

## CENTRAL BANK OF INDIA SPECIALIST OFFICER EXAM 06

### Reasoning Ability

1. How many such pairs of letters are there in the word INSTRUMENT, each of which has as many letters between them in the word as they have in the English alphabet?

- a) None
- b) One
- c) Two
- d) Three
- e) More than three

2. If 144: 256, then 343 :?

- a) 729
- b) 566
- c) 649
- d) 588
- e) 676

3. In a certain code SING is written as 3\$76 and SIDE is written as 3\$#4. How is DESIGN written in that code?

- a) \$43#67
- b) #43\$76
- c) \$436#7
- d) #43\$67
- e) None of these

4. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to the group?

- a) Orange
- b) Watermelon
- c) Pineapple
- d) Apple
- e) Carrot

5. If it is possible to make only one meaningful word from the first, the fourth, the fifth and the eighth letters of the word IDENTIFY, second letter of that word is your answer. If more than one such word can be formed, your answer is P and if no such word can be formed, your answer is Q.

- a) N
- b) I
- c) Y
- d) O
- e) Q

Directions (6-10) : Study the following information carefully to answer these questions.

Eight members A, B, C, D, E, F, G and H are sitting around a circular table facing the centre. Only D is between A and H. C is third to the left of D. Only B is between E and F. F is second to the left of G, who is neighbour of H.

6. Who is third to the right of A?

- a) E
- b) B
- c) G
- d) c
- e) None of these

7. Who is second to the right A?

- a) H
- b) D
- c) B
- d) E
- e) None of these

8. Which of the following is the correct position of G?

- a) To the immediate right of H
- b) To the immediate right of A
- c) Between F and C
- d) Between C and 1-I
- e) None of these

9. Who is to the immediate right of F?

- a) B
- b) C
- c) A
- d) G
- e) None of these

10. Which of the following statements is definitely correct?

- a) E is third to the right of D
- b) E is fourth to the right of G
- c) F is fourth to the right of H
- d) F is fourth to the left of H
- e) None of these

Directions (11-15) : In each of the questions below are given three statements followed by two conclusions numbered I, and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer a) if only conclusion I follow

Give answer b) if only conclusion II follows

Give answer c) if either conclusion I or II follows

Give answer d) if neither conclusion I nor II follows

Give answer e) if both the conclusions I and II follow

11. Statements:

Some bags are purses. All purses are folders. No folder is a box.

Conclusions:

I. No box is a bag.

II. Some folders are bags.

12. Statements:

Some bottles are cans. Some cans are tanks. All tanks are reservoirs.

Conclusions:

I. Some tanks are cans.

II. Some reservoirs are cans.

13. Statements:

Some jams are pickles. Some jams is sweets. No sweet is flowing.

Conclusions:

- I. Some sweets are jams.
- II. No pickles are jam.

14. Statements:

Some doors are walls. Some walls are bricks. All bricks are stones.

Conclusions:

- I. Some stones are walls.
- II. Some stones are doors.

15. Statements

Some roads are lanes. No lane is highway. Some highways are junctions.

Conclusions:

- I. Some highways are roads.
- II. No highway is road.

Directions (16-20) : In each question given below, there is a question followed by two statements I and II. You have decide that the data given in the statements are appropriate or not to answer the question. Read both the questions and-

Give answer a) if the data given in only statement I is appropriate to answer the question while the data given in only statement II is not appropriate to answer the question.

Give answer b) if the data given in only statement II is appropriate while the data given in statement I is not appropriate to answer the question.

Give answer c) if the data given in either only statement I or only statement II is appropriate to answer the question.

Give answer d) if even combined data of statements I and II are not appropriate to answer the question.

Give answer e) if data of both statements I and II are necessary to answer the question.

16. What is the code of 'keep'?

- I. 'keep your luggage' is written 'pa ke ra' in a code language.
- II. 'keep your belongings' is written ' ra fa ka' in the same code language.

17. What is the colour of fresh grass?

- I. Blue means red, red means green, green means black and black means yellow.
- II. Yellow means red, red means green and black means yellow orange.

18. How many students are in the class?

- I. Sangita who is 18th from bottom, Anita is 8th position down to her.
- II. Nidhi is 4th from up and 4<sup>th</sup> position up to Sangita.

19. How many daughters do Ramesh have?

- I. Nikhil who is son of Ramesh has only one sister Seema.
- II. Nikhil who is Seema brother is the only son of Ramesh.

20. How is Rohan related to Sirish?

- I. Sirish is the only grandson of Rohan's father.
- II. Rohan has no brother.

Directions (21-25): In each question below a group of digits/symbols followed by four combinations of letters are given. You have to find out which of the four combinations of letters numbered a), b), c) and d) correctly represents the group of digits / symbols. Digits / symbol are to be coded as per the scheme given below and the conditions that follow. The number of that combination is your answer. If none of the combinations is correct, your answer is e) i.e. "None of these".

Digit / Symbol: 5 7 \$ # 4 8 9 6 @ % 2 3

Letter Code: P D E J K B T Q H A F U

Conditions: a). If the first element is a digit and the last element is a symbol, both are to be coded by the code for symbol.

(ii) If the first as well as the last element is a symbol both are to be coded as 'X'.

21. 487%\$6

- a) KBDAEK
- b) KBDEAQ
- c) QBDEAK
- d) QBDAEQ
- e) None of these

22. 96@47%

- a) AQHKDA
- b) TQHKDT
- c) TQHKDA
- d) AQHKDT
- e) None of these

23. @92#3\$

- a) HTFJUE
- b) XTFJUX
- c) ETRJUE
- d) HTFJUH
- e) None of these

24. 35\$89@

- a) UPEBTH
- b) UPEBTU
- c) HPEBTU
- d) HPEBTH
- e) None of these

25. #78%64

- a) KDBAQK
- b) JDBAQJ
- c) JDBAQK
- d) KJBAQJ
- e) None of these

Directions (26-30) : The symbols @, %, #, '\$, © are used with following meanings.

'A@ B' means 'A is not greater than B'.

'A %B' means 'A is neither greater than nor equal to B'.

'A # B' means 'A is neither greater than nor smaller than B'.

'A \$ B' means 'A is neither smaller than nor equal to B'.

'A © B' means 'A is not smaller than B'.

