PCM only b) interleaves pulses belonging to difference transmissions
 c) combines fine groups into a supergroup d) stacks 24 channels in adjacent frequency slots

29. Audio frequency range lies between
 a) 20 Hz and 20 kHz
 b) 20 kHz and 200 kHz
 c) 2 MHz and 20 MHz
 d) 20 MHz and 200 MHz
30. In a typical AM receiver circuit, oscillator frequency is
 a) same as signal frequency
 b) always equal to 455 Hz
 c) lower than signal frequency by 455 kHz
 d) higher than signal frequency by 455 kHz
31. Disadvantage of FM over AM is that
 a) noise is very high for high frequency signals
 b) larger bandwidth is required
 c) high modulating power is required
 d) high output power is required
32. FM broadcast band lines in
 a) VHF band b) UHF band c) SHF band d) HF band
33. Match the following:
 1. Magnetic flux density a. Tesla
 2. Self inductance b. Weber
 3. Magnetic flux c. Henry
 a) 1-b, 2-c, 3-a b) 1-c, 2-a, 3-b c) 1-a, 2-b, 3-c d) 1-a, 2-c, 3-b
34. The magnetic field inside the solenoid
 a) Zero b) Uniform c) Increases with distance from axis d) Decreases with distances from axis
35. Received signal power in FM will....., with increase in the transmission bandwidth
 a) Increases b) Decrease c) Remain same d) First increases then decreases
36. The frequency of a signal is INVERSELY proportional to which of the following:
 a) time period b) amplitude c) phase d) power
37. What is the "power factor"?
 a) ratio of true power to apparent power
 b) peak power times 0.707
 c) sin of the phase difference between V and I
 d) cos of the phase angle between true power and apparent power
38. A signal is composed of a fundamental frequency of 2 kHz and another of 4 kHz. This 4kHz signal is referred to as :
 a) a fundamental of the 2 kHz signal b) the DC component of the main signal
 c) a dielectric signal of the main signal d) a harmonic of the 2kHz signal
39. A circuit designed to increase the level its input signal is called:
 a) an amplifier b) a modulator c) an oscillator d) a receiver
40. Which of the following is NOT amplified by an amplifier?
 a) current b) resistance c) power d) voltage
41. Local area networks can transmit
 a) faster than telecommunications over public telephone lines
 b) slower than telecommunications over public telephone lines
 c) using twisted-pair wiring or coaxial cables

42. Which of the following assertions is FALSE about the Internet Protocol(IP)?
- It is possible for a computer to have multiple IP addresses
 - IP packets from the same source to the same destination routes in the network
 - IP ensures that a packet is discarded if it is unable to reach its destination within a given number of hops
 - The packet source cannot set the route of an outgoing packets; the route is determined only by the routing tables in the routers on the way.
43. In a network of LANs connected by bridges, packets are sent from one LAN to another through intermediate bridges. Since more than one path may exist between two LANs, packets may have to be routed through multiple bridges. Why is the spanning tree algorithm used for bridge-routing?
- For shortest path routing between LANs
 - For avoiding loops in the routing paths
 - For fault tolerance
 - For minimizing collisions
44. An organization has a class B network and wishes to form subnets for 64 departments. The subnet mask would be
- 255.255.0.0
 - 255.255.64.0
 - 255.255.128.0
 - 255.255.252.0
45. How many digits of the DNIC (data network identification code) identify the country?
- first three
 - first four
 - first five
 - first six
46. Which data communication method is used to send data over a serial communication link?
- Simplex
 - Half duplex
 - Full Duplex
 - All of these
47. The synchronous modems are more expensive than the asynchronous modems because
- they must contain clock recovery circuits
 - production volume is larger
 - they must operate on a larger bandwidth
 - they are larger
48. Which of the following systems provides the longest digital transmission distance?
- Voice band modem
 - Local area network
 - Computer bus
 - Digital PBX
49. Which of the following items cannot be provided in a broadband LAN?
- Frequency agile modems
 - Closed-circuit TV
 - Voice circuits
 - Fibre-optic transmission
50. Which of the following is considered a broad band communication channel?
- Coaxial code
 - Fibre optic cable
 - Microwave
 - All of these
51. Current velocity through a copper conductor is
- nearly 3×10^9 m/s
 - of the order of a few μ m/s
 - independent of current strength
 - the same as propagation velocity of electric energy
52. Ratio of the voltage and electric current in a closed circuit
- remains constant
 - varies
 - increases
 - decreases
53. Ohm's law is applicable to
- semi-conductors
 - vacuum tubes
 - electrolytes
 - none of these
54. Resistance of a wire always increases if
- temperature is reduced
 - temperature is increased
 - number of free electrons available become less
 - number of free electrons available become more

