

MCA – Model Question Paper

I. Each one of questions 1 to 30 is independent:

1. A 300 meter long train crosses a platform in 39 seconds while it crosses a signal pole in 18 seconds. What is the length of the platform?
(a) 320 m (b) 350 m
(c) 650 m (d) 340 m
2. A and B can complete a work in 15 days and 10 days respectively. They started doing the work together, but after 2 days B had to leave and A alone completed the remaining work. The whole work was completed in :
(a) 8 days (b) 10 days
(c) 12 days (d) 15 days
3. When a plot is sold for Rs. 18,700, the owner loses 15%. At what price must that plot be sold in order to gain 15%?
(a) Rs. 21,000 (b) Rs. 22,500
(c) Rs. 25,300 (d) Rs. 25,800
4. The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?
(a) 4 years (b) 8 years
(c) 10 years (d) 9 years
5. The sum of the present ages of a father and his son is 60 years. Six years ago, father's age was five times the age of the son. After 6 years, son's age will be:
(a) 12 years (b) 14 years
(c) 18 years (d) 20 years
6. A grocer has a sale of Rs. 6435, Rs. 6927, Rs. 6855, Rs. 7230 and Rs. 6562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs. 6500?
(a) Rs. 4991 (b) Rs. 5991
(c) Rs. 6001 (d) Rs. 6991
7. 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
8. How many kilogram of sugar costing Rs. 9 per kg must be mixed with 27 kg of sugar costing Rs. 7 per kg so that there may be a gain of 10% by selling the mixture at Rs. 9.24 per kg?
(a) 36 kg (b) 42 kg
(c) 54 kg (d) 63 kg
9. 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
10. A flagstaff 17.5 m high casts a shadow of length 40.25 m. The height of the building, which casts a shadow of length 28.75 m under similar conditions will be:
(a)10 m (b)12.5 m
(c)17.5 m (d)21.25 m
11. The ratio between the length and the breadth of a rectangular park is 3 : 2. If a man cycling along the boundary of the park at the speed of 12 km/hr completes one round in 8 minutes, then the area of the park (in sq. m) is:
(a)15360 (b)153600
(c)30720 (d)307200
12. A tank is 25 m long, 12 m wide and 6 m deep. The cost of plastering its walls and bottom at 75 paise per sq. m, is:
(a)Rs. 456 (b)Rs. 458
(c)Rs. 558 (d)Rs. 568
13. How many times do the hands of a clock coincide in a day?
(a)20 (b)21
(c)22 (d)24
14. The population of a town increased from 1,75,000 to 2,62,500 in a decade. The average percent increase of population per year is:
(a)4.37% (b)5%
(c)6% (d)8.75%
15. In one hour, a boat goes 11 km/hr along the stream and 5 km/hr against the stream. The speed of the boat in still water (in km/hr) is:
(a)3 km/hr (b)5 km/hr
(c)8 km/hr (d)9 km/hr
16. Speed of a boat in standing water is 9 kmph and the speed of the stream is 1.5 kmph. A man rows to a place at a distance of 105 km and comes back to the starting point. The total time taken by him is:
(a)16 hours (b)18 hours
(c)20 hours (d)24 hours
17. Two dice are tossed. The probability that the total score is a prime number is:
(a) $\frac{1}{6}$ (b) $\frac{5}{12}$
(c) $\frac{1}{2}$ (d) $\frac{7}{9}$
18. Two cards are drawn together from a pack of 52 cards. The probability that one is a spade and one is a heart, is:
(a) $\frac{3}{20}$ (b) $\frac{29}{34}$
(c) $\frac{47}{100}$ (d) $\frac{13}{102}$

