

PSC Junior Instructor - Mechanic Computer Hardware - Industrial Training Department Examination Previous Year Question Paper

***Exam Name: Junior Instructor - Mechanic
Computer Hardware - Industrial Training
Department***

Date of Test : 27.02.2015

Question Paper Code: 038/2015

Medium of Questions: English



38/2015

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. Rectifiers are used to convert :
(A) AC to DC
(B) DC to AC
(C) Fixed to variable DC
(D) Variable DC to variable AC
2. C Language was developed by :
(A) Martin
(B) Bill Gates
(C) Dennis Richie
(D) John von Newman
3. Cache memory acts between :
(A) RAM and ROM
(B) CPU and Hard disk
(C) CPU and RAM
(D) None of these
4. Who invented analytical Engine?
(A) Charles Babbage
(B) Blaise Pascal
(C) George Bool
(D) Herman Hollerith
5. $2p^2 - 15p + 25 =$
(A) $(2p - 15)(p + 5)$
(B) $(p - 5)(2p + 5)$
(C) $(p + 5)(2p - 5)$
(D) $(p - 5)(2p - 5)$
6. Which of the following is not a bus interface?
(A) USB
(B) Timer
(C) PCI
(D) AGP
7. Give example of passive component :
(A) Resistor
(B) Transistor
(C) Varactor Diode
(D) Tunnel Diode
8. A variable in C language cannot start with :
(A) An alphabet
(B) A number
(C) A special symbol other than underscore
(D) Both (B) and (C)

9. The decimal number 127 may be represented by :
- (A) 1111 1111b (B) 0111 1111b
(C) 1000 0000b (D) 1100 0011b
10. What is the content of stack pointer?
- (A) Address of the current instruction
(B) Address of next instruction
(C) Address of top element of the stack
(D) Size of the stack
11. Unit of inductance :
- (A) Ohm (B) Henry
(C) Ampere (D) Farad
12. What is the result of the following C language statement?
- X = 10;
Y = ++x;
- (A) x = 10, y = 10 (B) x = 10, y = 11
(C) x = 11, y = 10 (D) x = 11, y = 11
13. The digital logic family which has minimum power dissipation is :
- (A) CMOS (B) ECL
(C) DTL (D) TTL
14. Memory unit accessed by content is called :
- (A) RAM (B) ROM
(C) Associative memory (D) Dynamic memory
15. Which of the following is a motherboard form factor?
- (A) SP (B) SAT
(C) NLX (D) VTX
16. What is the maximum memory that a 32 bit machine can access?
- (A) 1 GB (B) 4 GB
(C) 3 GB (D) 2 GB

17. Name a sequential access storage device :
(A) hard disk (B) floppy disk
(C) flash memory (D) magnetic tape
18. The nucleus of hydrogen atom has :
(A) one proton and two neutron (B) one proton only
(C) one neutron only (D) one electron only
19. Which of the following is not an antivirus software?
(A) AVG (B) AVAST
(C) NORTON (D) WINRAR
20. Which of the following is NOT a prime number?
(A) 11 (B) 21
(C) 31 (D) 41
21. Who invented computer mouse?
(A) Steve Russel (B) Alan Shugart
(C) Douglas Engelbart (D) Faggin
22. Name a language used to describe and format plain text files on the web :
(A) HTML (B) C
(C) JAVA (D) Fortran
23. Name a type of network in which any computer can act as both a server and client :
(A) client server (B) peer to peer
(C) world wide web (D) none of these
24. A device for encoding computer generated data in a form suitable for transmission through domestic telephone network and for decoding data received by a computer system through a telephone network :
(A) router (B) modem
(C) hub (D) monitor
25. Intel 8257 is a :
(A) DMA controller
(B) Programmable peripheral interface
(C) Programmable keyboard controller
(D) Programmable Timer/counter

