

IBPS RRB Clerk Mains 2017

REASONING ABILITY

Directions (1-5): Study the given information carefully to answer the given questions.

A, B, C, D, E, F and G are seven different mobile phones which has different storage spaces, ie 256mb, 500mb, 1gb, 2gb, 8gb, 16gb and 32gb but not necessarily in the same order.

The mobile phone which has 256mb storage space is immediately above A. There are only two mobile phones between D and the mobile phones which have of 256mb storage space. The mobile phones which has 1gb storage space is above D but not immediately above D. Only three mobile phones are between C and the mobile phones which have 1gb storage space. The mobile phone which has 8gb storage space is immediately above E. There are only two mobile phones between G and the mobile phones which is of 2gb storage space. There are only two mobile phones between the mobile phones G. Only one mobile phone is between mobile phone B and mobile phone A. Mobile phone B is immediately above E. Neither mobile phone A nor mobile phone B has 8gb storage space. Mobile phone C has 500mb storage space. There is only one mobile phone between mobile phone E and G. Mobile phone F has 16gb or 8gb storage space. Neither mobile phone F nor mobile phone G has 500mb storage space. Mobile phone D has 1gb storage space. Mobile phone A has 256mb storage space.

- How many mobile phones are between mobile phone D and mobile phone G?
(a) One (b) Two (c) Three (d) Four (e) None
- What is the storage space of mobile phone F?
(a) 32gb (b) 256mb (c) 1gb (d) 2gb (e) Can't be determined
- Find the pair of storage space and mobile phone which is not correctly matched.
(a) B-2gb (b) F-1gb (c) A-16gb (d) G-256mb (e) None of these
- Which of the following conditions is correct regarding 8gb storage space with respect to E?
(a) There is one mobile phone between E and 8gb storage space mobile phones.
(b) E is immediately above 8gb storage space mobile phone.
(c) 8gb storage space is related to the mobile phone immediately above E.
(d) All the above are true
(e) None of the above is true

5. Which of the following storage spaces belongs to 'A'?
- (a) 256mb (b) 2gb (c) 8gb
(d) 500mb (e) None of these.

Directions (6-8): In each of the question below are given three statements followed by three conclusions numbered I, II and III. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow(s) from the given statements, disregarding commonly known facts:

6. **Statements:** Some Gujrat are karnal.

Conclusions: I. Some delhi are Gujrat.
II. Some karnal are delhi.
III. No delhi are karnal.

- (a) None follow (b) I and II follow
(c) Only I follow (d) Only II follow
(e) Only I and II follow

Statement: Some pdf.

- Conclusions:** I. At least some xls are pdf.
II. All pdf are xls.
III. All xls are pdf.
- (a) I and II follow (b) I and III follow
(c) II and III follow (d) All follow
(e) None of the above

8. **Statements:** All windows are microsoft.

All ios are microsoft
All microsoft are android.

Conclusions: I. All windows are android is a possibility.

II. All ios is android.

III. At least some android are microsoft.

- (a) I and II follow (b) I and III follow
(c) II and III follow (d) All follow
(e) None of the above

Directions (9-13): Study the following information carefully to answer the given questions.

W, X, Y, Z, M, N and O going to three different malls GIP, DLF and SRS with at least two of them in any of these malls. Each of them has a favourite colour—Green, Blue, Red, White, Black, Violet and Purple. X going to DLF mall with M.

M's favourite colour is Purple. Those who went to GIP mall do not like Green and White colour. The one who likes Blue colour is going only with O in SRS mall. The one who's favourite Colour is Black does not go in the same mall with either M or O. W does not go in DLF mall. W likes Violet colour. Z and N going in the same mall. N does not like Red colour. The one who's favourite colour is White does not go in DLF mall.

9. W, Z and N are going in which mall?
 (a) Cannot be determined
 (b) GIP (c) DLF
 (d) SRS (e) None of these
10. What is the favourite colour of M?
 (a) Violet (b) White (c) Purple
 (d) Black (e) None of these
11. Which of the following combinations is true?
 (a) W-SRS-Blue (b) O-GIP-Black
 (c) N-SRS-White
 (d) None of these

12. Y goes in which mall?
 (a) GIP (b) DLF
 (d) Cannot be determined

13. Whose favourite colour is
 (a) X (b) W
 (d) Z (e) None

Directions (14-18): Following five three-digit given below.
 519 328 746 495 837

14. If half of the second highest number is added to the third highest number, which of the following will be the result?
 (a) 156 (b) 146
 (d) 314 (e) None of these
15. If the positions of the first and the third digits in each of the numbers are interchanged, which of the following will be the second digit of the lowest number?
 (a) 1 (b) 2 (c) 4
 (d) 9 (e) 3
16. If in each number the third digit becomes the first digit, the first digit becomes the second digit and the second digit becomes the third digit, which of the following will be the second digit of the lowest number?
 (a) 1 (b) 2 (c) 4
 (d) 9 (e) 3
17. Which of the following represents the difference between the first and the second digits of the second highest number?
 (a) 4 (b) 1 (c) 3
 (d) 5 (e) None of these

18. If '1' is subtracted from the third digit of each number and '1' is added to the first digit of each number, which of the following will be the sum of the second and third digits of the second lowest number?
 (a) 13 (b) 9 (c) 8
 (d) 6 (e) None of these

Directions (19-20): Read the given information carefully and answer the given questions.

There are 5 persons A, B, C, D and E. B is to the northeast of E. D is 2km to the east of E, who is 6km to the west of A. C is to the northwest of D and in the line of EB. D is 4km the south of B.

19. What is the distance between D and A?
 (a) 6km (b) 4km (c) 3km
 (d) 2km (e) None of these
20. In which direction is A with respect to B?
 (b) Southwest
 (d) Northwest

Directions (21-25): Read the following digit-letter-symbol sequence and answer the questions given below:
 * T J L 2 \$ % ^ & K 1 & A W ? P E + Q @ 7 F 6

21. How many symbols are there in the above sequence, each of which is immediately preceded by a consonant and immediately followed by a symbol?
 (a) None (b) One (c) Three
 (d) Two (e) Four
22. Which of the following is sixth to the left of eighteenth element from the right end?
 (a) % (b) C (c) 1
 (d) 8 (e) None of these
23. If the above sequence is written in reverse order then which of the following will be sixth to the right of sixteenth element from the right end?
 (a) M (b) A (c) B
 (d) ? (e) None of these
24. If each of the odd position in the letter CAREFULLY is increased by 1 and each of the even position letter are decreased by 1 then which will be the new word?
 (a) EZSDHTNKY (b) EZSDHTNKY
 (c) DZSDGTMKZ (d) DYTFGTNKY
 (e) None of these.
25. In a certain code, CHAMPION is written as NBIDMNHQ. How is ELECTRON written in the code?
 (a) FMDFMNQS (b) BDKDMNQS
 (c) DFMFOPUS (d) DFMFMNQS
 (e) None of these

Directions (26-30): Study the following information carefully and answer the given questions.

