## QUESTION PAPER NO.

## MCA LATERAL ENTRY ENTRANCE TEST 2014-(GROUP -D)

Roll No : $\square$

1. This question booklet contains total 150 questions. Answer all the questions.
2. Each question has four options (a), (b), (c) and (d), out of which on is correct.
3. The candidate is required to darken completely correct option in the OMR answer sheet supplied separately.
4. Answer will get cancelled if it is not answered or two or more answers are given.
5. There will be no negative marking.
6. Rough work may be done in this question booklet itself.
7. Submit the entrance test paper along with OMR answer sheet to the invigilator otherwise the candidate will be considered absent.
8. Maintain discipline during the examination.

Signature of the Invigilator Signature of the Candidate

1. The translator program used in assembly language is called
A. Compiler
B. Interpreter
C. Assembler
D. Translator
2. Which of the following is called low level languages?
A. Machine language
B. Assembly language
C. Both of the above
D. None of above
3. The translator program used in assembly language is called
A. Compiler
B. Interpreter
C. Assembler
D. Translator
4. CAD stands for
A. Computer aided design
B. Computer algorithm for design
C. Computer application in design
D. All of the above
5. CD-ROM is a
A. Semiconductor memory
B. Memory register
C. Magnetic memory
D. None of above
6. Which of the following is a secondary memory device?
A. Keyboard
B. Disk
C. ALU
D. All of the above
7. Which of the following is not a primary storage device?
A. Magnetic tape
B. Magnetic disk
C. Optical disk
D. None of above
8. CD-ROM is a
A. Semiconductor memory
B. Memory register
C. Magnetic memory
D. None of above
9. Which of the following produces the best quality graphics reproduction?
A. Laser printer
B. Ink jet printer
C. Plotter
D. Dot matrix printer
10. The first electronic computer in the world was
A. UNIVAC
B. EDVAC
C. ENIAC
D. All of above
11. Which was the computer conceived by Babbage?
A. Analytical Engine
B. Arithmetic Machine
C. Donald Kunth
D. All of above
12. Which of the following registers is loaded with the contents of the memory location pointed by the PC?
A. Memory address registers
B. Memory data registers
C. Instruction register
D. Program counter
13. Microprocessors can be used to make
A. Computers
B. Digital systems
C. Calculators
D. All of above
14. The subject of cybernetics deals with the science of
A. Genetics
B. Control and communication
C. Molecular biology
D. Biochemistry
15. Who invented the microprocessor?
A. Marcian E Huff
B. Herman H Goldstein
C. Joseph Jacquard
D. All of above
16. 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 counter
17. When did IBM introduce the 20286 based PC/AT?
A. 1982
B. 1984
C. 1985
D. 1989
18. If in a computer, 16 bits are used to specify address in a RAM, the number of addresses will be
A. 216
B. 65,536
C. 64 K
D. Any of the above
19. The digital computer was developed primarily in
A. USSR
B. Japan
C. USA
D. UK
20. Who is credited with the idea of using punch cards to control patterns in a waving machine?
A. Pascal
B. Hollerith
C. Babbage
D. Jacquard
21. One computer that is not considered a portable is
A. Minicomputer
B. Laptop computer
C. Notebook computer
D. All of above
22. Which of the following is required when more than one person uses a central computer at the same time?
A. Terminal
B. Light pen
C. Digitizer
D. Mouse
23. Which number system is commonly used as a shortcut notation for groups of four binary digits?
A. Binary
B. Decimal
C. Octal
D. Hexadecimal
24. In 1830, Charles Babbage designed a machine called the Analytical Engine which he showed at the Paris Exhibition. In which year was it exhibition?