19. If one-third of one-fourth of a number is 15, then three-tenth of that number is:
(a)35 (b)36
(c)45 (d)54
20. If one-seventh of a number exceeds its eleventh part by 100 then the number is...
(a)770 (b)1100
(c)1825 (d)1925
21. What is a percent of b divided by b percent of a?
(a)a (b)b
(c)1 (d)10
22. If point P is on line segment AB, then which of the following is always true?
(a)AP = PB (b)AP > PB
(c)PB > AP (d)AB > AP
23. The length of the side of a square is represented by $x+2$. The length of the side of an equilateral triangle is $2x$. If the square and the equilateral triangle have equal perimeter, then the value of x is _____.
(a)4 (b)14
(c)16 (d)8
24. The average of 11 numbers is 50. The average of first 6 numbers is 49 and that of last 6 is 52. Find the 6th number.
(a)55 (b)56
(c)62 (d)42
25. Two third of three fifth of one fourth of a number is 24. What is 40% of that number?
(a)96 (b) 72
(c)120 (d)156
26. How many terms of the series $230 + 227 + 224 + \dots$ make a sum of 4200.
(a) 20 (b) 22
(c) 21 (d) 24
27. Compute $8!/4!$
(a) 1680 (b) $4!$
(c) $2!$ (d) 178
28. If $9x-3y = 12$ and $3x-5y = 7$, then $6x-2y$ equals ?
(a) -5 (b) 8
(c) 4 (d) 7
29. Which one of the following has a greatest value?
(a)0.3 (b) $0.3^{0.5}$
(c) $2/5$ (d) $1/3$

30. If $x > 8$ and $y > -4$, then which one of the following is always true?
(a) $xy < 0$ (b) $x^2 < -y$
(c) $-x < 2y$ (d) $x > y$

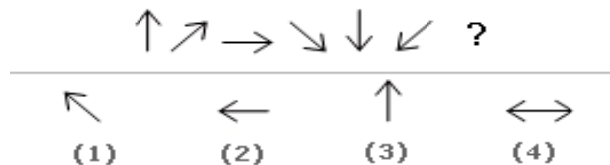
II. Fill in the blanks

31. 5, 10, 13, 26, 29, 58, 61, ____
(a) 122 (b) 64
(c) 125 (d) 128
32. 10, 5, 13, 10, 16, 20, 19, ____
(a) 22 (b) 40
(c) 38 (d) 23
33. 11, 13, 17, 19, 23, 29, 31, 37, 41, ____
(a) 43 (b) 47
(c) 53 (d) 51
34. 7, 26, 63, 124, 215, 342, ____
(a) 481 (b) 511
(c) 391 (d) 421
35. ELFA, GLHA, ILJA, ____, MLNA
(a) OLPA (b) KLMA
(c) LLMA (d) KLLA

III. Diagrammatic Reasoning Questions

Look carefully at the sequence of symbols to find the pattern. Select correct pattern.

36.



- (a) 1 (b) 2
(c) 3 (d) 4

37.



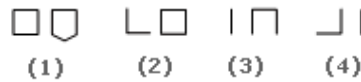
- (a)1 (b)2
(c)3 (d)4

38.



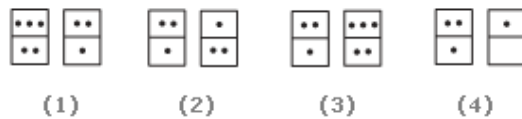
- (a)1 (b)2
(c)3 (d)4

39.



- (a)1 (b)2
(c)3 (d)4

40.