In each question, three statements showing relationships have been given, which are followed by two conclusions I & II. Assuming that the given statements are true, find out which conclusion (s) is/are definitely true.

Mark answer a), if only conclusion I is true;

Mark answer b), if only conclusion II is true;

Mark answer c), if either conclusion I or II is true;

Mark answer d), if neither conclusion I nor II is true and

Mark answer e), if both conclusions I and II are true.

26. Statements

M % J, J \$ U, U © D

Conclusions:

I. D@J

II. D% M

27. Statements

F # Q, R \$ Q, T%Q

Conclusions:

I. F%R

II. F \$ T

28. Statements

D @ E, E \$ F, F # J

Conclusions

I. D \$ F

II. J % E

29. Statements

I \$ M, M @ J, J % W

Conclusions

I. W\$M

II. I ©J

30. Statements:

N©P,P@V,V%X

Conclusions:

I. N@X

II. N\$X

Directions (31-35) : Read the following information carefully to answer these questions.

Eight workers P, Q, T, B, R, J, N and A of an institute work in three departments i.e. in transportation, and auditing, At least two persons work in each department. Each of them like different color from blue, green, yellow, red, violet, white, pink and orange not necessarily in the same order

Q likes blue colour and he works in department only with J who likes orange. P works in transportation and he does not like green and orange like's violet and works with N who likes red in the same department. Those who work in transportation don't like white. A does not work in transportation and B does not work in auditing. Those who like white and red work in the same department R does not work in auditing and he likes green.

31. Who likes white colour?

- a) A
- b) B
- c) Q
- d) p
- e) None of these

32. Which combination is correct among the following colour and department?

- a) yellow - auditing
- b) blue - transportation
- c) green
- d) red - transportation
- e) None of these

33. Which group of the following workers work in transportation department?

- a) QBRA
- b) PQR
- c) PTBR
- d) PBR
- e) None of these

34. Which department does T work in?

- a) Transportation
- b) Persoment
- c) Ledger
- d) Transportation/Auditing
- e) Cannot be determined

35. Who likes yellow?

- a) B
- b) P
- c) N
- d) A
- e) None of these

Directions (36-40) : In a particular system different calculations are written as following:

- a)  $a \& b \# c$  means product of a and b has been added to the square of c.
- (ii)  $a * b \% c$  means b has been divided by c and result has been subtracted from a.
- (iii)  $a @ b @ c$  means the square of b has been multiplied to the square root of c and the result has been added to a.
- (iv)  $a ! b \in c$  means a has been multiplied to b and the result has been divided by c.

In each of the questions, the value that is to come at (?) has to be found.

36.  $7 \& 6 \# 7 = v$

$14 * 768 \% 12 = x$

- a) 11
- b) 9
- c) 7
- d) 14
- e) None of these

37.  $76 H 768 \% 12 = x$

$24 ! x \in 36 = 9$

- a) 16
- b) 8
- c) 18
- d) Cannot be calculated
- e) None of these

38.  $15 \odot 3 @ 25 = P$

$P * 46 \% 2 = ?$

- a) 60
- b) 33
- c) 45
- d) 83
- e) More than three.

39.  $8 \odot 4 @ 49 = m$

$m * 204 \% 17 = ?$

- a) 132
- b) 106
- c) 112
- d) 108
- e) None of these

40.  $12 \$ 7 \# r = 100$

$28 ! 9 \in r = ?$

- a) 63
- b) 64
- c) 58
- d) 76
- e) None of these

Directions (41-45) : Given an input necessary results line a machine rearranges the line following certain rules followed in steps till the rearrangement is completed. Following is an illustration of the rearrangement.

Input line: do not forget to carry your books there

Step I : books do not forget to carry your there

Step II : books carry do not forget to your there.

Step III : books carry do forget take of not to your there

Step IV : books carry do forget not to your there

Arrangement in Step IV is the final arrangement and Step IV is the last step.

Now answer the following questions, following the same rules as illustrated above for rearrangement of the input line.

41. Step III of an input is- "attended large meeting number of people the today". What was definitely the first step?

- a) attended number of people large meeting today
- b) attended large people number of meeting today
- c) attended large number of people meeting today
- d) Cannot be determined
- e) None of these

42. What will be the fourth step for the input "enjoy holidays before the school reopens in June"?

- a) before enjoy holidays the school reopens in June
- b) before enjoy holidays the school reopens June
- c) before enjoy holidays in June the school reopens
- d) There will be no fourth step.
- e) None of these

43. What will be the fifth step of an input line whose step II is:

"accurate computer use of is necessary for results."

- a) accurate computer for is use results of necessary
- b) accurate computer for use is of necessary results
- c) accurate computer for is use of necessary results
- d) accurate computer for is of use necessary results
- e) None of these

44. What will be the third step for the following input line?

Input line: you must take good care of your health

- a) care health good you must take of your
- d) care good health you must take of your
- c) care good health your must you take of
- d) care good health of you must take your

e) None of these

45. How many steps will be required to complete the rearrangement for the input line- "children should understand the value of hard work"?

- a) Three
- b) Four
- c) Five
- d) Six
- e) None of these

Directions (46-48) : These questions are based on the following information :

'A\$ B' means 'A is father of B'.

'A# B' means 'A is son of B'.

'A@ B' means 'A is sister of B'.

'A% B' means 'A is wife of B'.

46. M#K\$T@N represents what relationship of M with N?

- a) Sister
- b) Cousin
- c) Brother
- d) Paternal Uncle
- e) None of these

47. Which of the following expressions represents the relationship "V is mother of D"?

- a) V%Q\$R@D
- b) V%Q@R\$D
- c) D#T@J\$V
- d) V@F\$D%M
- e) None of these

48. What is the relation of B with E in E # H @ K & B?

- a) Brother
- b) Sister
- c) Cousin Brother
- d) Cannot be determined
- e) None of these

49. In a certain code, REGIONAL is written NCPQSFHJ. How will CONSPIRE be written in the same code?

- a) GIKREQPU
- b) GTKRD POT
- c) FSJQDPOT
- d) FSTQDOTP
- e) None of these

50. If first and seventh letters of EXTROVERSION be changed to each other and in the same way 2<sup>nd</sup> and 8<sup>th</sup> letters be changed to each other and similarly further more. Which letter will be 3<sup>rd</sup> from left in the rearrangement?