Five Movies- Go Goa, Chandni-Chawk to China, London Dreams, Chennai Express and Mumbai Metro are played in 5 halls-Golden, Diamond, platinum, Deluxe, and Galaxy in a PVR. These movies are rated by different stars-one, two, three, four and five. The show timing is also different for each movie, 9am, 12 noon, 3pm, 6pm, and 9pm.

- Chandni-Chawk to China is not played in Diamond or Galaxy hall.
- The show timing of Go Goa is not 6pm or 9pm while show timing of Chennai Express is 12 noon.
- Mumbai Metro is not one or four star movie but played in Diamond hall.
- London Dream and Chennai Express are neither played in Golden & Platinum hall nor two or four star movie. Five star rated movie is played at 9pm
- Three star rated movie is played in Galaxy. Five star rated movie is played in Deluxe hall
- Four star rated movie is played in Diamond hall and Mumbai Metro.

26. Movie 'Go Goa' is rated as
- (a) One star
(c) Three star
(e) Five star
27. Which of the following stars is played in the Deluxe hall
- (a) Two star rated movie
(b) Mumbai Metro is played
(c) Chennai Express is five star
(d) Chandni-Chawk to China
(e) None of the above
28. Which of the following movies is played in the Galaxy hall
- (a) London Dream-four star
(b) Go Goa-five star
(c) Mumbai Metro-6pm
(d) Chennai Express-Galaxy hall
(e) More than one of the above
29. What is the timing of the movie which is played in Deluxe hall?
- (a) 9 am (b) 12 noon (c) 3 pm
(d) 6 pm (e) 9 pm
30. Movie 'Mumbai Metro' is rated as?
- (a) One star (b) Two star
(c) Three star (d) Four star
(e) Five star

Directions (31-32): Study the following information carefully and answer the questions given below:

Five family members V, W, X, Y and Z are sitting in a straight line facing north. Each of them somehow has a relation with V, who sits third to the right of his daughter. There are only two females in the family. X is an immediate neighbour of his mother. Y sits third to the right of Z, who

sits at one end of the line. V sits with his wife. X is brother of W, who is niece of Z.

31. How is Z related to V?
- (a) Father (b) Mother (c) Brother
(d) Can't be determined (e) None of these
32. How is Y related to W?
- (a) Mother (b) Father (c) Brother
(d) Can't be determined (e) None of these

Directions (33-37): Study the information carefully and answer the question given below.

Eight persons-P, S, Q, R, U, B, J and C are sitting in a circle at equal distances. Three of them are facing opposite to center and other five are sitting facing the centre of the circle. Two persons are sitting between C and U and two are sitting between B and U. Q is sitting to the second left of J, who is facing the centre of the circle. S is facing the centre of the circle. S is sitting to the third right of B. R is not near to C. Q is sitting to the third left of R, who is second to the right of U. Three players one is facing the circle. U is not opposite to B.

33. Which of the following persons is facing to the opposite of the center?
- (a) B (b) R (c) U
(d) Q (e) None of these
34. Who is sitting to the left of U?
- (a) R (c) S
(d) C (e) None of these
35. Which of the following persons is sitting second to the left of U?
- (a) B (b) C (c) B
(d) C (e) None of these

36. Who is second right to J?
- (a) B (b) C (c) S or B
(d) R or S (e) C or R
37. How many people are sitting between C and R, when counting in anticlockwise direction from R?
- (a) Three (b) None (c) One
(d) Two (e) None of these

Directions (38-40): Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the three statements and Give answer:

- (a) If the data in Statement I and II are sufficient to answer the question while the data in Statement III is not required to answer the question
- (b) If the data in Statement I and III are sufficient to answer the question, while the data in Statement II is not required to answer the question

- (c) If the data in Statement II and III are sufficient to answer the question, while the data in Statement I is not required to answer the question
- (d) If even the data in Statement I, II and III together are not sufficient to answer the question.
- (e) If the data in all the Statement I, II and III together are necessary to answer the question.

38. Who among A, B, C, D and E is driving the four wheeler?

- (i) B and C are drunk.
- (ii) D does not have the driving license.
- (iii) D and C are sitting on the front row.

39. Who is the tallest or heaviest among A, B, C, D and E?
- (i) E is heavier than D and B. Neither D nor B is the shortest.
- (ii) A is taller than B. Neither B nor C is the shortest.
- (iii) C is shorter than B but lighter than B.

40. Which of the following persons is B married to amongst A, C, D and E who all belong to the same family?

- (i) No one among B, C or E is the oldest member of the family. D is the father of A.
- (ii) C is the daughter of D. E is the youngest.
- (iii) D has only two children and one of them is a mother. A is unmarried & is brother-in-law of B.

QUANTITATIVE APTITUDE

Directions (41-45): Study the pie charts carefully and answer the following question

Distribution of Laptops (HP and Asus) sold by five different sellers

Total number of

Laptops sold =



41. Number of HP Laptops sold by seller A is approximately what percentage more or less than the number of Asus laptop sold by E and F together?
- (a) 145% (b) 227% (c) 127% (d) 245% (e) 97%
42. Find the difference between the number of Asus laptop sold D and E together to the number of HP laptop sold by A, B and F together?
- (a) 10,450 (b) 12,460 (c) 10,540 (d) 12,640 (e) 12,540
43. What is ratio of number of HP laptop sold by D and F together to HP laptop sold by B and E together?
- (a) $\frac{139}{109}$ (b) $\frac{109}{139}$ (c) $\frac{113}{127}$ (d) $\frac{127}{113}$ (e) $\frac{121}{147}$
44. Find the total profit earn by seller A if seller A earns Rs. 40 and Rs. 70 per laptop on HP and Asus respectively.
- (a) Rs. 5,47,200 (b) Rs. 5,27,500 (c) Rs. 5,47,900 (d) Rs. 4,77,200 (e) Rs. 5,77,200
45. A seller sells a laptop in loss at Rs. 30 each so at what price he should sell each HP laptop to gain Rs. 3,200 in total.
- (a) Rs.39 (b) Rs.41 (c) Rs.43 (d) Rs.45 (e) None of these
46. A watch dealer sells watches at Rs. 800 per watch. However, he is forced to give two successive discounts of 10% and 15% respectively. However, he recovers the sales tax on the net sale price from the customer at 25% of the net price. Find the profit percentage if the C.P of watch is Rs.600.
- (a) 23.5% (b) 21.5% (c) 25.5% (d) 27.5% (e) 26.5%
47. The short and the long hands of a clock are 4 cm and 6 cm long respectively. What will be sum of distances travelled by their tips in 4 days? (Take $\pi = 3.14$)
- (a) 954.56 cm (b) 3818.24 cm (c) 2909.12 cm (d) 2703.56 cm (e) None of these

48. A spherical cannon ball, 28 cm in diameter, is melted and cast into a right circular conical mould the base of which is 35 cm in diameter. Find the height of the cone correct up to two places of decimals.

- (a) 8.96 cm (b) 35.84 cm (c) 5.97 cm
(d) 17.92 cm (e) 30.92 cm

49. A train takes 3 seconds to cross a pole and 22 seconds to cross a 855 m long bridge. What is the time taken by the train (in seconds) to cross a 215 m long train coming at a speed of 90 km/hr from the opposite direction?