A. 1820
B. 1860
C. 1855
D. 1870
25. Where was India's first computer installed and when?
A. Indian Institute of Technology, Delhi, 1977
B. Indian Institute of Science, Bangalore, 1971
C. Indian Iron \& Steel Co. Ltd., 1968
D. Indian Statistical Institute, Calcutta, 1955
26. Which of the following is true?
A. Fields are composed of bytes
B. Records are composed of fields
C. Fields are composed of characters
D. All of above
27. The two basic types of record-access methods are
A. Sequential and random
B. Sequential and indexed
C. Direct and immediate
D. On-line and real time
28. The proper definition of a modern digital computer is
A. An electronic automated machine that can solve problems involving words and numbers
B. A more sophistic and modified electronic pocket calculator
C. Any machine that can perform mathematical operations
D. A machine that works on binary code
29. An integrated circuit is
A. A complicated circuit
B. An integrating device
C. Much costlier than a single transistor
D. Fabricated on a tiny silicon chip
30. To produce high quality graphics (hardcopy) in color, you would want to use $\mathrm{a} / \mathrm{n}$
A. RGB monitor
B. Plotter
C. Ink-jet printer
D. Laser printer
31. A digital computer did not score over an analog computer in terms of
A. Speed
B. Accuracy
C. Cost
D. Memory
32. Properly arranged data is called
A. Field
B. Words
C. Information
D. File
33. Which of the following are the two main components of the CPU?
A. Control unit and registers
B. Registers and main memory
C. Control Unit and ALU
D. ALU and bus
34. A disadvantage of the laser printer is:
A. It is quieter than an impact printer
B. It is very slow
C. The output is of a lower quality
D. None of above
35. Which of the following does not affect the resolution of a video display image?
A. Bandwidth
B. Raster scan rage
C. Vertical and horizontal lines of resolution
D. Screen size
36. When was Apple Macintosh II microcomputer introduced in the market?
A. 1964
B. 1970
C. 1983
D. 1986
37. An application suitable for sequential processing is
A. Processing of grades
B. Payroll processing
C. Both $a$ and $b$
D. All of above
38. Which of the following is used as a primary storage device?
A. Magnetic drum
B. Prom
C. Floppy
D. All of above
39. Which of the following is not true for a magnetic disk?
A. It is expensive relative to magnetic tape
B. It provides only sequential access to stored data
C. Users can easily update records by writing over the old data
D. All of above
40. The arranging of data in a logical sequence is called
A. Sorting
B. Classifying
C. Reproducing
D. Summarizing
41. The language that the computer can understand and execute is called
A. Machine language
B. Application software
C. System program
D. All of above
42. The word processing task associated with changing the appearance of a document is
A. Editing
B. Writing
C. Formatting
D. All of above
43. Which of the following memories needs refreshing?
A. SRAM
B. DRAM
C. ROM
D. All of above
44. A set of information that defines the status of resources allocated to a process is
A. Process control
B. ALU
C. Register Unit
D. Process description
45. A computer program that converts an entire program into machine language is called $\mathrm{a} / \mathrm{an}$
A. Interpreter
B. Simulator
C. Compiler
D. Commander
46. What is meant by a dedicated computer?
A. Which is used by one person only
B. Which is assigned one and only one task
C. Which uses one kind of software
D. Which is meant for application software
47. An error in software or hardware is called a bug. What is the alternative computer jargon for it?
A. Leech
B. Squid
C. Slug
D. Glitch
48. One millisecond is
A. 1 second
B. 10th of a seconds
C. 1000th of a seconds
D. 10000 th of a seconds
49. In latest generation computers, the instructions are executed
A. Parallel only
B. Sequentially only
C. Both sequentially and parallel
D. All of above
50. Which of the following devices can be sued to directly image printed text?
A. OCR
B. OMR
C. MICR
D. All of above
51. In analog computer
A. Input is first converted to digital form
B. Input is never converted to digital form
C. Output is displayed in digital form
D. All of above
52. What is the responsibility of the logical unit in the CPU of a computer?
A. To produce result
B. To compare numbers
C. To control flow of information
D. To do math's works
53. A computer which CPU speed around 100 million instruction per second and with the word length of around 64 bits is known as
