MODEL EXAMINATION PAPER 1

No. of Questions : 100
Time : 2 Hrs

1. The number obtained by reverting the digits is 594 less than the original number. The number is
   1) 762   2) 258   3) 528   4) 852

2. Twenty men can finish *a* piece of work in 30 days. When should 5 men leave the work so that it may be finished in 35 days
   1) 10 days   2) 20 days   3) 25days   4) l5 days

3. The value of a machine depreciates from Rs. 32,768 to Rs. 21,952 in three years. What is the rate % of depreciation?
   1) 11%   *2)* 12.5%   3) 33%   4) 1*2.25%*

4. If $x^2 - 3x + 2$ is a factor of $x^4 - px^2 + q$, then the value of p and q respectively will be
   1) -5, 4   2) -5, -4   3) 5, 4   4) 5, -4

5. The rational numbers lying between (1/3) and (3/4) are
   1) 117/300, 287/400   2) 97/300, 299/500   3) 99/300, 301/400   4)95/300, 301/400

6. Find the greatest number that will divide 1625, 2281 and 4218 leaving remainders 8, 4, 5 respectively
   1) 11   2) 12   3) 13   4) 14

7. The area of a grassy plot is 480 metres. If each side has been 5m longer, the area would have been increased by 245 sq. m. Find the length of the fence to surround it
   1) 87   2) 88   3) 90   4) *92*

8. The diagonals of a rhombus are 60 m and 80 m. Its area would be
   1) 1000 sq. m   *2)* 3600 sq. m   3) 2400 sq. m   4) 4800 sq. m

9. A vessel can be filled by one pipe in 8 minutes, by a second pipe in 10 minutes. It can be emptied by a waste pipe in 12 minutes. In what time will the vessel be filled if all the three be opened at once?
   1) *7* 1/17 minutes   2) 6 minutes   3) 10 minutes   4) 8(1/17) minutes

10. The average age of 32 students is 10 years. If the teachers age is also included, the average age increases by one year. What is the age of the teacher?
   1) 50   2) 34   3) 43   4) 32

11. The string of a kite is 150 metres long and it makes an angle of 60° with the horizontal, the height of the kite from the ground would be
   1) 130.1m   2) 129.9m   3) 112 m   4) 75 m

12.   If $x = 2^{1/3} - 2^{-1/3}$ F then the value of $2x^3 + 6x$ would be
   1) 3   2) 6   3) 9   4) 0

13. If x = (b – c)/a, y = (c – a)/b, z = (a – b)/c, then the value of x + y + z + xyz is
   1) 4   2) abc   3) a + b + c   4) 0

14. The value of t he expression $\sqrt{4 + \sqrt{15}} + \sqrt{4 - \sqrt{15}} - \sqrt{12 - 4\sqrt{5}}$ is
   1) a natural number   2) a negative number

1

    3) a non- integer rational number   4) a irrational number

15. A∩(B∩C) is same as
    1) (AUB) – (A∩C)   2) (A∩B) – C
    3) (A∩B) – (A∩C)   4) A – (B∩C)

16. If $\log_{10} x + \log_{10} 5 = 2$, then x equals
    1) 25   2) 20   3) 15   4) 100

17. The sum of the square of two consecutive even numbers is 1252. The sum of the numbers is
    1) 48   2) 50   3) 52   4) 54

18. If the angles of a pentagon are in the ratio 1:3:6:7:10, then the smallest angle is
    1) 32   2) 30   3) 27   4) 20

19. Turn odd man out 41, 43, 47, 53, 61, 71, 73, 81
    1) 61   2) 71   3) 73   4) 81

20. Complete the series 2, 5, 9, 19, 37, ………
    1) 76   2) 74   3) 75   4) 73

21. The calendar for 1990 is the same as for
    1) 1996   2) 1997   3) 1994   4) 2000

22. What is the smallest number by which 3600 is divided to make it a perfect cube?
    1) 9   2) 50   3) 450   4) 300

23. What is 25% of 25%?
    1) 6.25   2) 0.625   3)0.0625   4) 0.00625

24. What price should a shopkeeper mark on an article, costing him Rs.153, to gain 20% after allowing a discount of 15%
    1) Rs. 224   2) Rs. 216   3) Rs. 184   4) Rs. 162