- a) T
- b) R
- c) 2
- d) D
- e) None of these

Directions (51-60): To get admission in a technical institute for technical degree, the following qualifications have been fixed.

Candidate-

- (i) Age should not be less than 18 years on 1.7.2006.
- (ii) should be passed in HSC in science.
- (iii) has obtained at least 70% marks in HSC exam.
- (iv) has obtained at least 65% marks in entrance exam.
- (v) should be passed in state level drawing exam.
- (vi) should be ready to pay Rs. 30,000/- per annum at the time of admission.

Besides it, if a candidate fulfills the above qualifications except-

- (a) (iii) but he has obtained at least 80% marks in Maths in HSC then his situation will be sent to the Director of the institute.
- (b) (ii) but he is ready to pay Rs.2,000/- at the time of admission and remaining in maximum one month his situation will be sent to the Board Trustee.

In each question given below, the information about the candidates has been given, on the basis of term conditions mentioned above, you have to decide any one out of five you have not to take any point in consideration except the above information.

These all information has been given to you on 1.7.2006. You have to give your decision of the questions accordingly.

**Answer if**

- a) the candidate is to be selected.
- b) situation is to be sent to Board Director.
- c) situation is to be sent to Board Trustee.
- d) the candidate has not been selected.
- e) the given data is inappropriate to take decision.

51. Urmila has passed HSC with 65% marks in science and 80% marks in Maths. She has passed the entrance exam with 78% marks. She is ready to pay Rs.30, 000/- at the time of admission. She has passed drawing exam conducted by State Board in years 2002. Date of her birth is 31.12.1987.

52. Abhishek has passed HSC with 75% marks in science and 85% marks in Maths. He has passed the entrance exam with 87% marks. He celebrated his 18<sup>th</sup> birthday on 16.04.2006. He is ready to deposit the necessary amount of Rs.3, 000 at the time of admission.

53. Suresh has passed HSC examination with 60% marks from Science stream with distinction in Mathematics. He has passed the entrance examination with 70% marks and also the State level drawing examination with good marks. He is willing to pay the entire fees amount of Rs. 30,000/- at the time of admission. He completed 18 years of age on 15th August 2005.

54. Haresh is a Science student and passed HSC in June 2006 at the age of 18 years with 76% marks and entrance examination with 72% marks. He has decided to appear in the State level drawing -examination in September 2006. He is willing to pay the fees of Rs. 30,000/- at the time of admission.

55. Akhilesh Gupta is a Science student and has passed HSC examination with 64% marks in aggregate and 87% marks in Mathematics. He has cleared the entrance examination with 69% marks and the State level drawing examination with B grade. He is willing to pay the fees of Rs. 30,000/- at the time of admission. His date of birth is 16.8.1986.

56. Deepika, a 19 year old girl studying Science stream has passed HSC examination with 82% marks and entrance examination with 72% marks. She has passed the State level drawing examination. She can pay an amount of Rs. 20,000/- at the time of admission but the remaining amount of Rs.10, 000/- can be paid only after a-month or so.

57. Lalita, a Science student passed HSC in 2005 with 73% marks at the age of 18 years. She has appeared for first year B.Sc. examination in May 2006. She has cleared the entrance examination with 68% marks and the State level drawing examination with 'A' grade. She is willing to pay the amount of Rs. 30,000/- as fees at the time of admission.

58. Suchitra, a 19 years old girl has passed HSC examination from Science stream securing 78% marks and passed the entrance examination with 72% marks. She passed the State level drawing examination in B grade. She is witting to pay the fees of Rs. 30,000/- at the time of admission.

59. Vishwas, a Science student passed HSC examination with 85% marks in June 2006 just after completing 18 years of age. He has passed the state level drawing examination with A grade and the entrance examination with 70% marks. He cannot afford to pay the fees of Rs. 30,000/- but can pay only 70% of the amount at the time of admission and can arrange for the remaining amount within a month's time.

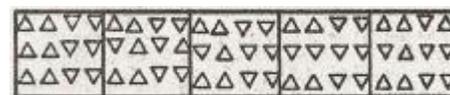
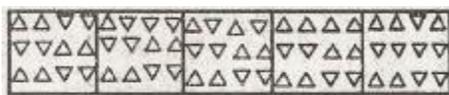
60. Nishant, a student of Science stream has passed HSC with 75% marks and entrance examination with 68% marks. He was born on 18<sup>th</sup> September 1987. He has passed the State level drawing examination two years ago. He is willing to pay the amount of Rs. 20,000/- at the time of admission and the remaining amount of Rs. 10,000/- within 15 days time.

Directions (61-75) : In each of the questions give1 below which one of the five answer figures on the right should come after the problem figures on the left, if the sequence were confirmed?

**PROBLEM FIGURES**

**ANSWER FIGURES**

61.



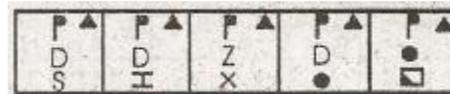
a) b) c) d) e)

62.



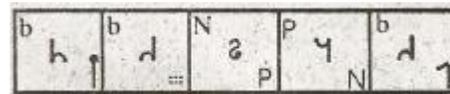
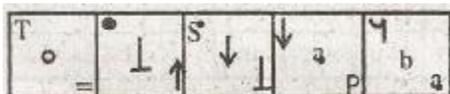
a) b) c) d) e)

63.



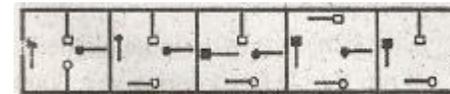
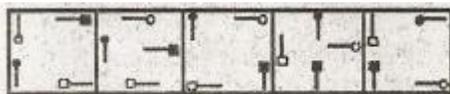
a) b) c) d) e)

64.



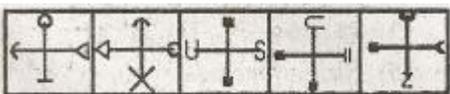
a) b) c) d) e)

65.



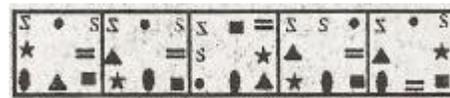
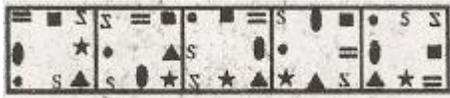
a) b) c) d) e)

66.