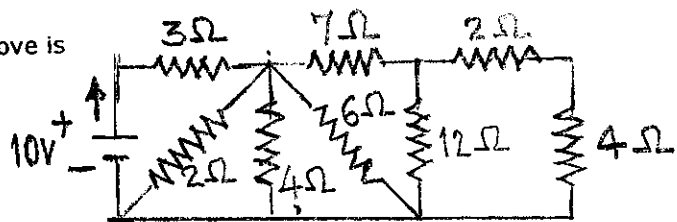
55. The resistance of wire varies inversely as
 a) area of cross-section b) length c) resistivity d) temperature
56. Pure metals generally have
 a) high conductivity and low temperature coefficient b) high conductivity and large temperature coefficient
 c) low conductivity and zero temperature coefficient d) low conductivity and high temperature coefficient
57. A 200 W, 230 V lamp is connected across 115 V supply. The lamp will draw power
 a) slightly more than 50 W b) slightly less than 50 W c) 50 W d) none of these
58. If the voltage across the lamp drops by 1%, the power drawn will be reduced by
 a) 1% b) 2% c) 3% d) 4%
59. A 200 W, 100 V lamp is to be operated on 250 V supply. The additional resistance required to be connected in series will be
 a) 125Ω b) 100Ω c) 75Ω d) 50Ω
60. A closed path made by several branches of the network is known as
 a) circuit b) loop c) junction d) branch
61. For determining the polarity of the voltage drop across a resistor, we do not require value of
 a) Resistor b) Current c) emf of the circuit d) all of these
62. Supplier's fuse, is provided in domestic wiring system
 a) after the energy meter b) before the energy meter c) before distribution board d) after main switch
63. The common voltage across parallel branches with different voltage sources can be computed from the relation

$$V = \frac{V_1 + V_2 + V_3}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}}$$

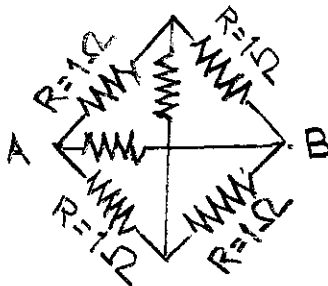
- The above statement is associated with
 a) Thevenin's theorem b) Milman's theorem c) Norton's theorem d) reciprocity

64. EMF of a zinc-carbon cell is about
 a) 1.2 V b) 1.5 V c) 1.75 V d) 2.2 V
65. Cells are connected in series in order to increase the
 a) current capacity b) life of the cells c) voltage rating d) terminal voltage
66. When two cells are connected in parallel, it should be ensured that they have
 a) identical internal resistances b) equal emfs c) same make d) same ampere-hour capacity
67. With the rise in temperature, the resistance of carbon
 a) increases b) decreases c) becomes zero d) remains unchanged

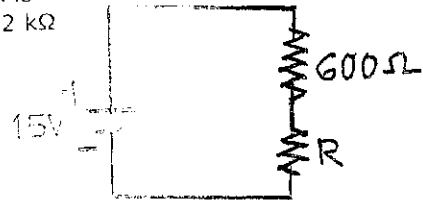
68. The equivalent resistance of the given circuit above is
 a) 2 Ω b) 4 Ω c) 5 Ω d) 10 Ω