25. If 18 persons can build a wall 140 m long in 42 days, the number of days that 30 persons will take to complete a similar wall 100m long is
    1) 18 days   2) 21 days   3) 24 days   4) 28 days

Directions:
Questions 26, 27 and 28 are based on the passage given. Choose the best answer for each.
Passage: If a person reads a lot he will increase his vocabulary. In doing so he will increase his speaking and writing power.
26. The argument is based on the assumption
   (M) String vocabulary is important for writing and speaking
   (N) People should read books containing unfamiliar words
   (O) The books to be read should be entertaining
   1) (M) only   2) (N) only   3) (M) and (n) only   4) (N) and (O) only

27. Which one of the following would weaken the argument?
   1) Educated people can express their thoughts better
   2) Only a well read person can make proper use of the English language
   3) The style of a person is coloured by the style of the authors he reads
   4) Those who passed vocabulary tests could not write well

28. Which will strengthen the argument?

2

(M) Slow readers cannot do well in competitive exams
(N) Every one must study English
(O) In order to become a good lecturer in English one must increase one's vocabulary
1) (M) only   2) (N) only   3) (O) only   4) (M), (N) and (O)

Questions 29 to 32
Four cousins, Deepak, Pooja, Saurabh and Gaurau have different hobbies and play different game. The hobbies they are interested in are story – reading, music, watching TV serials and going to movies. The children play cricket, badminton, hockey and fly kites. Saurabh and Gaurav do not like TV serials or movies. Pooja and Saurabh do not play cricket or hockey. Deepak and Gaurav do not read stories or fly kites. Saurabh does not play badminton. Music lovers does not Like to play hockey. The badminton player does not watch TV serials

29. What is Deepak's hobby and which game does he play ?
    1) TV serial : hockey   2) Music : badminton
    3) Movies : cricket   4) Music : cricket

30. What are Saurabh's interest?
    1) Music : kites   2) Music : badminton
    3) Stories : hockey   4) Stones : kites

31. Who likes movies and which game does that person play?
    1) Deepak : hockey   2) Pooja : badminton
    3) Pooja : cricket   4) Deepak : cricket

32. Who likes music?
    1) Gaurav   2) Saurabh   3) Pooja   4) Deepak

Read the following statements and answer the question 33 and 34
Five shirts are placed on a shelf in a heap. Red shirt is above the Blue shirt and Green shirt is below the Orange shirt. Blue shirt is above the Orange shirt and White is below the Green shirt.
33. The colour of the shirt between Red and Orange shirts is
    1) White   2) Green   3) Blue   4) Data is insufficient

34. Which colour shirt is at the bottom ?
    1) Red   2) White   3) Orange   4) Cannot be said

35. A person is driving towards west. What sequence of direction should he follow so that he is driving towards south?
    1) left, right, right   2) right, right, left
    3) left, left, left   4) right, right, right

36. I was walking in South-Emit direction. After a while I turned 90° to the right and walked ahead. Later I turned 45° to the right. In which direction am I walking now 7
    1) East   2) North-East   3) South-West   4) North

Read the following statements and answer the questions 37 to 39 ;
A is the father of C. But C is not his son.
E is the daughter of C. F is the spouse of A.
B is the brother of C. D is the son of B.
G is the spouse of B. H is the father of G.
37. Who is the son-in-law of H?
    1) A   *2)* B   3) C   4) D

3

38. Who is the grand - daughter of A?
    1) B   2) H   3) E   4) D

39. Who is the common grand - child of both F and H?
    1) B   *2) C*   3) D   4) H

Directions :
On the basis of the following diagram answer, questions 40 to 43

The rectangle represents the bachelors
The square represents the Delhi Metropolis
The circle represents the English language
The triangle represents the tourists