- (a) 5 (b) 8 (c) 12
(d) 7 (e) 15

50. A 10 hectare field is reaped by 2 men, 3 women and 4 children together in 10 days. If working capabilities of a man, a woman and a child are in the ratio 5 : 4 : 2, then a 16 hectare field will be reaped by 6 men, 4 women and 7 children in.

- (a) 5 days (b) 6 days (c) 7 days
(d) 8 days (e) None of these

Directions (51-55): In each of the following, two equations are given. Solve the equations and choose the correct answer—

- (a) If $x < y$ (b) If $x > y$
(c) If $x = y$ (d) If x and y cannot be compared
(e) $x = y$ or relationship between x and y cannot be established

51. I. $35x^2 - 53x + 20 = 0$
II. $56y^2 - 97y + 42 = 0$

52. I. $18x^2 + 18x + 4 = 0$
II. $12y^2 + 29y + 14 = 0$

53. I. $8x^2 - 78x + 169 = 0$
II. $20y^2 - 117y + 169 = 0$

54. I. $6x^2 + 13x + 5 = 0$
II. $3y^2 + 11y + 10 = 0$

55. I. $6x + 7y = 52$
II. $14x + 4y = 35$

Directions (56-60): Study the following table carefully and answer the questions that follow.

The table shows the data related top six schools of India. Some values are missing which you need to find out and answer the questions accordingly.

Schools	Number of teachers	Ratio of male to female teachers	Ratio of teachers to students	Percentage of non-teaching staff
Vasant valley	480	15 : 17	- : -	15%
Woodstock	450	- : -	1 : 6	10%
DPS	—	3 : 2	3 : 20	—
Rishi Valley	510	8 : 7	3 : 10	—
Pathways	—	2 : 7	2 : 5	20%
DAV	—	- : -	2 : 7	15%

Note: Total strength of school = Number of teachers + Number of students + Number of non-teaching staff

56. If female teachers of school Vasant valley are 17% of total strength of school, then what is the ratio of teachers to students in that school?

- (a) 32 : 55 (b) 5 : 11 (c) 32 : 53
(d) 23 : 53 (e) 5 : 13

57. The female students of Pathways school are $15\frac{5}{9}\%$ more than male teachers of school Vasant valley while ratio of male to female students of Pathways school is 14 : 13. Find the number of non-teaching staff of Pathways school.

- (a) 180 (b) 192 (c) 210
(d) 189 (e) None of these

58. If strength of all school is same, then find the number of non-teaching staff of school DAV.

- (a) 420 (b) 525 (c) 580
(d) 630 (e) None of these

59. If total strength and number of students of schools Woodstock and DPS are same, then teachers of DPS are _____ of students of Woodstock?

- (c) 72%

(a) 60% (b) 65% (d) 70% (e) 75%

60. Find the ratio of total strength of school Woodstock to Rishi valley.

- (a) 98 : 100 (b) 95 : 100 (c) 780 : 800
(d) cannot be determined (e) None of these

61. A man spends 15% of his monthly salary for his household expenses and 12% on travelling. Out of the remaining salary he spends 20% on clothes and saves the rest. If he saves Rs 500 every month, what is his monthly salary?

- (a) Rs 2500 (b) Rs 3000 (c) Rs 3000
(d) Rs 2000 (e) Rs 2500

62. Raman and Naresh invested in a business. Raman invested Rs 3000 and Naresh Rs 2000. At the end of the year, they withdrew Rs 1500 at the end of 4th month and Rs 1000 initially and Rs 1500 at the end of 7th month. At the year's end, they earned Rs 1800. What should be Raman's share?

- (a) 800 (b) 920 (c) 864
(d) 850 (e) 795

63. A can do a piece of work in 10 days, B can do the same work in 12 days and C in 15 days. They all started working together, but A leaves the work after 2 days and B leaves the work 3 days before the work is completed. For how many days the work lasted?

- (a) 8 days (b) 10 days (c) 7 days
(d) 9 days (e) 6 days

64. A shopkeeper sells shirts at the rate of Rs 400 per shirt and allows a discount of 10% to all customers buying by full cash payment. Also, for all those customers who buy 10 shirts at a time, he counts 12 shirts. If a customer is willing to take both the discounts, what net effective discount can he avail?

- (a) 37.5% (b) 12.5% (c) 33.33%
(d) 25% (e) None of these

65. Subbu have a fan whose 5% of the selling price is equal to 6% of its cost price and 7% of the selling price exceeds 8% of its cost price by Rs 1. Find the profit.

- (a) Rs 25 (b) Rs 37.5 (c) Rs 50
(d) Rs 75 (e) Rs 62.5

66. A sum of Rs 1000 after 3 years at compound interest becomes a certain amount that is equal to the amount that is the result of a 3 years depreciation from Rs 1728. Find the difference between the rates of CI and depreciation. (Given that CI is 10% p.a.)

- (a) $2\frac{1}{3}\%$ (b) $1\frac{2}{3}\%$ (c) 3%
(d) 2% (e) None of these

67. In a co-educational school there are 15 more girls than boys. If the number of girls is increased by 10% and the number of boys is also increased by 16%, there would be 9 more girls than boys. What is the number of students in the school?

- (a) 140 (b) 125
(d) 255 (e) 250

68. In Ramnagar colony, the number of school going children to non-school going children was 3 : 2. Next year the number of non-school going children increases by 20% making it 35,40. The number of school going children remains the same. What is the new ratio of school going children to non-school going children?

- (a) 4 : 5 (b) 3 : 2
(d) Data inadequate

69. There was one mess for 300 students. If the number of boarders increased by 10% the expenses of the mess were increased by 10% in a month, while the average expenditure per boarder diminish by Rs 2. Find the original monthly cost of the mess.

- (a) Rs 390 (b) Rs 360 (c) Rs 410
(d) Rs 480 (e) None of these

70. An empty container is filled with pure alcohol the alcohol is slowly to run out and when the container is one-fourth empty, it is replaced with water. Next, when the container is half empty it is again filled with water. Finally, when it is three fourth empty, it is again filled with water. What percentage of container is alcohol now?

- (a) $8\frac{1}{2}\%$ (b) $11\frac{3}{4}\%$ (c) $9\frac{3}{8}\%$
(d) $14\frac{3}{8}\%$ (e) None of these

Direction (71 - 75): Each question below is followed by two Statements [I] and [II]. You have to determine whether the data given in the statements are sufficient for answering the question. You should use the data and your knowledge of Mathematics to choose between the possible answers.

Give answer

- (a) if the Statement [I] alone is sufficient to answer the question but the Statement [II] alone is not sufficient
(b) if the Statement [II] alone is sufficient to answer the question but the Statement [I] alone is not sufficient
(c) if both Statement [I] and [II] together are needed to answer the question
(d) if either the Statement [I] alone or Statement [II] alone is sufficient to answer the question
(e) if you cannot get the answer from the Statements [I] and [II] together but need even more data

71. In how many days 8 women can complete the work?

- [I]. 10 men & 12 Women can finish the work in $1\frac{3}{7}$ days.