A. Super computer
B. Mini computer
C. Micro computer
D. Macro computer
54. The term gigabyte refers to
A. 1024 bytes
B. 1024 kilobytes
C. 1024 megabytes
D. 1024 gigabyte
55. Which of the following is not an input device?
A. OCR
B. Optical scanners
C. Voice recognition device
D. COM (Computer Output to Microfilm)
56. Which is considered a direct entry input device?
A. Optical scanner
B. Mouse and digitizer
C. Light pen
D. All of the above
57. The computer code for the interchange of information between terminals is
A. ASCII
B. BCD
C. EBCDIC
D. All of above
58. The silicon chips used for data processing are called
A. RAM chips
B. ROM chips
C. Micro processors
D. PROM chips
59. The ALU of a computer normally contains a number of high speed storage element called
A. Semiconductor memory
B. Registers
C. Hard disks
D. Magnetic disk
60. A byte consists of
A. One bit
B. Four bits
C. Eight bits
D. Sixteen bits
61. In which language is source program written?
A. English
B. Symbolic
C. High level
D. Temporary
62. A 32 bit microprocessor has the word length equal to
A. 2 byte
B. 32 byte
C. 4 byte
D. 8 byte
63. A hybrid computer
A. Resembles digital computer
B. Resembles analog computer
C. Resembles both a digital and analog computer
D. None of the above
64. In which year was chip used inside the computer for the first time?
A. 1964
B. 1975
C. 1999
D. 1944
65. A father said to his son, "I was as old as you are at the present at the time of your birth". If the father's age is 38 years now, the son's age five years back was:
A. 14 Years
B. 19 Years
C. 33 Years
D. 38 Years
66. 36 men can complete a piece of work in 18 days. In how many days will 27 men complete the same work?
A. 12
B. 18
C. 22
D. 24
67. A man has Rs. 480 in the denominations of one-rupee notes, fiverupee notes and ten-rupee notes. The number of notes of each denomination is equal. What is the total number of notes that he has?
A. 45
B. 60
C. 75
D. 90
68. One-third of Rahul's savings in National Savings Certificate is equal to one-half of his savings in Public Provident Fund. If he has Rs. $1,50,000$ as total savings, how much has he saved in Public Provident Fund?
A. Rs. 30,000
B. Rs. 50,000
C. Rs. 60,000
D. Rs. 90,000
69. 39 persons can repair a road in 12 days, working 5 hours a day. In how many days will 30 persons, working 6 hours a day, complete the work?
A. 10
B. 13
C. 14
D. 15
70. 3 pumps, working 8 hours a day, can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day?
A. 9
B. 10
C. 11
D. 12
71. Present ages of Sameer and Anand are in the ratio of 5:4
respectively. Three years hence, the ratio of their ages will become $11: 9$ respectively. What is Anand's present age in years?
A. 24
B. 27
C. 40
D. 42
72. A clock is started at noon. By 10 minutes past 5, the hour hand has turned through:
A. $145^{\circ}$
B. $150^{\circ}$
C. $155^{\circ}$
D. $160^{\circ}$
73. The angle between the minute hand and the hour hand of a clock when the time is 8.30 , is:
A. $80^{\circ}$
B. $75^{\circ}$
C. $60^{\circ}$
D. $105^{\circ}$
74. If a quarter kg of potato costs 60 paise, how many paise will 200 gm cost?
A. 48 paise
B. 54 paise
C. 56 paise
D. 72 paise
75. A wheel that has 6 cogs is meshed with a larger wheel of 14 cogs. When the smaller wheel has made 21 revolutions, then the number of revolutions mad by the larger wheel is:
A. 4
B. 9
C. 12
D. 49
76. Which one of the following is not a prime number?
A. 31
B. 61
C. 71
D. 91
77. The cube root of .000216 is:
A. . 6
B. . 06
C. 77
D. 87
78. $(51+52+53+\ldots+100)=$ ?
A. 2525
B. 2975
C. 3225
D. 3775
79. $\quad 217 \times 217+183 \times 183=$ ?