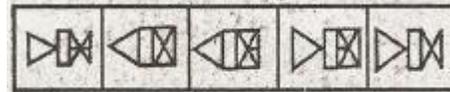
a) b) c) d) e)

67.



a) b) c) d) e)

68.



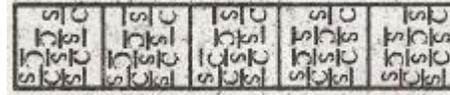
a) b) c) d) e)

69.



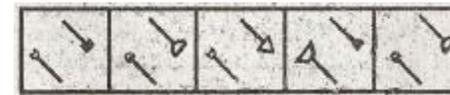
a) b) c) d) e)

70.



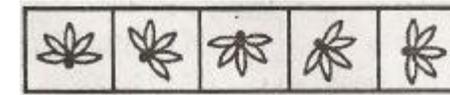
a) b) c) d) e)

71.



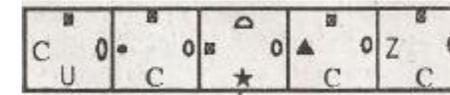
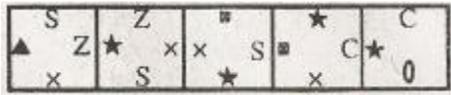
a) b) c) d) e)

72.



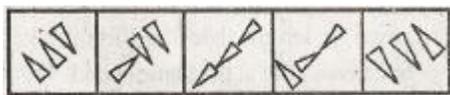
a) b) c) d) e)

73.



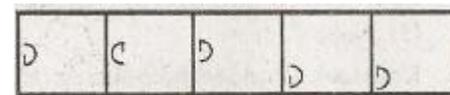
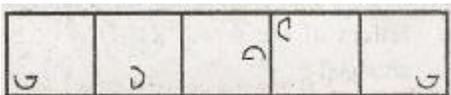
a) b) c) d) e)

74.



a) b) c) d) e)

75.



a) b) c) d) e)

### Quantitative Aptitude

Directions (76-80) : What should come in place of the question mark(?) in the following questions?

76.  $6^{1.2} \times 36^x \times 30^{2.4} \times 25^{1.3} = 30^5$

- a) 0.7
- b) 0.1
- c) 1.4
- d) 2.6
- e) None of these

77. 28% of 495-24% of 345 =? % of 400

- a) 55.8
- b) 55.35
- c) 11.49
- d) 13.95
- e) None of these

78.  $48 \div 75 \times 84.5 \div 20 = ?$

- a) 1.527
- b) 2.704
- c) 1.834
- d) 2.914
- e) None of these

79.  $[\sqrt{81}]^2 = (?)^2$

- a) 9
- b) 6561
- c) 4096
- d) 8
- e) None of these

80.  $6\frac{9}{13} - 4\frac{4}{11} + 2\frac{2}{5} = ?$

- a)  $4\frac{596}{715}$
- b)  $9\frac{324}{715}$
- c)  $4\frac{521}{715}$
- d)  $9\frac{386}{715}$
- e) None of these

81. A 240 meters long train takes 40 seconds longer to cross a platform twice its length than the time it takes to cross a pole at the same speed. What is the speed of the train?

- a) 6 meters/second
- b) 24 meters/second
- c) 48 meters/second
- d) 12 meters/second
- e) None of these

82. In how many different ways can the letters of the word 'RIDDLED' be arranged?

- a) 1680
- b) 840
- c) 2520
- d) 5040
- e) None of these

83. Kruti took a loan at simple interest rate of 6% in the first year with an increase of 0.5% in each subsequent year. She paid interest of Rs. 3,375/- after four years. How much loan did she take?

- a) Rs. 12,500/-
- b) Rs. 33,250/-
- c) Rs. 15,800/-
- d) Cannot be determined
- e) None of these

84. What would be the cost of building a fence around a circular plot of area. 98.56 sq. feet, if the cost of fencing per foot is Rs. 614/-?
- a) Rs. 60,515.84
  - b) Rs. 30,257.92
  - c) Rs. 21,612.80
  - d) Rs. 43,324.60
  - e) None of these

85. Michelle got married 9 years ago. Today her age is  $1\frac{1}{3}$  times her age at the time of marriage. At present her daughter's age is one-sixth of her age. What was her daughter's age two years ago?
- a) 6 years
  - b) 7 years
  - c) 3 years
  - d) Cannot be determined
  - e) None of these

Directions (86-90) :What approximate value should come in place of the question mark (?) in the following questions ? (You are not expected to calculate the exact value.)

86.  $125\%$  of 605 +  $\frac{4}{5}$  of 218 = ?

- a) 840
- b) 931
- c) 618
- d) 1024
- e) 726

87.  $84.6624 \times 18.9865 \div 11.0124 = ?$

- a) 146
- b) 132
- c) 189
- d) 206
- e) 225

88.  $8^{0.601} \times 64^{1.7} = ?$

- a) 512
- b) 64
- c) 8
- d) 2884
- e) 4096

89.  $\sqrt[3]{598746} = ?$

- a) 72
- b) 66
- c) 84
- d) 98
- e) 112

90.  $2418.065 + 88 \div 14.2 \times 6 = ?$

- a) 1059
- b) 2419
- c) 2496
- d) 2455

e) 1985

Directions (91-95) : Study the table given above carefully to answer the following questions:

**The no. of produced items (in thousands) last year and percent of rejected products**

Product	I		II		III		IV		V		VI	
Year	No. of items	% of rejected										
2000	1300	1.2	1450	0.2	1050	0.3	990	0.1	1350	0.8	1500	1.4
2001	945	1.8	1650	0.75	1210	0.25	825	0.8	900	0.9	625	1.2
2002	896	0.5	1600	1.4	1042	1.05	620	0.6	1250	1.5	1030	1.25
2003	1250	0.2	980	1.5	850	1.1	1250	1.2	1420	1.3	1200	0.75
2004	1400	0.4	740	1.3	900	0.75	1450	1.4	1400	1.5	1000	0.8
2005	1351	1.6	1020	0.5	1002	1.2	1300	0.9	1220	1.2	1120	1.5

91. How many items from all six products have been rejected during year 2005?

- a) 81880
- b) 88180
- c) 82820
- d) 83180
- e) None of these

92. What percent is total no. of produced items of product III for the given all years of produced items of product IV for the given years?