[II]. 10 men can finish the work in $2\frac{6}{7}$ days.

72. What is the radius of the circle?

- [I]. The area of the circle is 10% more than the breadth. of a rectangle of length 40 cm. Length of rectangle is 20 cm. Area of circle.

- [II]. Circumference of the circle is equal to side of square of side 20 cm.

73. Ram sold an article at a profit of 20% above the M.P. of the item?

- [I]. Ram gave two successive discounts of 20% & 5% on the marked price. After that take 25% more on the marked price. Ram can earn 40 more If the marked price is Rs 1000.

- [II]. Ram gave two successive discount of MP i.e., 15% & 20% when he sold the article. Ram kept M.P. 50% more than the cost price. Cost price of the article is Rs 1000.

74. Find the amount invested by Jagriti?

- [I]. If jagriti invested half of the amount in Yes Bank at 5% for 3years and half the amount in Kotak Bank at 6% for 5 year, she got Rs 4500 as Simple Interest.

- [II]. Jagriti will get 2420 more if she will invest in a bank at 10% p.a. for 3 year at compound interest rather than 10% p.a. for 2 year in same bank at compound interest

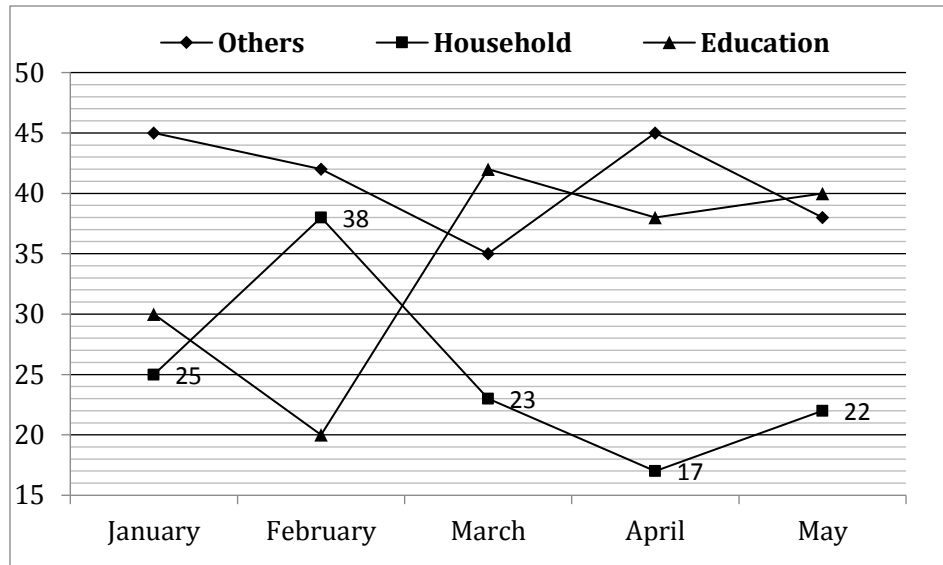
75. What is the weight of Raju?

- [I]. There are four person Raju, Ramesh, Rajan, Rajguru. Average of weight of these four is 51.25. Average weight of Rajan and Rajguru is 47.5. Average weight of Ramesh & Rajguru is 57.5.

- [II]. In a class of 50 students having 30 kg as average weight If one students of weight 30 kg is replaced by Rajan then the average increases by 0.4.

Direction (76-80): - Study the following line graph and answer the questions that follow.

The graph shows the percentage distribution of money spent by Avanish on Education, Household and Others in five different months. He spent only 60% of his monthly salary.



Note: Monthly income through salary is constant.

MONTHLY SALARY:- 50,000

76. In June, Avanish spent 20% of his salary on Education, 17.1% on Household and 22.5% on Others as compared to what he spent in January. Find the percentage contribution of Education in June in monthly salary of Avanish.
- (a) 20.5% (b) 22.5% (c) 20.0% (d) 23.2% (e) None of these
77. Avanish invested 10% of his salary in January in a business which gives him an annual return of 20% per annum on amount invested. Find the amount saved by him in one year?
- (a) Rs. 125.5 (b) Rs. 125.0 (c) Rs. 125.2 (d) Rs. 135 (e) None of these
78. What is the ratio of amount saved and amount spent by Avanish in April?
- (a) Rs. 1 : Rs. 600 (b) Rs. 1 : Rs. 600 (c) Rs. 7200 (d) Rs. 8500 (e) Rs. 850
79. Find the total amount made in February except for Education?
- (a) Rs. 24,000 (b) Rs. 4,400 (c) Rs. 22,400 (d) Rs. 2,400 (e) None of these
80. Find the ratio of money spent on Education in February to the money spent on Education in January?
- (a) 3 : 2 (b) 4 : 7 (c) 5 : 29 (d) 8 : 3 (e) None of these

ENGLISH LANGUAGE

Directions (81-88): Read the following passage carefully and answer the questions given below it.

One of the major concerns of many European physicians today is the alarming increase in the incidence of suicides across the Continent. Recent studies indicate that more Europeans take their own lives than they die on the highways. While the traditionally high suicide rates in Austria, Hungary, Switzerland and Scandinavia have remained relatively stable, the low rates in Latin and Catholic countries have begun to grow dramatically in the last 20 years. Among some age groups in Ireland, the increase is to the order of 100 percent. In many parts of Europe, suicide has long been common among older people. In parts of Hungary, which holds Europe's record

for suicides with a rate of 41 a year per one lakh people, the rate among the elderly is 300. In France it is 114, while the overall rate is 20.8. By comparison the overall suicide rate in the United States is 12.3. In Japan, it is 17.3.

The greatest concern of European specialists is the increasing number of young people who take their own lives. Since 1960s the suicide rate among young French men between the ages of 15 and 29 has tripled. A third of Danish men who die between the ages of 25 and 34 kill themselves.

Experts see the transformation of European society as the key to the recent increases in European suicides. The modernization of the workforce, the increasing social and geographical mobility and the consequent breakdown of

old family structures and support networks all play a role. In a comparative study of suicide in 20 European countries over two decades, it was found that factors such as divorce, unemployment, the number of working women in a society, the number of children and the prevalence of religion, combined with the presence of violent crimes and alcohol abuse, are useful in predicting the rise and fall of suicide rates. As European Southern tier becomes more prosperous, families are becoming smaller, relationship less stable and suicides are increasing. In Eastern Europe, where change is coming even faster, suicide rates are expected to flare up for a rather long period of time.

As traditional family support systems have weakened in the U. S., Canada and Britain, State and community services have worked to fill the gap with counseling and hotlines. But there has been a setback to this very recently. More and more people are beginning to consider the way they die as an equally personal choice. This has been fuelled by a whole new range of "how to do it" books hitting the market, a few of them even to the point of being self-inflicted euthanasia, itself a consequence of this, an increase in the number of people in Europe are now directly confronted with the possibility of mortality.