A. 79698
B. 80578
C. 80698
D. 81268
80. $\quad(1000)^{9} \div 10^{24}=$ ?
A. 10000
B. 1000
C. 100
D. 10
81. $106 \times 106-94 \times 94=$ ?
A. 2400
B. 2000
C. 1904
D. 1906
82. $(4300731)-?=2535618$
A. 1865113
B. 1775123
C. 1765113
D. 1675123
83. What will be remainder when $\left(67^{67}+67\right)$ is divided by 68 ?
A. 1
B. 63
C. 66
D. 67
84. In a division sum, the divisor is 10 times the quotient and 5 times the remainder. If the remainder is 46 , what is the dividend?
A. 4236
B. 4306
C. 4336
D. 5336
85. The difference of the squares of two consecutive even integers is divisible by which of the following integers?
A. 3
B. 4
C. 6
D. 7
86. If $(64)^{2}-(36)^{2}=20 \times x$, then $x=$ ?
A. 70
B. 120
C. 180
D. 140
87. If a and b are odd numbers, then which of the following is even ?
A. $a+b$
B. $a+b+1$
C. $a b$
D. $a b+2$
88. On dividing a number by 56 , we get 29 as remainder. On dividing the same number by 8 , what will be the remainder ?
A. 4
B. 5
C. 6
D. 7
89. $\quad 3251+587+369-?=3007$
A. 1250
B. 1300
C. 1375
D. 1200
90. The sum of how many terms of the series $6+12+18+24+\ldots$ is 1800 ?
A. 16
B. 24
C. 20
D. 18
91. It is being given that $\left(2^{32}+1\right)$ is completely divisible by a whole number. Which of the following numbers is completely divisible by this number?
A. $\left(2^{16}+1\right)$
B. $\left(2^{16}-1\right)$
C. $\left(7 \times 2^{23}\right)$
D. $\left(2^{96}+1\right)$
92. The sum of first five prime numbers is:
A. 11
B. 18
C. 26
D. 28
93. $\quad\left(112 \times 5^{4}\right)=$ ?
A. 67000
B. 70000
C. 76500
D. 77200
94. Which of the following is a prime number?
A. 33
B. 81
C. 93
D. 97
95. What least number must be added to 1056 , so that the sum is completely divisible by 23 ?
A. 2
B. 3
C. 18
D. 21
96. Which one of the following numbers is exactly divisible by 11 ?
A. 235641
B. 245642
C. 315624
D. 415624
97. How many of the following numbers are divisible by 132 ?
$264,396,462,792,968,2178,5184,6336$
A. 4
B. 5
C. 6
D. 7
98. If the number 653 xy is divisible by 90 , then $(x+y)=$ ?
A. 2
B. 3
C. 4
D. 6
99. 

$(?)+3699+1985-2047=31111$
A. 34748
B. 27474
C. 30154
D. 27574
100. The sum of first 45 natural numbers is:
A. 1035
B. 1280
C. 2070
D. 2140
101. The largest 4 digit number exactly divisible by 88 is:
A. 9944
B. 9768
C. 9988
D. 8888
102. A boy multiplied 987 by a certain number and obtained 559981 as his answer. If in the answer both 9 are wrong and the other digits are correct, then the correct answer would be:
A. 553681
B. 555181
C. 555681
D. 556581
103. $476^{* *} 0$ is divisible by both 3 and 11. The non-zero digits in the hundred's and ten's places are respectively:
A. 7 and 4
B. 7 and 5
C. 8 and 5
D. None of these
104.

$$
\left(2^{2}+4^{2}+6^{2}+\ldots+20^{2}\right)=?
$$

A. 770
B. 1155
C. 1540
D. $385 \times 385$
105. $(12345679 \times 72)=$ ?
A. 88888888
B. 888888888
C. 898989898
D. 9999999998
106. If $2994 \div 14.5=172$, then $29.94 \div 1.45=$ ?
A. 0.172
B. 1.72
C. 17.2
D. 172
107. $0.002 \times 0.5=$ ?