69. When all the resistances in the circuit are of 1 Ω each, the equivalent resistance across the points A and B will be
 a) 1 Ω b) 0.5 Ω c) 2 Ω d) 1.5 Ω



70. A 35-V source is connected to a series circuit of $600\ \Omega$ and R as shown. If a voltmeter of internal resistance $1.2\ \text{k}\ \Omega$ is connected across $600\ \Omega$ resistor. If a voltmeter of internal resistance $1.2\ \text{k}\ \Omega$ is connected across $600\ \Omega$ resistor, it reads 5V. The value of R is
- a) $1.2\ \text{k}\ \Omega$ b) $2.4\ \text{k}\ \Omega$ c) $3.6\ \text{k}\ \Omega$ d) $7.2\ \text{k}\ \Omega$



71. A 100 W bulb is connected in series with a room heater. If now 100 W bulb is replaced by a 40 W bulb, the heater output will
- a) increase b) decrease c) remain same d) uncertain
72. When the voltage applied across an electric iron is halved, the power consumption of the iron will reduce to
- a) Half b) three-fourth c) one-fourth d) none of these
73. For a given line voltage, four heating coils will produce maximum heat when connected
- a) all in parallel b) all in series
c) two parallel pairs in series d) one pair in parallel with the two in series
74. Two lamps of 200 W, 220V, and 100W, 220V are connected in series across 220V supply. The ratio of current through them will be
- a) 1:2 b) 1:1 c) 2:1 d) 1:4
75. The unit newton/coulomb is the unit of
- a) electric field intensity b) electric flux density c) electro-motive force d) capacitance
76. Human ear cannot detect the sounds of wavelength
- a) 500m b) 1m c) 10 m d) 100 m
77. Which of the following represents an elastic wave?
- a) Radio waves b) Microwaves c) Light waves d) Sound waves
78. The velocity of sound will be least in
- a) steel b) copper c) aluminium d) distilled water
79. When distance between two charges is doubled, then force between them will become
- a) Four times b) Double c) Half d) One fourth
80. Which of the following is ferromagnetic material?
- a) Copper b) Palladium c) Silver d) Cobalt
81. Which question no longer concerns the modern software engineer?
- a) Why does computer hardware cost so much?
b) Why does software take a long time to finish?
c) Why does it cost so much to develop a piece of software?
d) Why can't software errors be removed from products prior to delivery

82. Most software continues to be custom built because
- a) Component reuse is common in the software world.
 - b) Reusable components are too expensive to use.
 - c) Software is easier to build without using someone else's components.
 - d) Off-the-shelf software components are unavailable in many application domains
83. What is part of a database that holds only one type of information?
- a) Report
 - b) Field
 - c) Record
 - d) File
84. The post order traversal of a binary tree is DEBFCA. Find out the pre order traversal
- a) ABFCDE
 - b) ADBFEC
 - c) ABDECF
 - d) ABDCEF
85. When necessary, the results are transferred from the CPU to main memory by
- a) I/O devices
 - b) CPU
 - c) Shift registers
 - d) Transistors
86. The binary representation of 0.875 is 0 0111110 1100000000000000000000
- a) Excess 32
 - b) 33 Bit
 - c) 32 Bit
 - d) 32 Byte
87. What is the Binary representation of decimal number 5?
- a) 0100
 - b) 1101
 - c) 0101
 - d) 0011
88. The XOR output is 1 if the inputs are _____
- a) Different
 - b) Same
 - c) Finite
 - d) Infinite
89. For every x, y in B , $x + y = y + x$; $x \cdot y = y \cdot x$;
- a) Commutative Law
 - b) Transitive Law
 - c) Addition and Multiplication Law
 - d) Complement Law
90. While booting the system the IP address is _____
- a) 1.1.1.1
 - b) 1.1.0.0
 - c) 0.0.1.1
 - d) 0.0.0.0