26. A unit of information storage equal to 1048576 bytes :
- (A) one GB (B) one TB
(C) one MB (D) one KB
27. A program that remains in memory after being loaded and can be reactivated by a predefined keystroke sequence or other operation while another program is active :
- (A) LISP program (B) TSR program
(C) PIC program (D) C program
28. The colour bands on a fixed carbon resistor are red, brown and black. Its value is :
- (A) 12 ohm (B) 120 ohm
(C) 21 ohm (D) 210 ohm
29. What is the output of the following program?
- ```
main()
{ int c=1;
 while (c<100)
 printf ("% d", c);
 c++;
}
```
- (A) compilation error (B) prints numbers from 1 to 99  
(C) prints numbers from 1 to 100 (D) infinite loop
30. Dynamic RAM consumes \_\_\_\_\_ power and \_\_\_\_\_ than static RAM.
- (A) less, slower (B) more, slower  
(C) less, faster (D) more, faster
31. The time required to reach a particular storage location and obtain its content in a disk is :
- (A) access time (B) transfer time  
(C) latency (D) seek time
32. An external signal applied to the microprocessor to suspend the program that is currently executing is :
- (A) suspend (B) stop  
(C) interrupt (D) block



33. Who was the founder of IBM corporation?  
(A) Herman Hollerith (B) Rock Well  
(C) Bill gates (D) Balley
34. What is the value of u in the sequence 2, 7, 14, 23, 34, u?  
(A) 48 (B) 46  
(C) 47 (D) 53
35. Which of the following is not a nonconventional sources of energy?  
(A) solar energy (B) wind energy  
(C) water energy (D) petrol
36. PARAM is a :  
(A) DBMS package (B) Parallel computer  
(C) Programming language (D) None of the above
37. The resistance of a conductor is directly proportional to :  
(A) length (B) cross sectional area  
(C) mass (D) weight
38. In simplex transmission :  
(A) data format is simple  
(B) data can be transmitted to small distance only  
(C) data transmission is one way  
(D) all of the above
39. Oxidation is a process which involves :  
(A) loss of protons by a substance (B) loss of electrons by a substance  
(C) gain of electrons by a substance (D) gain of protons by a substance
40. Which of the following computers was the first to use a stored program?  
(A) ACE (B) EDVAC  
(C) ENIAC (D) EDSAC

41. The acid used in lead acid storage cell is :  
(A) sulphuric acid (B) nitric acid  
(C) hydrochloric acid (D) tartaric acid
42. Find  $u_8$  given that  $u_1 = 1$ ,  $u_2 = 8$ ,  $u_3 = 27$ ,  $u_4 = 64$ ,  $u_5 = 125$ ,  $u_6 = 216$  and  $u_7 = 343$  :  
(A) 512 (B) 625  
(C) 610 (D) none of the above
43. Emission of electrons from a metal surface when light of suitable energy falls on it is :  
(A) accordion effect (B) allais effect  
(C) embedding effect (D) photo electric effect
44. Technology which is the engineering of the functional system at the molecular scale :  
(A) robotic technology (B) nano technology  
(C) computer technology (D) satellite technology
45. The properties associated with Heisenberg's uncertainty principle :  
(A) position and momentum (B) velocity and momentum  
(C) position and velocity (D) none of the above
46. Classes are some times \_\_\_\_\_ Thursday.  
(A) held at (B) hold on  
(C) hold at (D) held on
47. Which of the following is an allotropic form of carbon?  
(A) dicarbon (B) dichlorine  
(C) graphite (D) dihydrogen
48. An impact printer creates characters by using :  
(A) electrically charged ink (B) an ink pen  
(C) an inked ribbon and print head (D) none of the above
49. What is the unit of momentum?  
(A) kg m (B) m/s  
(C) kg ms (D) kg m/s