40. The portion representing bachelor tourists, who know the English language is
    1) 2   2) 1   3) 7   4) 4

41. The portion representing bachelor tourists, who know the English language is
    1) 6   *2) 9*   3) 7   4) 8

42. Which of the following is true?
    1) Some of the tourists are staying in Delhi Metropolis
    2) No person m Delhi Metropolis knows English
    3) English is spoken by *a* few tourists and some persons in Delhi
    4)   None of the above statements are true

43. Tourists, who *are* bachelors and do not know the English language is represented by the section marked
    1) 1   2) 2   3) 3   4) 4

44. A hospital always has
    1) attendants   2) nurses   3) emergency   4) doctors

43. Blood is formed in the human adult by
    1) bone-marrow   2) liver   3) heart   4) Lungs

46. If ACTION is coded *as* ZXGRLM, then HEALTH will be coded in the s*ame way as*
    1) SVZOGS   2) TVZOGT   3) RUZPGR   4) QVGOZQ

47. If OUT is coded as 152120, IN will be coded as
    1) 1015   2) 1813   3) 819   4) 914

Direction:
Based on the relationship of the two given words, find the missing term from the given option.
48. NATION : ANITNO : : HUNGRY : ?
    1) HNUGRY   *2)* UNHGYR   3) YRNGUH   4) UHGNYR

Direction :
Which of the following groups of letters will complete the given series

4

49. ab-ccca-bccc-bbcc-

    1) abbc   2) bbac   3) bbca   4) cabc

50. If $\div$ Means +, $\times$ Means -, + Means $\times$, - Means $\div$ then $8\div15-3\times4+2$ = ?

    1) 18   2) 5   3) 23/24   4) 23/6

Direction :

For questions 51 to 54, in each questions are given two statements followed by two conclusions numbered I and II. You have to take the two given statements to be True even if they *seem* to be at variance from the commonly known facts and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts

Given answer

1. if only conclusion I follows
2. if only conclusion II follows
3. if either I or II follows
4. if neither I nor II follows

51. **Statements** :   All politicians are intelligent

                             Some women ore politicians

    Conclusion: I Some women are intelligent

                             II All those intelligent women

52. **Statements** :   Some teachers are adults

                             Some adults are poets

    Conclusion: I Some teachers are poets

                             II Some poets are teachers

53. **Statements :**   Lawyers married only fair girls

                             Shoba is very fair

    Conclusion :   I Shoba was married to a lawyer

                             II Shoba was not married to a lawyer

54. **Statements** :   Some dogs are rats

                             All rats ere horses

    Conclusion :   I All dogs are horses

                             II Some horses are dogs

Directions (Q. 55 - 56)

Out of the five statements, there are logically compact. From the answer choices pick up the one which give three logically compact statements.

55. (1)   Some caps are tanks

     (2)   Some bulbs are not caps

     (3)   All caps ore bulbs

     (4)   All tanks are caps

     (5)   Some bulbs are tanks

   1) (3), (5), (4)   2) (1), (3), (4)   3) (1), (2), (3)   4) (1), (3), (5)

56. (1)   All birds are rings

     (2)   No wing is bird

     (3)   Some rings are wings

     (4)   No ring is wing

     (5)   Some birds are not rings

1) (5), (2), (1) 2) (2), (3), (4) 3) (1), (4), (2) 4) (2), (4), (5)

Direction for Q. (57 - 60)

In each of the questions one or more statements have been given followed by four interferences. Find out the interference that definitely follows from the given statements

57. Soldiers serve their country
   1) Those who serve the country are soldiers
   2) Women do not serve their country because they are not soldier
   3) Men generally serve the country
   4) Some men who are soldiers serve their country

58. **Many smokers get cancer**
   1) Most cancer patients are smokers
   2) Smoking may lead to cancer
   3) Most smokers get cancer
   4) Smoking always leads to cancer

59. **All business men are dishonest**
    All business men are fraudulent
   1) Either all fraudulent persons are dishonest or all dishonest are fraudulent
   2) Some dishonest persons are fraudulent
   3) Generally fraudulent persons are dishonest
   4) Fraud and dishonesty go together