- a) 89.21
- b) 87.48
- c) 92.16
- d) 94.08
- e) None of these

93. What is total percent of rejected items of product IV during years 2003, 2004 and 2005? (Up to two digits after decimal)

- a) 1.13
- b) 1.24
- c) 1.16
- d) 1.02
- e) None of these

94. What is difference between total rejected items of product I and II during years 2002 and 2003?

- a) 4480
- b) 9680
- c) 2500
- d) 7200
- e) None of these

95. What is the ratio of the produced item of products I, II, III during year 2000 and those of products IV, V & VI during year 2001?

- a) 32 : 77
- b) 77 : 32
- c) 47 : 76
- d) 76 : 47
- e) None of these

Directions (96-100): In the following series, what will come in place of question mark (?)?

96. 169 ? 361529 841 961

- a) 226
- b) 250
- c) 289
- d) 196
- e) None of these

97. 14 42 144 596 ? 18018

- a) 3582
- b) 2995
- c) 2396
- d) 3000
- e) None of these

98. 67 102 206 ? 1555.5 5447.75

- a) 525
- b) 517.5
- c) 683.5
- d) 615
- e) None of these

99. 879 536 ? 195 131 104

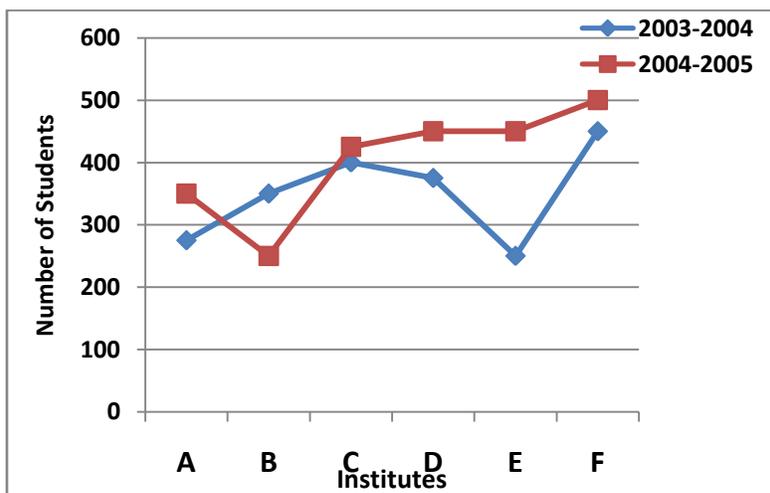
- a) 250
- b) 315
- c) 384
- d) 296
- e) None of these

100. 988 3443 10316 25779 ? 77316.5

- a) 51549
- b) 4324
- c) 38184
- d) 46382
- e) None of these

Directions (101-105) : Study the graph carefully and answer the following questions.

**Number of students enrolled from different management institutes in academic years 2003-2004 and 2004-2005**



101. What is the per cent increase/decrease in number of students enrolled from institutes D, E and F together in 2003-2004 to 2004-2005? (Rounded off to two digits after decimal)

- a) 24.63
- b) 30.23
- c) 28.15
- d) 43.80
- e) None of these

102. Total number of students enrolled from all the institutes together in 2003-2004 is what percentage of the total number of students enrolled from all the institutes together in 2004-2005? (Rounded off to the nearest integer)

- a) 87
- b) 115
- c) 91
- d) 142
- e) None of these

103. What was the approximate average number of students enrolled in 2004-2005?

- a) 392
- b) 350
- c) 450
- d) 380
- e) 404

104. Which of the following pairs of institutes have equal number of students enrolled for the two academic years together?

- a) None
- b) A & B
- c) B & C
- d) C & D
- e) None of these

105. What is the respective ratio between the member of students enrolled in the year 2003-2004 from institutes A, B and E together and the number of students enrolled in the year 2004-2005 from institutes C, D and F together?

- a) 11 : 7
- b) 11 : 23
- c) 7 : 11
- d) 23 : 11
- e) None of these

Directions (106-110): In each of the following questions, tow equations I and II are given. You have to solve both two equations and--

Give Answer If

- a)  $x > y$
- b)  $x \geq y$
- c)  $x < y$
- d)  $x \leq y$
- e)  $x = y$  or the relationship cannot be determined.

106.

I.  $9x^2 - 9x + 2 = 0$

II.  $20y^2 + 1 = 9y$

107.

I.  $x^2 = x + 12$   
 II.  $y^2 + 7y + 12 = 0$

108.  
 I.  $2x^2 + 5x + 2 = 0$   
 II.  $4y^2 = 1$

109.  
 I.  $12x^2 - 17x + 6 = 0$   
 II.  $2y^2 - 17y + 35 = 0$

110.  
 I.  $x^2 + 44 = 64.25$   
 II.  $y = \sqrt{20.25}$

Directions (111-115) : Study the table given below carefully to answer the questions given below:-

**The no. of students from six states appeared for the exam and the no. of students passed last years**

States Years	A		B		C		D		E		F	
	Appeared	Passed										
2000	1300	1.2	1450	0.2	1050	0.3	990	0.1	1350	0.8	1500	1.4
2001	945	1.8	1650	0.75	1210	0.25	825	0.8	900	0.9	625	1.2
2002	896	0.5	1600	1.4	1042	1.05	620	0.6	1250	1.5	1030	1.25
2003	1250	0.2	980	1.5	850	1.1	1250	1.2	1420	1.3	1200	0.75
2004	1400	0.4	740	1.3	900	0.75	1450	1.4	1400	1.5	1000	0.8
2005	1351	1.6	1020	0.5	1002	1.2	1300	0.9	1220	1.2	1120	1.5

111. In which of the following states is the percentage of passed candidates of the appeared candidates in the year 2002 maximum?

- a) C
- b) D
- c) E
- d) F
- e) None of these

112. In which of the following years is the percentage of passed candidates of appeared candidates in exam from state F minimum?

- a) 2005
- b) 2002
- c) 2000
- d) 2001
- e) None of these

113. What percentage of candidates appeared in the exam from all states passed in year 2000?

- a) 13
- b) 3
- c) 16
- d) 9
- e) 6

114. For the given years, what is the average of candidates who failed in the exam from state D?

- a) 1400
- b) 1000
- c) 1600
- d) 1100
- e) 1200

115. What is the percentage of candidates from state C in years 2001 and 2004 of the number of candidates appeared in exam from state B in years 2000 and 2003? (Up to 2 places of decimal)

- a) 6.28
- b) 7.83
- c) 8.64
- d) 10.54
- e) None of these

Directions (116-118) : To answer the following questions, study the information given below :  
There are 2 books of literature, 3 books of economics and 4 books of statistics on a shelf.