81. What, according to the passage, has been the greatest concern of European countries?
- Increase in the number of people committing suicide
 - Increase in the number of people killing themselves
 - Increase in the number of people committing suicide
 - Increase in the number of people killing themselves
 - None of these
82. Which of the following has not been mentioned in the passage as a reason for the gradual escalation in European suicide rate?
- The breakdown of traditional family structures
 - The migration of people from one place to another
 - The growing unemployment problem
 - The mobility of people on the social scale
 - None of these
83. According to the passage, the finding of the comparative study of suicide in 20 countries was that
- divorce and unemployment led to violent crimes and alcoholic abuse.
 - suicide rate could be predicted on the basis of certain socio-cultural factors.
 - violent crimes and alcohol abuse are the main reasons for suicides.

- the prevalence of religion was combined with the presence of violent crimes and alcohol abuse.
- suicide rates may rise or fall and are difficult to predict.

84. What has been mentioned in the passage as regards the suicide rate in Switzerland?

- The increase in the suicide rate in Switzerland has been higher than that of other European countries.
- There has not been any appreciable change in the suicide rate in Switzerland over the few years.
- Switzerland's suicide rate has been the same as that of other countries like Austria, Hungary and Scandinavia.
- There has been a steady increase in the suicide rate in Switzerland over the past 20 years.
- Switzerland's suicide rate has been traditionally stable, but has been growing over the last 20 years.

85. Which of the following statements is **TRUE** in the

- Switzerland has a yearly suicide rate of 12.3 per one lakh people.
- The suicide rate in Ireland has increased by 7% over the last 20 years.
- The suicide rate in Protestant and Catholic countries has remained the same over the last 20 years.
- In France, the suicide rate of individuals per one lakh people is 41 a year.
- In Japan, the suicide rate of elderly people is 17.3 a year per one lakh people.

and community services are being provided several times on account of the growing resistance to counselling and hotlines by the people. The number of the aged and the number of people committing suicide have increased to euthanasia.

- weakening of traditional family support systems
- ever-increasing number of people committing suicide out of frustration
- increase in the number of people exerting their personal choice in deciding the way they die

87. Which of the following statements is **NOT TRUE** in the context of the passage?

- Lesser number of Europeans are today dying of highway accidents than killing themselves.
- One-third of men between the ages of 25 and 34 who kill themselves are Danish.
- The overall suicide rate in America is 12.3 a year per one lakh people.
- An overall suicide rate of 41 a year per one lakh people has been found in parts of Hungary.
- During the 1960s the suicide rate of 15-29 year old French men was only one-third of what it is today.

88. What has been mentioned in the passage regarding Europe's Southern part?
- (a) Suicide rates are remaining stable there.
 - (b) Unemployment is comparatively more there.
 - (c) The living standards of the people are improving there.
 - (d) There are smaller families there.
 - (e) Economic transformation is relatively faster there.

Directions (89-95): Read the following passage carefully and answer the questions given below it.

From 'apparel to aerospace', 'steel to software', the pace of technological innovation is quickening. No longer can companies afford to miss **generation** of technology and expect to remain competitive. Adding to the pressure, innovations are increasingly crossing industry boundaries; a new fiber developed by the textile industry has potential for building materials and medical equipment. Some companies are adept at using a diversity of technologies to create new products that transform markets. But many others are floundering because of a myopic, short-term strategy that no longer works in a fast-changing environment. The difference between success and failure is not how much a company invests in research and development (R&D), but how it invests. There are two possible approaches. One is to invest in R&D that replaces old technology with new technology. The other is to combine existing technologies to create new products. The 'breakthrough' approach focuses on developing new technologies. The 'technologies fusion' approach combines existing technologies to create new products. The 'breakthrough' approach focuses on developing new technologies. The 'technologies fusion' approach combines existing technologies to create new products. The 'breakthrough' approach focuses on developing new technologies. The 'technologies fusion' approach combines existing technologies to create new products.

In a world where the old 'breakthrough' approach is no longer applicable, a new strategy is inadequate; companies must adopt a new strategy. Relying on breakthrough approach, companies focus the R&D efforts too narrowly, ignoring the possibilities of combining technologies. Yet many western companies still rely almost exclusively - on the breakthrough approach. The reasons are complex: a distrust of outside innovations and not-invented here engineering and arrogance and aversion to sharing research results.

89. Which of the following is **false** according to the passage?
- (a) Technological innovation is taking place at a fast pace
 - (b) All technological innovations have applicability in other industries
 - (c) Companies failing to adopt new technology may fail.
 - (d) Companies which adopt technologies of other industries have an advantage
 - (e) Technology becomes obsolete in a fast changing environment.

90. Which of the following would correctly reflect the position regarding the two approaches to technology adoption?
- (a) Both the approaches are to be used at the same time
 - (b) 'Breakthrough' approach is only to be used
 - (c) 'Technology fusion' approach is only to be used
 - (d) 'Breakthrough approach' is preferable for many companies
 - (e) None of these
91. Which of the following has the same meaning as the word '**generation**' as it has been used in-the passage?
- (a) Family
 - (b) Class
 - (c) Offspring
 - (d) Phase
 - (e) Level
92. Which of the following features of technology has been highlighted most prominently by the author of the passage?

- (a) The increasing utilization by some companies
 - (b) The increasing speed of technological innovations are happening
 - (c) The increasing speed of technological innovations are happening
 - (d) The increasing speed of technological innovations are happening
 - (e) The increasing speed of technological innovations are happening
- What does the author want to highlight by using the words 'apparel to aerospace' and 'steel to software'?
- (a) Many industries are trying to improve technology
 - (b) His knowledge of the various industries
 - (c) The wide range of technological innovations
 - (d) The increasing speed of technological innovations
 - (e) The increasing speed of technological innovations
95. What is the immediate effect, according to the passage, if a company does not innovate?
- (a) It closes down.
 - (b) It ceases to be competitive in the market.
 - (c) The prices of its products go up.
 - (d) Its R & D departments close down.
 - (e) It adds pressure on itself.

Directions (96-100): Pick out the word opposite or nearly so in the meaning of the given words.

96. EXTRAVAGANT
- (a) Developing
 - (b) Wonderful
 - (c) Disappearing
 - (d) Economical
 - (e) Real

97. VIVID

- (a) Peculiar (b) Uncanny (c) Evocative
(d) Stifle (e) Ceases

98. DESULTORY

- (a) Isolated (b) Manifest (c) Pertinent
(d) Customization (e) Frequent

99. ERUDITE

- (a) Aversion (b) Sleazy (c) Sagacious
(d) Loquacious (e) Disheveled

100. DEBONAIR

- (a) Awkward (b) Windy (c) Balmy
(d) Sportive (e) Stormy

Directions (101-103): In each of the questions given below a sentence is given with a blank which is followed by five options that provide us with the possible alternatives for the blank. The blank must be filled by one of the idioms or phrases given in the options.

- 101.** We missed our flight to _____
flight was late and to _____
ticket as if it was our fault.
(a) break a leg
(c) add insult to injury
(e) scratch someone's back

- 102.** I can't believe that was _____
than some of our homework.
(a) whole new ball game
(c) dime's worth
(e) piece of cake

- 103.** His birthday was supposed to be _____
believe you _____. Now he _____
(a) let the cat out of bag
(b) keep your cool
(c) keep a straight face
(d) fate worse than death
(e) face like thunder

Directions (104-105): In the question given below few sentences are given which are grammatically correct and meaningful. Connect them by the word given above the statements in the best possible way without changing the intended meaning. Choose your answer accordingly from the options to form a correct, coherent sentence.