60. **All men are vertebrates**
    Some mammals are vertebrates
   1) All men are mammals
   2) All mammals are men
   3) Some vertebrates are mammals
   4) All vertebrates are men

Directions : Each of the questions 61 to 65 is followed by two Arguments numbered I and II. You are to decide which one *is* strong and which is week. Mark
   1) if argument I is strong
   2) if argument II is strong
   3) if neither I nor II i**s** strong

61. **Question** : Should all the elected legislative members be put through compulsory training for running the government?
   Arguments : I Yes, it will certainly be helpful.
                   II No, people elect only matured individuals who are able to hold the office

62. **Question :** Should primary education be made free in India?
   Arguments : I Yes, in a welfare state it is the duty of the government to impart primary education.
                   II No, India does not have adequate number of primary schools to accommodate all.

63. **Question :** Should the degree be de-linked from job ?
   Arguments : I Yes, because such a step would discourage students from joining universities
                   II No, because well educated are the backbone of democracy.

64. **Question :** Is a coalition government suitable for democracy ?

Arguments : I Yes, because; such government cannot become dictorial
II No, because such government cannot be stable

65. **Question :** Should rural banks be abolished ?
Arguments : I Yes, because they are not run properly
II No, because they will develop villages

Directions :
Each of the question 66 to 70 consists of a question statement and two data statements numbered I and II Read both and Mark
1. If data 1 alone is sufficient to answer the question
2. If data II alone is sufficient to answer the question
3. If both data I and II taken together is sufficient
4. If both data I and II taken together is not sufficient

66. **Statement :** Which day will be the last day of the month of March ?
Data : I The first day of March and the year are given
II The first day of the year given

67. **Statement :** A is taller than C and D is shorter than E who among them is the shortest
Data : I D is taller than A
II C is shorter than E

68. **Statement :** 'A' and 'B's salaries are in proportion 4 : 3 respectively. What is A's salary?
Data : I B's salary is 75% of A's salary
II B's salary is 4,500 p.m.

69. **Statement** : Many pick pockets have been arrested ?
Data : I Picking pocket is a cognisable offence
II Police arrest those who commit this offence

70. **Statement** : Nuclear war will leave no victor and no vanquished
Arguments : I There are victors and vanquished after war
II Nuclear war is destructive

Directions:
For question 71 to 75 a statement is followed by two conclusions. Point out
1. If only first conclusion is true
2. If only second conclusion is true
3. If both the conclusions are true
4. If neither of the conclusion is true

71. **Statement :** The increase in adult literacy will lead to country's development and progress.
Conclusions: I The educated people offer less resistance to new innovations
II The literacy rate is higher in developed countries.

72. **Statement** : Crime is a function of criminals biological make up and his family relations
Conclusions: I The incidence of crime is higher in identical twins then in fraternal twins
II Families in which parents lack warmth and affection fail to build a moral conscience in children.

73. **Statement :** Education is in the concurrent list. The State Government cannot bring reforms in education without the consent of the Central Government
Conclusions: I For bringing about quick reforms in education, it should be in the state list
II States are not willing to bring about quick reforms in education.

74. **Statement** : Douglas is my cousin. A cousin may be a sister's son or an uncle's son or brother's son
    Conclusions: I Douglas is my sister's son
    II Douglas is my uncle's son

75. **Statement** : The negotiations failed. There was an atmosphere of tension. The parties withdrew to their old positions
    Conclusions: I In the atmosphere of tension negotiations cannot succeed
    II Had the negotiations been successful they would have taken new positions.