A. 0.0001
B. 0.001
C. 0.01
D. 0.1
108. If the number $5 * 2$ is divisible by 6 , then $*=$ ?
A. 2
B. 3
C. 6
D. 7
109. On dividing 2272 as well as 875 by 3 -digit number N , we get the same remainder. The sum of the digits of N is:
A. 10
B. 11
C. 12
D. 13
110. How many terms are there in the G.P. $3,6,12,24, \ldots, 384$ ?
A. 8
B. 9
C. 10
D. 11
111. A library has an average of 510 visitors on Sundays and 240 on other days. The average number of visitors per day in a month of 30 days beginning with a Sunday is:
A. 250
B. 276
C. 280
D. 285
112. What decimal of an hour is a second ?
A. . 0025
B. . 0256
C. . 00027
D. . 000126
113. $\left(x^{n}-a^{n}\right)$ is completely divisible by $(x-a)$, when
A. $n$ is any natural number
B. $n$ is an even natural number
C. $n$ is and odd natural number
D. $n$ is prime
114. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?
A. 564
B. 645
C. 735
D. 756
115. In how many ways can the letters of the word 'LEADER' be arranged?
A. 72
B. 144
C. 360
D. 720
116. A sum of money at simple interest amounts to Rs. 815 in 3 years and to Rs. 854 in 4 years. The sum is:
A. 650
B. 690
C. 698
D. 700
117. 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. 55.23
118. The captain of a cricket team of 11 members is 26 years old and the wicket keeper is 3 years older. If the ages of these two are excluded, the average age of the remaining players is one year less than the average age of the whole team. What is the average age of the team?
A. 23 Years
B. 24 Years
C. 25 Years
D. 26 Years
119. The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is:
A. 35 Years
B. 40 Years
C. 45 Years
D. 50 Years
120. In a group of 6 boys and 4 girls, four children are to be selecteD. In how many different ways can they be selected such that at least one boy should be there?
A. 159
B. 194
C. 205
D. 209
121. The average weight of $\mathrm{A}, \mathrm{B}$ and C is 45 kg . If the average weight of A and B be 40 kg and that of $B$ and $C$ be 43 kg , then the weight of $B$ is:
A. 17 kg
B. 20 kg
C. 26 kg
D. 31 kg
122. In how many ways can a group of 5 men and 2 women be made out of a total of 7 men and 3 women?
A. 63
B. 90
C. 126
D. 45
123. In the first 10 overs of a cricket game, the run rate was only 3.2 . What should be the run rate in the remaining 40 overs to reach the target of 282 runs?
A. 6.25
B. 6.5
C. 6.75
D. 7
124. How much time will it take for an amount of Rs. 450 to yield Rs. 81 as interest at $4.5 \%$ per annum of simple interest?
A. 3.5 Years
B. 4 Years
C. 4.5 Years
D. 5 Years
125. The series is: $1.5,2.3,3.1,3.9, \ldots$ What number should come next?
A. 4.2
B. 4.4
C. 4.7
D. 5.1
126. 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
127. The average monthly income of P and Q is Rs. 5050. The average monthly income of Q and R is Rs. 6250 and the average monthly income of P and R is Rs. 5200. The monthly income of P is:
A. 3500
B. 4000
C. 4050
D. 5000
128. 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. Rs. 2000
B. Rs. 10000
C. Rs. 15000
D. Rs. 20000
129. A person borrows Rs. 5000 for 2 years at $4 \%$ p.a. simple interest. He immediately lends it to another person at $6^{\frac{1}{4}}$ p.a for 2 years. Find his gain in the transaction per year.
A. Rs. 112.50
B. Rs. 125
C. Rs. 150
D. Rs. 167.50
130. A sum of Rs. 12,500 amounts to Rs. 15,500 in 4 years at the rate of simple interest. What is the rate of interest?
A. $3 \%$
B. $4 \%$
C. $5 \%$
D. $6 \%$
131. A sum of money amounts to Rs. 9800 after 5 years and Rs. 12005 after 8 years at the same rate of simple interest. The rate of interest per annum is:
A. $5 \%$
B. $8 \%$
C. $12 \%$
D. $15 \%$
132. In a certain store, the profit is $320 \%$ of the cost. If the cost increases by $25 \%$ but the selling price remains constant, approximately what percentage of the selling price is the profit?