104. BECAUSE

- (A) The federal department has twice rejected LePage's requests for centralization
(B) LePage has been in a tug of war with the regional boards for control of the federal money for several years.
(C) LePage didn't work in collaboration with federal department as required.
(D) The organization claims that LePage has broken federal law by refusing to release the funds within 30 days of them having become available in August.

- (a) Only B-D (b) Only D-A
(c) Both C-B and D-A (d) Only A-C
(e) None of these

105. BY THE TIME

- (A) The storm crawls up the East Coast Wednesday and Thursday.
(B) It's expected to gust with strong 30 to 50 mph winds.
(C) That's a signal that the storm is going to get more intense, quickly.
(D) Once the storm reaches New England, it may bring dangerous, power line-snapping blizzard conditions and coastal flooding.
(a) Only A-B (b) Only B-C (c) Only D-C
(d) Only D-B (e) Only C-A

Directions (106-108): Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph. From the statements, choose the one that does not fit into the

- 106.** (a) _____ by turning sound into digital data and then decoding them using digital radio receivers;
(b) This produces CD-quality sound output.
(c) Digital is no different from normal radio what digital television is different from standard analog TV.
(d) It's the most important upgrade to happen since the introduction of FM in Australia in the 1970s and its sound quality is comparable to FM versus

_____ as the potential to provide better sound quality than FM, governments may end up filling the frequency spectrum with as many channels as possible. _____ may divide the bit-rate (the rate at which data is sent) among these broadcasts. As a result, if the DAB bandwidth is choked, it may suffer a drop in quality.

- 107.** (a) India has developed complex election expenditure, political party funding, and reporting and disclosure laws.
(b) Competitive political parties and election campaigns are central to the health of democracies.
(c) Parties and campaigns require significant resources to be effective.
(d) Current state funding measures include provision of free time on public broadcasters for national parties in general elections and for registered state parties in state legislature elections.
(e) However, these laws may have perverse impacts on the electoral system: they tend to drive campaign expenditure underground and foster a reliance on unaccounted funds or "black money."

- In these days of economic liberalization, globalization, etc. materialistic values have assumed (111) importance. Money, physical comforts and luxuries are the most sought after aspects. There has been (112) competition. Such competition (113) stress. The stress leads to (114) of health of the people. Indian culture has (115) its striking uniqueness, as against the Western culture.

111. (a) usual (b) little (c) tangible
(d) least (e) greater
112. (a) critical (b) unhealthy (c) unequalled
(d) no (e) absolute
113. (a) releases (b) deserves (c) generates
(d) demonstrates (e) suppresses
114. (a) neglect (b) illness (c) generation
(d) deterioration (e) encroachment
115. (a) maintained (b) illustrated
(c) marginalised (d) bestowed

Directions: In the following passage there are numbered blanks. Each blank is numbered and one word has been suggested for each blank. These numbers are printed before the blank. Against each, five options are given. Find the correct word which fits the blank appropriately. Write the letter of the word which fits the blank in the space provided. (No correction required) as

- significantly, in the law goes beyond the protection of (16) who a whistle-blower is, to protect government officials who **boost** (117) in the course of their work. It on or non-governmental organization. The importance of such **radical** (118) is underlined by the fact that in the last few years, the government has been killed for exposing corruption in government on the basis of **instruction** (119) they obtained under the Right to Information (RTI) Act. The RTI law has **guaranteed** (120) the common man to have access to information from public authorities — which only government officials were earlier privy to — making every citizen a potential whistle-blower.

- 116.** (a)characterize (b)assigning (c)defining
(d)illustrating (e)No correction required
- 117.** (a)unfolds (b)proves (c)inform
(d)expose (e)No correction required
- 118.** (a)progressive (b)intermittent (c)shifting
(d)mobile (e)No correction required
- 119.** (a)advice (b)information
(c)knowledge (d)experience
(e)No correction required
- 120.** (a)revoked (b)licensed
(c)enabled (d)empowered

120. (a)revoked (b)licensed
(c)enabled((d)empowered

(e) No correction required

Solutions

REASONING ABILITY

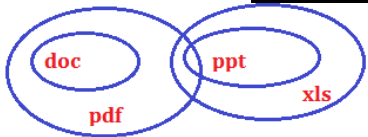
Direction (1-5);

Mobile Phone	Storage Space
F	1gb
B	500mb
D	8gb
E	32gb
C	2gb
G	256mb
A	16gb

1. (b); 2. (c); 3. (a);
4. (c); 5. (e);
6. (c);



7. (d);



8. (c);



Direction (9-13):

Person	Mall	Colour
W	GIP	Violet
X	DLF	Green
Y	SRS	Blue
Z	GIP	Red
M	DLF	Purple
N	GIP	Black
O	SRS	White

9. (b); 10. (c); 11. (d);
12. (c); 13. (c);

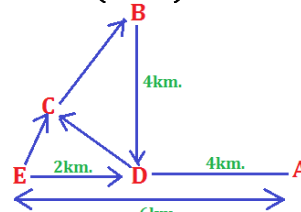
Direction (14-18)

14. (b); 146
15. (d); Lowest number is 594.
Second digit is 9
16. (c); 4

17. (c); 3

18. (a); 13

Direction (19-20)



19. (b); 20. (a); 21. (e);
22. (d); 23. (a); 24. (c);

25.

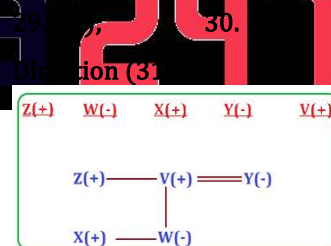
+1 +1 +1 +1 -1 -1 -1 -1
CHAMPION
NBIDMNHQ

+1 +1 +1 +1 -1 -1 -1 -1
ELECTRON
DFMFMNQS

Directions (26-30):

Movie	Hall	Rating	Time
Go Goa	Golden/Platinum	1 star	9a.m
Chandni-Chowk to China	Golden/Platinum	4 star	6p.m
London Dreams	Deluxe	5 star	9p.m
Chennai Express	Galaxy	3 star	12noon
Mumbai Metro	Diamond	2 star	3p.m

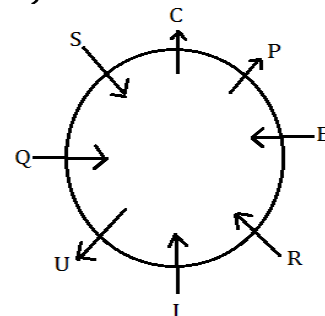
28. (d);



31. (c);

32. (a);

Directions (33-37):

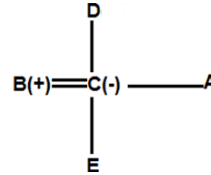


33. (c); 34. (b); 35. (a);
36. (a); 37. (d);

38. (d); None is sufficient as the person can be drunk or not have driving license but still be driving the vehicle.