76. Which of the following is the most powerful type of computer?
    1) Super-micro   2) Superconductor
    3) Supercomputer   4) Megaframe

77. Coded entries which are used to gain access to a computer system are called
    1) Entry codes   2) Passwords
    3) Security commands   4) Code words

78. A term associated with the comparison of processing speeds of different computer system is
    1) EFTS   2) MPG   3) MIPS   4) CPS

79. Human beings are referred to as Homosapiens. Which device is called silicosapiens ?
    1) Monitor   2) Hardware   3} Robot   4) Computer

80. A software package generally used with in a distributed word processing system is
    1) ATMS   2) DWPS   3) RPG   4) DBMS

81. Which was the first company in the world to build computer for sale?
    1) International Business Machines   2) Remington Rand Corporation
    3) English Electric Computers   4) Sperry Univac

82. The first movie released in 1982 with terrific computer animation and graphics was
    1) Star wars   2) Tron   3) Forbidden planet   4) Dark star

83. Which of the following is an example of nonvolatile memory ?
    1) ROM   2) RAM   3) LSI   4) VLSI

84. In virtual storage, program segments stored on disk during processing are called
    1) sections   2) partitions   3) sectors   4) pages

85. Which of the following is not an alternate name for primary memory ?
    1) Main memory   2) Primary storage   3) Internal storage   4) Mass storage

86. What is the number of bit patterns provided by a 7-bit code ?
    1) 64   2) 256   3) 128   4) 512

87. The word length of a computer is measured in
    1) bits   2) bytes   3) millimetres   4) metres

88. What does the acronym ISDN stands for
    1) Indian Standard Digital Network   2) Integrated Services Digital Network
    3) Intelligent Services Digital Network   4) Integrated Services Data Network

89. A network which is used for sharing data, software and hardware among several users owning micro computers is called
    1) WAN   2) MAN   3) LAN   4) VAN

90. The operating system for the laptop compi called Machite is
    1) Windows   2) DOS   3) MS-DOS   4) OZ

91. The errors that can be pointed out by compiler are
    1) Syntax errors   2) Semantic errors   3) Logical errors   4) Intemal errors

92. Which of the following colour graphics dia adapter has the highest resohition ?
    1) CGA   2) HGA   3) EGA   4) VGA

93. The programming language used in Artil Intelligence and expert system developmc
    1) RPG   2) PROLOG   3) FORTRAN   4) C + +

94. Whose trademark is the operating sy: UNIX?
    1) BELL Laboratories   2) Ashton Tate
    3) Microsoft   4) Motorola

95. Which tanguage has recently becamt defacto standard for interfacing applic programs ivith relational database systen
    1) ORACLE   2) SQL   3) dBASE   4) 4GL

96. The naine given to a program uncitten in any one of the high level languages is
    1) Object program   2) System program   3) Source program   4) Compiler program

97. The MIS structure with one main computer system is called a
    1) distributed MIS structure   2) hierarchical MIS structure
    3) centralised MIS structure   4) decentralised MIS structure

98. A language for simulating models of business activity is
    1) SPSS   2) DL/1   3) COBOL   4) GPSS

99. Graphic interfaces were first used in a xerox product called
    1) Ethernet   2) Inter LISP   3) Smalltalk   4) Zeta LISP

100. What console command displays the server name and LAN configuration ?
    1) VER   2) CONFIG   3) N CONFIG   4) N DIR/LAN

1.	2
2.	4
3.	2
4.	3
5.	1
6.	1
7.	2
8.	3
9.	1
10.	3
11.	2
12.	1
13.	4
14.	4
15.	3
16.	2

17.	2
18.	4
19.	4
20.	3
21.	2
22.	3
23.	3
24.	2
25.	1
26.	3
27.	4
28.	3
29.	1
30.	4
31.	2
32.	1
33.	3
34.	2
35.	4
36.	4
37.	2
38.	3
39.	3
40.	2
41.	*
42.	3
43.	2
44.	4
45.	1
46.	1
47.	4
48.	4
49.	2
50.	2
51.	1
52.	4
53.	3
54.	2
55.	4
56.	3
57.	1
58.	2
59.	2
60.	3
61.	1
62.	3
63.	3
64.	3

65.	2
66.	1
67.	4
68.	2
69.	2
70.	4
71.	3
72.	2
73.	4
74.	3
75.	2
76.	3
77.	3
78.	3
79.	3
80.	2
81.	4
82.	1
83.	1
84.	3
85.	4
86.	3
87.	2
88.	2
89.	3
90.	4
91.	3
92.	4
93.	2
94.	1
95.	2
96.	3
97.	3
98.	4
99.	1
100.	3