116. In how many different ways can these books be arranged so that books of each subject be together?

- a) 1728
- b) 288
- c) 5184
- d) 628
- e) None of these

117. In how many different ways can these books be arranged so that the books of economic be together?

- a) 5040
- b) 10080
- c) 6240
- d) 30240
- e) None of these

118. In how many different ways can these books be arranged themselves on the shelf?

- a) 40320
- b) 362880
- c) 5040
- d) 7250
- e) None of these

Directions (119-120) : Study the information given below to answer the following questions.

An urn contains 4 Green, 3 Red and 5 Blue balls.

119. If 4 balls are picked at random, what is the probability that at least one is Blue?

- a)  $\frac{5}{12}$
- b)  $\frac{5}{99}$
- c)  $\frac{92}{99}$
- d)  $\frac{7}{12}$
- e) None of these

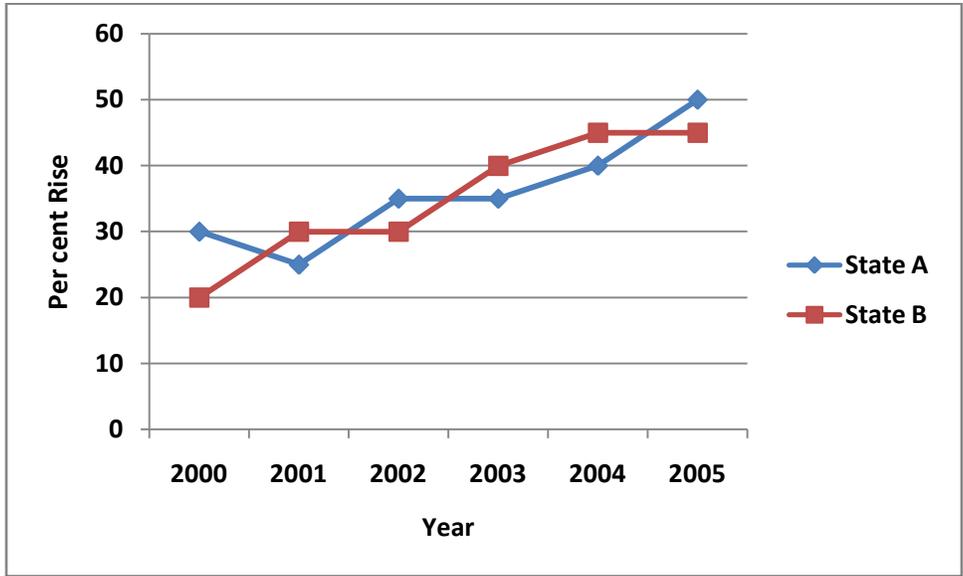
120. If 3 balls are picked at random, what is the probability that all are Green?

- a)  $\frac{1}{3}$
- b)  $\frac{1}{2}$

- c)  $\frac{1}{58}$
- d)  $\frac{1}{72}$
- e) None of these

Directions (121-125) : Study the graph carefully to answer the questions:

**Per cent rise in population of two States from the previous year**



121. Total population of the two States in 2004 was 93.6 lakhs, what was the total population of the States in 2002?

- a) 78.3 lakhs
- b) 69.5 lakhs
- c) 53.3 lakhs
- d) Cannot be determined
- e) None of these

122. If the population of State A in 2002 was 10.96875 lakhs, what was its population in 2000?

- a) 7.8 lakhs
- b) 6.2 lakhs
- c) 5.4 lakhs
- d) 8.7 lakhs
- e) None of these

123. What is the per cent increase in per cent rise of population of State B in 2005 from the year 2000?

- a) 25
- b) 125
- c) 35
- d) 110
- e) None of these

124. If population of State B in 2002 was 20 lakhs, what will be the average population of the state in 2003 and 2004?

- a) 34300000
- b) 2030000
- c) 3430000
- d) 20300000
- e) None of these

125. If the respective ratio between the population of States A and B in the year 2003 was 4 : 5, what will be the respective ratio in 2004?

- a) 112: 145
- b) 103: 112
- c) 103: 145
- d) Cannot be determined
- e) None of these

### English Language

Directions (126-140) : Read the following passage and answer the questions given below it. Certain words have been printed in **bold** to help you locate them while answering some of the questions.

Mumbai's exorbitant real estate prices have been held responsible for many of the city's ills : shortage of good schools, the underworld's birth and **sustenance**, the venality in Maharashtra's body politic, the inability to transform itself into a full services city, the flight of capital and even the lack of conscientious citizenry.

As long as Mumbai continues to **metamorphose** not a services-led city, supply office as well as residential space will continue to trail demand, leading to a state of permanently high property prices. The solution is to make large swathes of land available to the city, including provision for green belts and low cost housing. The Government owned Mumbai Port Trust is among the largest land owners in Mumbai, shutting down the port and selling all the land at one go **barring** some built upon areas, some navy installations, and some jetties for use by passenger ferries and the offshore oil installation is the kind of Government intervention required. Undoubtedly it will create problems of displacement and temporary unemployment.

The benefits First land prices will crash. The Government while selling the land to private developers, should also **mandate** certain standards, ensure low cost housing and keep aside parcels of land for parks and playgrounds. Alternatively it could even sell land to a few educational institutions to set up schools with decent playgrounds something the city sorely lacks. The second benefit will be easing of congestion in the island city and neighboring areas. Mumbai is probably the only city in the world that sees traffic levels swell during rush hours due to influx of trucks and other assorted heavy vehicles. The consequent slowing down of city's traffic leads to a monumental wastage of fuel and energy. Apart from wastage of precious fuel delays in operation of public transport affect the city's famed productivity levels. Another larger issue is that of trucks which navigate through the city's road network is not exactly eco-friendly. As an environmental issue it might seem too simplistic, too **mundane** and not too important for the NGOs but once the truck traffic is reduced the number of people afflicted with respiratory problems will drop.