39. (b); From (i) and (iii) we can say that A is the heaviest.

40. (e); From all the statements taken together, we can determine B is married to C.



QUANTITATIVE APTITUDE

41. (c); HP laptop sold by A

$$= \frac{18}{100} \times 48,000 - \frac{24}{100} \times 28,000$$

$$= 8640 - 6720$$

$$= 1920$$

HP laptop sold by B

$$= \frac{28}{100} \times 48,000 - \frac{14}{100} \times 28,000$$

$$= 13,440 - 3,920$$

$$= 9,520$$

HP laptop sold by A and

Asus laptop sold by E

$$= \frac{18}{100} \times 28,000$$

$$= 5040$$

Required percentage

$$= \frac{6400}{5040} \times 100 \approx 127\%$$

42. (d); Asus laptop sold by D

$$= \frac{20}{100} \times 28,000$$

$$= 5600$$

HP laptop sold by A and

HP laptop sold by F

$$= \frac{20}{100} \times 48,000 - \frac{10}{100} \times 28,000$$

$$= 9600 - 2800 = 6800$$

$$\text{Desired difference} = 11,440 + 6,800 - 5,600$$

$$= 12,640$$

43. (b); HP laptop sold D and F together

$$= \frac{(20 + 11)}{100} \times 48,000 - \frac{(12 + 10)}{100} \times 28,000$$

$$= 14,880 - 6,160$$

$$= 8,720$$

HP laptop sold by B and E together

$$= \frac{(28 + 8)}{100} \times 48,000 - \frac{(14 + 8)}{100} \times 28,000$$

$$= 17,280 - 6,160$$

$$= 11,120$$

$$\text{Desired Ratio} = \frac{8,720}{11,120} = \frac{109}{139}$$

44. (a); Asus laptop sold by A

$$= \frac{24}{100} \times (28,000)$$

$$= 6,720$$

HP laptop sold by A

$$= \frac{18}{100} (8,000) - \frac{24}{100} (28,000)$$

$$= 1,920$$

Total profit of A = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

45. (c)

HP laptop sold by E

$$= \frac{18}{100} \times 28,000 = 5040$$

Total profit of A = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of B = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400 = 70,400$$

Total profit of C = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of D = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of E = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of F = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of G = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of H = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of I = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of J = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of K = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of L = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of M = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of N = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of O = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of P = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of Q = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of R = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

Total profit of S = $40 \times 1,920 + 70 \times 6,720$

$$= 76,800 + 4,70,400$$

47. (b); In 4 days, the short hand covers its circumference $4 \times 2 = 8$ times long hand covers its circumference $4 \times 24 = 96$ times

Then they will cover a total distance of :-

$$(2 \times \pi \times 4) 8 + (2 \times \pi \times 6) 96 \Rightarrow 3818.24 \text{ cm}$$

48. (b); The volume in both the cases will be equal. Let the height of cone be = h

$$4 \times \frac{22}{7} \times (14)^3 \times \frac{1}{3} = \frac{22}{7} \times \left(\frac{35}{2}\right)^2 \times \frac{h}{3}$$

$$\Rightarrow 4(14)^3 = h \left(\frac{35}{2}\right)^2$$

$$\Rightarrow h = \frac{4 \times 14 \times 14 \times 14 \times 2 \times 2}{35 \times 35}$$

$$\Rightarrow h = 35.84 \text{ cm}$$

49. (a); Let L and V_t be the length and speed of train respectively.

$$\text{Then, } \frac{L}{V_t} = 3$$

$$\text{and } \frac{L+855}{V_t} = 22$$

$$\Rightarrow \frac{L}{V_t} + \frac{855}{V_t} = 22$$

$$3 + \frac{855}{V_t} = 22$$

$$\Rightarrow V_t = \frac{855}{19} = 45 \text{ m/s}$$

$$L = 3 \times 45 = 135 \text{ m}$$

$$\text{Speed of the second train} = 90 \text{ km/hr} = 25 \text{ m/s}$$

$$\therefore \text{Time taken to cross 215 m long train}$$

$$= \frac{135+215}{45+25} = 5 \text{ seconds.}$$

50. (d); Ratio of their efficiency = 5 : 4 : 2

$$\text{One day work of 2 men} = 10 \text{ units}$$

$$\text{One day work of 3 women} = 12 \text{ units}$$

$$\text{One day work of 4 children} = 8 \text{ units}$$

$$\text{Let time taken is } D$$

$$= \frac{(10+12+8) \times 10}{60 \times D} = \frac{[(6 \times 5) \times 10]}{60 \times D}$$

$$30 = \frac{10}{16}$$

$$D = 8 \text{ days}$$

51. (a); $35x^2 - 25x - 28x + 2$

$$5x(7x - 5) - 4(7x - 5)$$

$$x = \frac{4}{5}, \frac{5}{7}$$

$$56y^2 - 49y - 48y + 4$$

$$7y(8y - 7) - 6(8y - 7)$$

$$y = \frac{6}{7}, \frac{7}{8}$$

$$x < y$$

52. (d); I. $18x^2 + 18x + 4 = 0$

$$\Rightarrow 3x(3x + 2) + 1(3x + 2)$$

$$\Rightarrow (3x + 1)(3x + 2) = 0$$

$$\therefore x = -\frac{1}{3} \text{ or } -\frac{2}{3}$$

$$\text{II. } 12y^2 + 29y + 14 = 0$$

$$\Rightarrow 3y(4y + 7) + 2(4y + 7) = 0$$

$$\Rightarrow (3y + 2)(4y + 7) = 0$$

$$\therefore y = -\frac{2}{3} \text{ or } -\frac{7}{4}$$

$$x \geq y$$

53. (d); I. $8x^2 - 78x + 169 = 0$

$$\Rightarrow (2x - 13)(4x - 13) = 0$$

$$\therefore x = \frac{13}{2} \text{ or } \frac{13}{4}$$

$$\text{II. } 20y^2 - 117y + 169 = 0$$

$$\Rightarrow (4y - 13)(5y - 13) = 0$$

$$\therefore y = \frac{13}{4} \text{ or } \frac{13}{5}$$

$$\therefore x \geq y$$

54. (d); I. $6x^2 + 13x + 5 = 0$

$$6x^2 + 3x + 10x + 5 = 0$$

$$3x(2x + 1) + 5(2x + 1) = 0$$

$$x = -\frac{5}{3}, -\frac{1}{2}$$

$$\text{II. } 3y^2 + 11y + 10 = 0$$

$$3y^2 + 6y + 5y + 10 = 0$$

$$3y(y + 2) + 5(y + 2) = 0$$

$$y = -2, -\frac{5}{3}$$

$$x \geq y$$

55. (a); Equation (I) $\times 4$ and equation (II) $\times 7$

$$24x + 28y = 208$$

$$\underline{-98x + 28y = -245}$$

$$-74x = -37$$

$$x = \frac{1}{2}$$

$$y = 7$$

$$\therefore y > x$$

56. (c); Number of female teachers

$$= \frac{17}{32} \times 480 = 255$$

$$\therefore \text{Total strength of school}$$

$$< 1500$$

$$\therefore \frac{30}{5} = \frac{32}{53}$$

57. (d); Number of students of Pathways

$$= \frac{1040}{900} \times 260$$

$$\text{nts}$$

$$540 \times \frac{2}{5} = 216$$

$$\text{Required number of non-teaching staff}$$

$$= (540 + 216) \times \frac{20}{80} = 756 \times \frac{20}{80} = 189$$

58. (b); Since strength of all schools is same.