- (a)1 (b)2
(c)3 (d)4

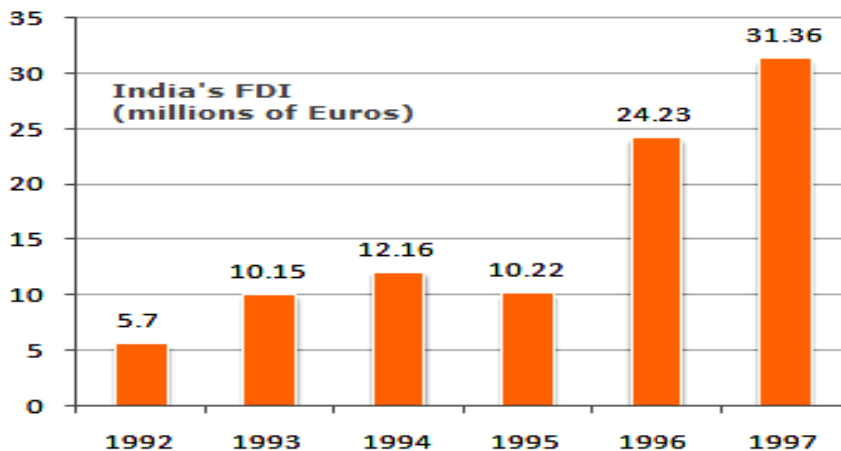
IV. Three of the words will be in the same classification; the remaining one will not be. Your answer will be the one word that does NOT belong to the same classification as the others.

41. Which word does NOT belong with the others?
 (a) CDX (b) MNU
 (c) PQM (d) EGY
42. Which word does NOT belong with the others?
 (a) Reader (b) Publisher
 (c) Reporter (d) Writer
43. Which word does NOT belong with the others?
 (a) River (b) Pond
 (c) Pool (d) Lake
44. Which word does NOT belong with the others?
 (a) 10 (b) 222
 (c) 68 (d) 125
45. Which word does NOT belong with the others?
 (a) explain (b) illustrate
 (c) eradicate (d) elucidate

V. Study the graph carefully and answer the questions 46 to 50.

The following bar chart shows the trends of Foreign Direct Investments(FDI) into India from all over the world.

Trends of FDI in India



46. What was the ratio of investment in 1997 over the investment in 1992 ?
 (a) 5.50 (b) 5.36
 (c) 5.64 (d) 5.75
47. What was absolute difference in the FDI to India in between 1996 and 1997 ?

- (a)7.29 (b)7.13
(c)8.13 (d)7.23
48. If India FDI from OPEC countries was proportionately the same in 1992 and 1997 as the total FDI from all over the world and if the FDI in 1992 from the OPEC countries was Euro 2 million. What was the amount of FDI from the OPEC countries in 1997 ?
(a)11 (b)10.72
(c)11.28 (d)11.5
49. Which year exhibited the highest growth in FDI in India over the period shown ?
(a)1993 (b)1994
(c)1995 (d)1996
50. What was India's total FDI for the period shown in the figure ?
(a)93.82 (b)93.22
(c)93.19 (d)93.92

VI. Identify the relationship between the word pair in the question. Select the answer where the word pair shown has the most similar relationship.

51. Silence : Noise
(a)Quiet : Peace (b)Baldness : Hair
(c)Talk : Whisper (d)Sing : Dance
52. Sound : Muffled
(a)Moisture : Humid (b)Colour : Faded
(c)Despair : Anger (d)Odour : Pungent
53. Candle : Wick
(a)Hammer : Nail (b)Light : Bulb
(c)Oven : Fire (d)Bicycle : Wheel
54. Stove : Kitchen
(a)Window : Bedroom (b)Sink : Bathroom
(c)Pot : Pan (d)Television : Living room
55. Rectangle : Pentagon
(a)Side : Angle (b)Diagonal : Perimeter
(c)Triangle : Rectangle (d)Circle : Square

VII. In each of the following questions find out the alternative which will replace the question mark .

56. ACEG : IKMO :: QSUW : ?
(a)YZCE (b)YACD
(c)YACE (d)YBCE
57. ZRYQ : KCJB :: PWOV : ?
(a)GBHA (b)ISJT
(c)ELDK (d)EOFP
58. BLOCKED : YOLXPVW :: ? : OZFMXS
(a)DEBATE (b)RESULT
(c)LABOR (d)LAUNCH
59. CEDH : HDEC :: ? : PNRV
(a)VRNP (b)RNPV
(c)NRVP (d)VNRP
60. Corden : zrogbq :: Pxivro : ?
(a)mulmul (b)sulsul
(c)munmun (d)srspql

VIII. Rearrange the following FIVE sentences (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph; then answer the questions given below them. (Q. 61 to 65)

- A. The ash spun around can be more ruinous
B. It appears as if wrecking revenge on one and all with its suddenness.
C. The death and damage because of the hot lava can be very large.
D. The land all around becomes useless for crops for many years because of this.
E. When a volcano erupts after a long silence it brings with it death and ruin in its wake.