50. The area of a circle is  $314 \text{ cm}^2$ . If  $\pi = 3.14$  then its diameter is :  
(A) 100 cm (B) 20 cm  
(C) 10 cm (D) 50 cm
51. What is the molecular formula of phosphor?  
(A)  $\text{P}_4$  (B)  $\text{P}_2$   
(C)  $\text{P}_3$  (D)  $\text{P}_5$
52. On the PC side the printer port is a :  
(A) 15 pin female serial connector (B) 25 pin male serial connector  
(C) 15 pin female parallel connector (D) 25 pin female parallel connector
53. Who was awarded the 1921 Nobel prize in physics for his services to theoretical physics and especially for his discovery of the law of photo electric effect?  
(A) William Gilbert (B) Lord Kelvin  
(C) Albert Einstein (D) James Clark Maxwell
54. Which of the following is not in OSI model?  
(A) physical layer (B) internet layer  
(C) network layer (D) transport layer
55. What kind of a car?  
(A) has she got (B) does she has  
(C) she has (D) none of the above
56. The slowest transmission speeds are those of :  
(A) twisted pair cable (B) coaxial cable  
(C) fiber optic cable (D) micro wave
57. What does FDISK do?  
(A) performs low level formatting of the hard drive  
(B) fixes bad sectors on the hard drive  
(C) create partitions on the hard drive  
(D) recovers lost clusters on the hard drive



58. Which of the following is an output device?
- (A) mouse (B) keyboard  
(C) joystick (D) plotter
59. A device mounted on a communication satellite which receives, amplifies and retransmits signals from earth stations :
- (A) transmitter (B) transponder  
(C) transceiver (D) transfuser
60. When  $n$  is divided by 4, the remainder is 3. What is the remainder when  $2n$  is divided by 4 :
- (A) 1 (B) 2  
(C) 3 (D) 6
61. The product of two numbers is 120 and sum of their squares is 289. The sum of the number is :
- (A) 20 (B) 169  
(C) 23 (D) 17
62. A method in which a communication channel is shared by number of messages :
- (A) multiplexing (B) multiprogramming  
(C) time sharing (D) transmission
63.  $12\frac{1}{2}\%$  is equivalent to :
- (A) 0.8 (B) 1.25  
(C) 0.125 (D) 12.5
64. Which of the following is a version of Linux?
- (A) Fedora (B) UBUNTU  
(C) SUSE (D) All of the above
65. An Ethernet port is used to connect your computer to :
- (A) network (B) printer  
(C) monitor (D) digital camera

66. Which of the following statement about hard disk is true?  
(A) Hard disks are always installed inside the system unit of a computer  
(B) Hard disks are considered volatile storage devices  
(C) With the rise of flash drives hard disks are becoming legacy technology  
(D) Hard disks are considered non volatile storage devices
67. Which of the following is an internet access methods?  
(A) DSL  
(B) Dial Up  
(C) ISDN  
(D) All of the above
68. You won't lose any weight \_\_\_\_\_ you start eating healthier food.  
(A) unless  
(B) if  
(C) since  
(D) none of these.
69. Device which enables movement of data from one network to other network :  
(A) hub  
(B) router  
(C) monitor  
(D) keyboard
70. Built in software that performs basic computer hardware functions is :  
(A) SCSI  
(B) SATA  
(C) BIOS  
(D) PCI
71. When the chairman \_\_\_\_\_ the room everybody stopped talking.  
(A) entered  
(B) entered into  
(C) entered to  
(D) entering to
72. ATX SMPS has \_\_\_\_\_ pin power connector.  
(A) 18  
(B) 20  
(C) 12  
(D) 16
73. Internet originated from the network :  
(A) NICNET  
(B) TELNET  
(C) USENET  
(D) ARPANET
74. Write the odd one out :  
(A) RDRAM  
(B) SRAM  
(C) SDRAM  
(D) DDRSDRAM