The decision to shut down the port will be taken by Delhi. The Government needs to consider that Bombay currently provides the central kitty with 40% of the direct tax revenue but if the city has to continue providing such a large proportion of the country's revenue then it is in Delhi's interest to take some bold steps before it's too late.

126. What is the bold step the author recommends Delhi needs to take to ensure Mumbai remains productive?

- a) The Government should put in place measures to eradicate the underworld
- b) The Government should build more schools
- c) The Government should reward citizens who display civic commitment
- d) The Government should provide low cost housing
- e) None of these

127. What does the author think/envision the problems of shutting down the Mumbai Port will be?

- a) Traffic congestion and environmental hazards
- b) Wastage of fuel and energy
- c) Temporary retrenchment of workers
- d) Setting up new offshore oil installations
- e) None of these

128. According to the author what is the benefit of easing congestion in Mumbai?

- a) Construction of high rises by private developers
- b) Hawkers can trade freely
- c) Less influx of trucks and heavy vehicles

- d) A more productive workforce
- e) None of these

129. What is the author's main objective in writing the passage?

- a) Provide insight in to Mumbai's real estate troubles
- b) Enumerate the disadvantages of closing the Mumbai Port
- c) Visualize the future benefits of closing Mumbai's Ports
- d) Making a strong case for the partial sale of the Mumbai Port
- e) Criticize the Government's intervention

130. According to the passage which of these is not a characteristic of Mumbai?

- a) There exist problems of citizenry apathy and a drop in investment
- b) Heavy vehicles cause the volume of traffic to swell during rush hour
- c) The number of people suffering from respiratory problems has dropped
- d) Worker productivity levels are legendary
- e) The city contributes 40% of the direct tax revenue to the Centre

131. According to the author "Mumbai's exorbitant real estate prices" are the root cause of-

- a) unemployment
- b) corruption in government
- c) influx of capital
- d) citizen -protests
- e) None of these

132. Which of the following is not a-benefit of closing the Mumbai Port?

- (A) Land prices going into a free fall along with lowered taxes.
- (B) Sale of land to educational institutions to build schools and playgrounds.
- (C) Traffic decongestion.
- a) Only A
- b) Only B
- c) Both A & B
- d) Both B & C
- e) None of these

133. Which of the following is true in the context of the passage?

- (A) Land prices will crash with the sale of the port.
- (B) Mumbai Port Trust is privately owned.
- (C) Supply of real estate meets the demand in Mumbai
- a) Only A
- b) Only B
- c) Both A & B
- d) Both B & C
- e) None of these

134. Which of the following is true in the context of the passage?

- a) Shutting down the Mumbai Port will benefit only land developers
- b) Jawaharlal Nehru Port Trust is the largest landowner in Mumbai
- c) The author recommends selling all the port land at one go keeping aside some land for green belts
- d) The decision to shut down the Mumbai Port will be taken by the Maharashtra government
- e) None of these

Directions (135-137) : Pick out the word which is closest in meaning to the word printed in **bold** as used in the passage.

135. **sustenance**

- a) advantage
- b) corrupt
- c) maintain
- d) favor
- e) profitable

136. **metamorphose**

- a) attract
- b) persist
- c) commence
- d) shift
- e) sustain

137. **mandate**

- a) follow
- b) honor
- c) command
- d) preserve
- e) achieve

Directions (138-140) : Pick out the word which is most opposite in meaning to the word printed in **bold** as used in the passage.

138. **barring**

- a) dividing
- b) comprising
- c) preserving
- d) diverting
- e) denoting

139. **mundane**

- a) powerful
- b) clear
- c) muddled
- d) virulent
- e) novel

140. **exorbitant**

- a) fair
- b) low
- c) unsteady
- d) suitable
- e) true

Directions (141-150) : 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. Mark the number of that part with error as your answer. If there is no error, mark e).

141. They will be/a) the first to/b) shout out themselves/c) hoarse if any action is taken./d) No error. e)

142. His meticulous work/a) and dedication/b) at office always puts/ c) mine in shade./d) No error. e)

143. The Chairman made/a) the unexpected decision/b) to step below/ c) at the next meeting./d) No error. e)

144. For the first time/a) in twenty years/ b) he wrote a letter/c) asking for forgiveness./d) No error. e)

145. He asked Ramesh/a) Are you having/b) the files we have to/c) take with us ?"d) No error. e)
146. They were believing/a) it could be achieved/b) through hard work/c) and self discipline/.d) No error. e)
147. It was encouraging/a) to note the effort/b) he put/c) to studying./d) No error. e)
148. The cities vied/a) for the honor/b) to be hosting/c) the Olympic Games/d) No error. e)
149. Two years after/a) planning the entire project/b) he is looking/c) for implementing the ideas. d) No error. e)
150. She was uncomfortable/a) so she began/b) hunting a suitable/c) place to sit and relax/.d) No error. e)

Directions (151-155) : In each item two of the words are related in some way i.e. they are similar or opposites. Pick out the option which represents this pair.

151. (A) ideal (B) identical (C) idea (D) real  
a) A-B  
b) A-D  
c) B-C  
d) C-D  
e) A- C
152. (A) pain (B) many (C) load (D) few  
a) A-D  
b) A-B  
c) C-D  
d) A-C  
e) B- D
153. (A) pursue (B) purpose (C) dodge (D) provide  
a) A-B  
c) B-D  
e) A-C  
b) B-c  
d) C-D
154. (A) meddle (B) mean (C) honor (D) interfere  
a) A-B  
b) B- D  
c) A-D  
d) B-C  
e) A-C
155. (A) ruin (B) reputation (C) criticize (D) approve  
a) A-B  
b) B-C  
c) A-C  
d) C-D  
e) B-D

Directions (156-160) : Which of the phrases a), b), c) and d) given below each sentence should replace the phrase printed in **bold** type to make the sentence correct. If the sentence is correct as it is, mark it as e) i.e. 'No correction required' as the answer.