61. Which sentence should come **Fourth** in the paragraph?
(a)A (b)C (c)E (d)D
62. Which sentence should come **Last** in the paragraph ?
(a)E (b)B (c)C (d)D
63. Which sentence should come **Second** in the paragraph?
(a)D (b)B (c)C (d)A
64. Which sentence should come **First** in the paragraph ?
(a)B (b)C (c)A (d)E
65. Which sentence should come **Third** in the paragraph?
(a)A (b)D (c)C (d)E

IX. Follow the instructions given below [From 66 to 70]

1. A ,B, C, D and E are five men sitting in a line facing south - while M, N, O, P and Q are five ladies sitting in a second line parallel to the first line and are facing North.
2. B who is just next to the left of D, is opposite to Q.
3. C and N are diagonally opposite to each other.
4. E is opposite to O who is just next right of M.
5. P who is just to the left of Q, is opposite to D.
6. M is at one end of the line.

66. Who is sitting third to the right of O ?
 (a)Q (b)N
 (c)M (d)E
67. If B shifts to the place of E, E shifts to the place of Q, and Q shifts to the place of B, then who will be the second to the left of the person opposite to O ?
 (a)Q (b)P
 (c)C (d)E
68. Which of the following pair is diagonally opposite to each other ?
 (a)EQ (b)BO
 (c)AN (d)AM
69. If O and P, A and E and B and Q interchange their positions, then who will be the second person to the right of the person who is opposite to the person second of the right of P ?
 (a)D (b)A
 (c)E (d)O
70. In the original arrangement who is sitting just opposite to N ?
 (a)B (b)A
 (c)C (d)D

X. Follow the instructions given below [From 71 to 75]

Replace the phrase printed in **bold** type to make the sentence grammatically correct.

71. We demonstrated to them how we **were prepared** the artistic patterns.
 (a)are prepared (b)have prepared
 (c)are preparing (d)had prepared
72. For some days the new professor lectured **above the heads of** his pupils.
 (a)over the head of (b)over the heads of
 (c)on the heads of (d)through the heads of
73. **Despite of their** differences on matters of principles, they all agree on the demand of hike is salary?
 (a)Despite their (b)Despite of the
 (c)Despite for their (d)Despite off their

74. We don't know **how did the thief made** an escape.
 (a) how the thief did make (b) how the thief does make
 (c) how the thief made (d) how was the thief made
75. Maria unnecessarily **picked up** a quarrel with Rani and left the party hurried.
 (a) has picked up (b) picked on
 (c) picked (d) picking up

XI. Read the passage carefully and choose the best answer to each question. The questions are to be answered on the basis of what is stated or implied in the passage.

The strength of the electronics industry in Japan is the Japanese ability to organise production and marketing rather than their achievements in original research. The British are generally recognized as a far more inventive collection of individuals, but never seem able to exploit what they invent. There are many examples, from the TSR Z hovercraft, high speed train and Sinclair scooter to the Triumph, BSA and Norton Motorcycle which all prove this sad rule. The Japanese were able to exploits their strengths in marketing and development many years ago, and their success was at first either not understood in the West or was dismissed as something which could have been produced only at their low price. They were sold because they were cheap copies of other people's ideas churned out of a workhouse which was dedicated to hard grind above all else.