A. $30 \%$
B. $70 \%$
C. $100 \%$
D. $250 \%$
133. A trader mixes 26 kg of rice at Rs. 20 per kg with 30 kg of rice of other variety at Rs. 36 per kg and sells the mixture at Rs. 30 per kg . His profit percent is:
A. $2 \%$
B. $5 \%$
C. $8 \%$
D. $10 \%$
134. A and B can do a piece of work in 30 days, while B and C can do the same work in 24 days and C and A in 20 days. They all work together for 10 days when B and C leave. How many days more will A take to finish the work?
A. 18 days
B. 24 days
C. 30 days
D. 36 days
135. A and B together can do a piece of work in 30 days. A having worked for 16 days, B finishes the remaining work alone in 44 days. In how many days shall B finish the whole work alone?
A. 30 days
B. 40 days
C. 60 days
D. 70 days
136. Sam purchased 20 dozens of toys at the rate of Rs. 375 per dozen. He sold each one of them at the rate of Rs. 33. What was his percentage profit?
A. 3.5
B. 4.5
C. 5.6
D. 6.5
137. The series is: $7,10,8,11,9,12, \ldots$ What number should come next?
A. 7
B. 10
C. 12
D. 13
138. If 6 men and 8 boys can do a piece of work in 10 days while 26 men and 48 boys can do the same in 2 days, the time taken by 15 men and 20 boys in doing the same type of work will be:
A. 4 days
B. 5 days
C. 6 days
D. 7 days
139. The ratio between the perimeter and the breadth of a rectangle is 5 : 1. If the area of the rectangle is $216 \mathrm{sq} . \mathrm{cm}$, what is the length of the rectangle?
A. 16 cm
B. 18 cm
C. 24 cm
D. 22 cm
140. On selling 17 balls at Rs. 720 , there is a loss equal to the cost price of 5 balls. The cost price of a ball is:
A. Rs. 45
B. Rs. 50
C. Rs. 55
D. Rs. 60
141. X and Y can do a piece of work in 20 days and 12 days respectively. X started the work alone and then after 4 days Y joined him till the completion of the work. How long did the work last?
A. 6 days
B. 10 days
C. 15 days
D. 20 days
142. Twenty women can do a work in sixteen days. Sixteen men can complete the same work in fifteen days. What is the ratio between the capacity of a man and a woman?
A. 3:4
B. $4: 3$
C. $5: 3$
D. $3: 5$
143. The percentage increase in the area of a rectangle, if each of its sides is increased by $20 \%$ is:
A. $40 \%$
B. $42 \%$
C. $44 \%$
D. $46 \%$
144. Look at this series: 58, 52, 46, 40, 34, ... What number should come next?
A. 26
B. 28
C. 30
D. 32
145. The series is: U32, V29, _, X23, Y20, ... What number should fill the blank?
A. W26
B. W17
C. Z 17
D. Z26
146. Look at this series: J14, L16, _, P20, R22, ... What number should fill the blank?
A. S24
B. N 18
C. M18
D. T24
147. 8112115182122
A. 2518
B. 2521
C. 2529
D. 2421
148. How many 3-digit numbers can be formed from the digits 2, 3, 5, 6, 7 and 9 , which are divisible by 5 and none of the digits is repeated?
A. 5
B. 10
C. 15
D. 20
149. 4 men and 6 women can complete a work in 8 days, while 3 men and 7 women can complete it in 10 days. In how many days will 10 women complete it?
A. 35
B. 40
C. 45
D. 50
150. Look at this series: F2, _, D8, C16, B32, ... What number should fill the blank?
A. A16
B. G4
C. E4
D. E3