75. Which of the following is the file format of sound?  
(A) bmp (B) jpeg  
(C) gif (D) wav
76. Which of the following is not a computer language?  
(A) C (B) BASIC  
(C) HTML (D) LOTUS
77. Which of the following is a package used for presentation?  
(A) TALLY (B) MSWORD  
(C) POWERPOINT (D) None of these
78. The output of NOR gate is high if :  
(A) all inputs are high (B) any input is high  
(C) all inputs are low (D) any input is low
79. Which of the following is not a hard disk interface?  
(A) SCSI (B) SATA  
(C) IDE (D) None of these
80. Who is the founder of GOOGLE corporation?  
(A) Larry Page & Sergey Brin (B) Mark Zuckerberg  
(C) Dustin Moskovitz (D) Jimmy Wales
81. 'Reaching families through women and reaching communities through families' is the slogan of which programme?  
(A) Indira Awas Yojana (B) Kudumbasree  
(C) People's planning (D) Antyodya programme
82. According to 2011 census which state has the highest density of population :  
(A) Kerala (B) Bihar  
(C) Uttar Pradesh (D) Madhya Pradesh
83. Which of the following is known as 'Venice of the East'?  
(A) Coimbatore (B) Kayamkulam  
(C) Allapuzha (D) Bengaluru

84. 'Kaladi' the birth place of Sree Sankaracharya is situated on the bank of :  
(A) Bharathapuzha (B) Pamba  
(C) Achankovil (D) Periyar
85. The First Indian Governor General of independent India :  
(A) C. Raja Gopalachari (B) Dr. S. Radhakrishnan  
(C) Dr. Rajendraprasad (D) V.V. Giri
86. "Freedom is my birth right will have it" who said this?  
(A) Gopala Krishna Gokhale (B) Subash Chandra Bose  
(C) Bala Gangadhar Tilak (D) Sardar Vallabhai Patel
87. Which soil is most suitable for cotton cultivation?  
(A) Red soil (B) Alluvial soil  
(C) Khadar (D) Regur soil
88. 'Mullaiperiyar Dam' is situated in which district?  
(A) Pathanamthitta (B) Idukki  
(C) Kannur (D) Kasarcode
89. The biggest 'Back Water' of Kerala :  
(A) Ashtamudi (B) Sasthamkotta  
(C) Vembanattu (D) Kochi
90. Which is known as "Tropical Paradise"?  
(A) Kerala (B) Kochi  
(C) Andaman Nicobar Islands (D) Lakshadweep
91. Who is known as 'KERALA KESARI'?  
(A) Mannathu Padmanabhan (B) Vagbhatananda  
(C) Ayyankali (D) Dr. Palpu
92. Sanskrit school founded by blessed Kuriakose Elias Chavara is at :  
(A) Champakulam (B) Mannanam  
(C) Kainakari (D) Changanacherry



93. Author of the book 'Adukkalyilninnu Arangathekku' :  
(A) Pandit Kuruppan (B) Kumaranasan  
(C) V.T. Bhattathirippad (D) Vakkom Moulavi
94. The birth place of chattampi swamikal :  
(A) Kannamoola (B) Kaladi  
(C) Vadakara (D) Chempazhanthi
95. In 1888 Sree Narayana Guru consecrated a temple for the worship of the Ezhavas and other low castes at :  
(A) Chempazhanthi (B) Sivagiri  
(C) Vadakara (D) Aruvipuram
96. How many teams are participated in 2014 world cup foot ball tournament?  
(A) 31 (B) 33  
(C) 32 (D) 34
97. Union Minister for 'women and child development' :  
(A) Sushama Swaraj (B) Maneka Gandhi  
(C) Sumithra Mahajan (D) Najma Hepathulla
98. Which of the following is the mother country of Pope Francise I?  
(A) Brazil (B) Italy  
(C) Poland (D) Argentineena
99. World non-violence day :  
(A) October 2 (B) June 5  
(C) April 22 (D) April 7
100. The 29<sup>th</sup> state of India :  
(A) Chattisgarh (B) Jharkhand  
(C) Telugana (D) Odisha