76. It is evident from the passage that the strength of a country's industry depends upon
 (a) original research (b) international cooperation
 (c) dedicated workforce (d) electronic development
77. The sad rule mentioned in this passage refers to
 (a) the inability of the Japanese to be inventive like the British
 (b) the inability of the British to be industrious like the Japanese
 (c) the lack of variety in Japanese inventions
 (d) the poorer marketing ability of British
78. The TSR Z hovercraft, high speed train, Sinclair scooter etc. are the symbols of
 (a) Japanese success (b) British failure
 (c) British success (d) Japanese failure
79. It According to the passage, prosperity in industry depends upon
 (a) productivity (b) inventiveness
 (c) marketing ability (d) official patronage
80. The main theme of this passage is
 (a) electronic industry in Japan
 (b) industrial comparison between Japan and Britain
 (c) the role of marketing efficiency in industrial prosperity
 (d) the importance of original research in industry

XII. Choose the Synonym for the given words.

81. CANNY

- (a)Obstinate (b)Handsome
(c)Clever (d)VNRP
82. LYNCH
(a)Hang (b)Madden
(c)Kill (d)Shoot
83. INEXPLICABLE
(a)Confusing (b)Unaccountable
(c)Chaotic (d)Unconnected
84. HARBINGER
(a)Forerunner (b)Steward
(c)Messenger (d)Pilot
85. FURORE
(a)Anteroom (b)Worry
(c)Flux (d)Excitement

XIII. Choose the Antonym for the given words.

86. FICKLE
(a)Courageous (b)Sincere
(c)Steadfast (d)Humble
87. SUBSERVIENT
(a)Aggressive (b)Dignified
(c)Straightforward (d)Supercilious
88. FRUGAL
(a)Copious (b)Extravagant
(c)Generous (d)Ostentatious
89. GREGARIOUS
(a)Antisocial (b)Glorious
(c)Horrendous (d)Similar
90. EPILOGUE
(a)Dialogue (b)Prelude
(c)Post script (d)Epigram

XIV. Fill in the blanks with the suitable words given.

91. The of the Minister's statement cannot be verified by people who have no access to official records.
(a)veracity (b)verbosity
(c)ambiguity (d)validity
92. Colgate has also set an ambitious aim ofon 8% value shared of tooth paste market by then end of first years.

- (a)soliciting (b)cornering
(c)disturbing (d)keeping
93. Her parents will never give their to so much an unsuitable match.
(a)acquiescence (b)consent
(c)agreement (d)willingness
94. About twenty clerks were made when the banks introduced computers.
(a)dispensable (b)expandable
(c)redundant (d)obsolete
95. In large cities people are cut from nature.
(a)away (b)off
(c)out (d)down

XV. Choose the Correct answer.

96. DSL is an example of _____ connection.
(a)network (b)wireless
(c)slow (d)broadband
97. Which technology is used in Compact disks?
(a)Mechanical (b)Electrical
(c)Electro Magnetic (d)Laser
98. The programs which are as permanent as hardware and stored in ROM is known as
(a)Hardware (b)Software
(c)Firmware (d)ROMware
99. A _____ is approximately a million bytes.
(a)gigabyte (b)kilobyte
(c)megabyte (d)terabyte
100. Memory is made up of
(a)Set of wires (b)Set of circuits
(c)Large number of cells (d)All of these

Answer

1	b	21	c	41	d	61	a	81	c
2	c	22	d	42	a	62	d	82	c
3	c	23	a	43	a	63	b	83	b
4	a	24	b	44	d	64	d	84	a
5	d	25	a	45	c	65	c	85	d
6	a	26	c	46	a	66	b	86	c
7	d	27	a	47	b	67	a	87	b

8	d	28	b	48	a	68	d	88	b
9	a	29	b	49	d	69	b	89	a
10	b	30	c	50	a	70	b	90	b
11	b	31	a	51	b	71	d	91	a
12	c	32	b	52	b	72	b	92	b
13	c	33	a	53	d	73	a	93	b
14	b	34	b	54	d	74	c	94	c
15	c	35	d	55	c	75	c	95	a
16	d	36	b	56	c	76	c	96	d
17	b	37	d	57	c	77	d	97	d
18	d	38	c	58	d	78	b	98	c
19	d	39	d	59	a	79	c	99	c
20	d	40	a	60	b	80	c	100	c