156. The spectators at Eden Garden went on a rampage when India was **bordering of** losing the match to Pakistan.

- a) was verging to
- b) was on the verge off
- c) was on the border of
- d) was on the verge of
- e) No correction required

157. Yoga is a way of life that has evolved **ower centuries**.

- a) will evolved over centuries
- b) has evolved in centuries
- c) has been evolving with centuries
- d) has evolve through centuries
- e) No correction required

158. The shopkeeper **provided in** risk of fire by insuring his goods.

- a) providing for
- b) provided against
- c) will be providing
- d) provided the
- e) No correction required

159. We ransacked the cupboard, by **upsetting the neat arrangement of contents**, but could not locate the locket.

- a) upset the neat content
- b) will be upsetting the neat content
- c) upsetting the nearly arranged contents
- d) especially upsetting the neat arrangement of content
- e) No correction required

160. Incidentally you could show some sensitivity to the blind **adding your name in Braille** on your visiting card

- a) adding your name written in Braille
- b) punching your Braille name
- c) putting your Braille name
- d) having your Braille name
- e) No correction required

Directions (161-165) :Rearrange the following sentences in to a meaningful paragraph and then answer the questions given below it.

- (A) Clearly, these children are special.
- (B) A child who performs beyond his or her age pulls at our heart strings and fascinates us like Budhia.
- (C) At times this factor comes not with looks and clothes but with lack of it.
- (D) But given today's hunger for visual gratification, ability and talent are not enoughen you need the x-factor.
- (E) What makes a child prodigy a potential star?
- (F) For money to flow though they must not only catch the public eye but also remain there.

161. Which is the **FOURTH** sentence of the passage?

- a) C
- b) D
- c) A
- d) B
- e) None of these

162. Which is the **FIRST** sentence of the passage?

- a) C
- b) E

- c) B
- d) A
- e) None of these

163. Which is the **SECOND** sentence of the passage?

- a) B
- b) C
- c) A
- d) D
- e) None of these

164. Which is the **THIRD** sentence of the passage?

- a) C
- b) D
- c) A
- d) B
- e) E

165. Which is the **LAST (SIXTH)** sentence of the passage?

- a) D
- b) A
- c) C
- d) B
- e) F

Directions (166-175) :In the following passage there are blanks each of which has been numbered These numbers are printed below the passage and against each five are suggested, one of which fills the blanks appropriately. Find out the appropriate word in each case.

Public health services are **(166)** distinct from medical services. They have as a key goal **(167)** a population's **(168)** to disease en for example through **(169)** food safety, **(170)** waste disposal and health education to improve personal health behaviors and **(171)** citizen demand for **(172)** public health outcomes. These services are largely **(173)** to the public, **(174)** the public only becomes **(175)** of the need for then when a problem develops.

166.

- a) conceptually
- b) strictly
- c) distinctly
- d) definitively
- e) certainly

167.

- a) curing
- b) reducing
- c) concealing
- d) omitting
- e) disabling

168.

- a) exposure
- b) resistance
- c) incidence
- d) contagion
- e) infection

169.

- a) criticizing
- b) serving
- c) examining
- d) deciding
- e) assuring

170.

- a) executing
- b) promoting
- c) planning
- d) monitoring
- e) altering

171.

- a) check
- b) build
- c) calculate
- d) assemble
- e) undo

172.

- a) extensive
- b) raised
- c) heightened
- d) noble
- e) better

173.

- a) manifest
- b) invisible
- c) obscure
- d) unclear
- e) ignored

174.

- a) accidentally
- b) occasionally
- c) proportionately
- d) sometimes
- e) typically

175.

- a) knowledgeable
- b) aware
- c) urgent
- d) certain
- e) thankful

Q.1	C	Q.45	A	Q.89	C	Q.133	D
Q.2	A	Q.46	C	Q.90	D	Q.134	C
Q.3	D	Q.47	A	Q.91	A	Q.135	D
Q.4	E	Q.48	D	Q.92	D	Q.136	D
Q.5	B	Q.49	B	Q.93	E	Q.137	D
Q.6	E	Q.50	E	Q.94	B	Q.138	B
Q.7	C	Q.51	B	Q.95	D	Q.139	E
Q.8	D	Q.52	E	Q.96	C	Q.140	B
Q.9	B	Q.53	A	Q.97	D	Q.141	C
Q.10	B	Q.54	E	Q.98	B	Q.142	D
Q.11	B	Q.55	B	Q.99	E	Q.143	C
Q.12	E	Q.56	C	Q.100	A	Q.144	C
Q.13	A	Q.57	A	Q.101	B	Q.145	C
Q.14	A	Q.58	A	Q.102	A	Q.146	A
Q.15	C	Q.59	C	Q.103	E	Q.147	D
Q.16	D	Q.60	C	Q.104	D	Q.148	C
Q.17	A	Q.61	C	Q.105	C	Q.149	A
Q.18	E	Q.62	D	Q.106	A	Q.150	C
Q.19	A	Q.63	B	Q.107	B	Q.151	B
Q.20	E	Q.64	E	Q.108	D	Q.152	E
Q.21	E	Q.65	A	Q.109	C	Q.153	E
Q.22	A	Q.66	A	Q.110	E	Q.154	C
Q.23	B	Q.67	B	Q.111	B	Q.155	E
Q.24	D	Q.68	E	Q.112	A	Q.156	D
Q.25	C	Q.69	E	Q.113	D	Q.157	D
Q.26	A	Q.70	A	Q.114	E	Q.158	B
Q.27	E	Q.71	E	Q.115	C	Q.159	C
Q.28	B	Q.72	D	Q.116	B	Q.160	A
Q.29	A	Q.73	B	Q.117	D	Q.161	B
Q.30	C	Q.74	B	Q.118	B	Q.162	B
Q.31	A	Q.75	A	Q.119	C	Q.163	A
Q.32	E	Q.76	A	Q.120	E	Q.164	C
Q.33	E	Q.77	D	Q.121	D	Q.165	E
Q.34	C	Q.78	B	Q.122	E	Q.166	A
Q.35	B	Q.79	E	Q.123	B	Q.167	B
Q.36	E	Q.80	C	Q.124	C	Q.168	A
Q.37	B	Q.81	D	Q.125	A	Q.169	E
Q.38	E	Q.82	B	Q.126	E	Q.170	A
Q.39	D	Q.83	A	Q.127	C	Q.171	C
Q.40	E	Q.84	A	Q.128	C	Q.172	E
Q.41	D	Q.85	E	Q.129	C	Q.173	C
Q.42	E	Q.86	B	Q.130	C	Q.174	B
Q.43	E	Q.87	A	Q.131	B	Q.175	B
Q.44	B	Q.88	E	Q.132	B		