$$\text{Students in Woodstock} = 450 \times 6 = 2700$$

$$\therefore 90\% \text{ of strength} = 2700 + 450$$

$$\therefore \text{total strength of Woodstock} = 3150 \times \frac{100}{90} = 3500$$

$$\text{So, required number of non-teaching staff}$$

$$= 15\% \text{ of } 3500$$

$$= 525$$

59. (b); Total strength = 3500

$$\text{Teachers in DPS} = 2700 \times \frac{3}{20} = 405$$

$$\therefore \text{Required percentage} = \frac{2700 - 405}{2700} \times 100$$

$$= 85\%$$

60. (d); We can't find the strength of school Rishi Valley with given data.

61. (a); Let Anil's Salary be Rs x
According to the question,
25% of $x = \frac{x}{4}$; on household expenditure
12% of $x = \frac{3x}{25}$; on travelling
20% of $\left(x - \frac{x}{4} - \frac{3x}{25}\right) = \frac{63x}{500}$, on clothes
Therefore, remaining salary
 $= 80\%$ of $\left(x - \frac{x}{4} - \frac{3x}{25}\right) = 2520$
 $\Rightarrow x = \text{Rs } 5000$

62. (c); Raman's investment = first 8 months + last 4 months
 $= 3000 \times 8 + 1500 \times 4$
 $= 30,000$
Nakul's investment = first 4 months + next 3 months + remaining five months
 $= 1000 \times 4 + 4500 \times 3$
 $= 32,500$
Therefore, $\frac{\text{Raman}}{\text{Nakul}} = \frac{30000}{32500} = \frac{12}{13}$
Raman's share in profit
 $= \frac{12}{(12+13)} \times 1800 = \text{Rs } 720$

63. (c); From the question,
A, B and C work together.
C works alone for 3 days
B and C finish the remaining work together.
A, B and C finish the work together.
 $= 2 \left(\frac{1}{10} + \frac{1}{12} + \frac{1}{15}\right) = \frac{1}{2}$
C finishes in 3 days
 $= 3 \left(\frac{1}{15}\right) = \frac{1}{5}$ of work
Total work remaining
 $\frac{3}{10}$ of work is done by A and B together.
Total days to finish the work
 $= 2 + 3 + 2 = 7$ days

64. (d); Price of 12 shirts = $400 \times 12 = \text{Rs } 4800$
Price of 10 shirts = $400 \times 10 = \text{Rs } 4000$
Cash discount on 10 shirts = 10% of 4000
 $= \text{Rs } 400$
 $\therefore$ Total amount to be paid for 12 shirts
 $= 4000 - 400 = \text{Rs } 3600$
Net discount availed
 $= \frac{1200}{4800} \times 100\% = 25\%$

65. (c); According to the question,
5% of S.P. = 6% of C.P. i.e., 5 S.P. - 6 C.P. = 0
...(i)
7% of S.P. - 8% of C.P. = 1, i.e., 7 S.P. - 8 C.P. = 100
...(ii)
Solving both the equations, we get
C.P. = 250, S.P. = 300, hence the profit = Rs 50

66. (b); Amount after 3 years = $1000 \left(1 + \frac{10}{100}\right)^3$
 $= \text{Rs. } 1,331$
According to question,
 $1331 = 1728 \left(1 - \frac{x}{100}\right)^3$
 $\Rightarrow \frac{11}{12} = 1 - \frac{x}{100}$
 $\Rightarrow x = \frac{25}{3}\%$
 $\therefore$ Required difference = $10 - \frac{25}{3} = \frac{5}{3}\%$
 $= 1\frac{2}{3}\%$

67. (c); Let total numbers of boys = x
Then, total number of girls = $x + 15$
Now,
 $\left[(x + 15) \times \frac{110}{100}\right] - \left[x \times \frac{116}{100}\right] = 9$
 $\Rightarrow \frac{110x + 1650 - 116x}{100} = 9$

68. (c); Let number of school going children = x
Then, number of non-school going children = $40x$
Total number of children = $x + 40x = 41x$
According to the question,
 $\frac{x}{41x} = \frac{120}{100}$
 $\Rightarrow x = 4100$

69. (b); Initial amount = 1000
After 1 year = $1000 \times \frac{110}{100} = 1100$
After 2 years = $1100 \times \frac{110}{100} = 1210$
After 3 years = $1210 \times \frac{110}{100} = 1331$
Total amount after 3 years = 1331
Difference = $1331 - 1000 = 331$

70. (c); Portion of container filled with alcohol at end
 $= \left(1 - \frac{1}{4}\right) \left(1 - \frac{1}{2}\right) \left(1 - \frac{3}{4}\right)$
 $= \frac{3}{32}$
 $\therefore \frac{3}{32} \times 100 = 9\frac{3}{8}\%$ of container is filled with alcohol at end

71. (e); From statement [I]
 $10M + 12W$ takes $\frac{10}{7}$ days to complete the work
From statement [II]
 $5M + 6W$ can complete the work in $\frac{20}{7}$ days
Both the equations are same so, we can't solve the question by using both [I] and [II]
 $\therefore$ Hence, Neither statement [I] nor statement [II] is sufficient to answer the question.

72. (d); From statement [I]
 $L = 1.1 B$
 $LB = 440 \Rightarrow 1.1B.B = 440$

$$\Rightarrow B^2 = 400$$

$$\Rightarrow B = 20 \text{ cm}$$

$$\Rightarrow L = 22 \text{ cm}$$

$$L = 2\pi r$$

$$22 = 2 \times \frac{22}{7} \times r \Rightarrow r = 3.5 \text{ cm}$$

From statement [II]

Area of square, $a^2 = 484$

$$A = 22$$

According to question

$$2\pi r = 22$$

$$2 \times \frac{22}{7} \times r = 22$$

$$r = 3.5 \text{ cm}$$

$\therefore$ Hence, Either statement [I] alone or statement [II] alone is sufficient to answer the question.

73. (a); From Statement [I]

$$MP = x$$

After two successive discounts

$$= 0.76x$$

Final S.P after taking two

$$= 0.95x$$

According to question

$$MP - SP = 40$$

$$x - 0.95x = 40$$

$$0.05x = 40$$

$$x = 800$$

From statement [II]

$$\text{Let, } MP = x$$

$$S.P = \frac{85}{100} \times \frac{80}{100} \times x$$

$$= 0.68x$$

As, any value is not given for SP, find the value of x

$\therefore$ Hence, Statement [I] alone is sufficient to answer the question but the Statement [II] alone is not sufficient

74. (d); From statement [I]

Let total amount = x

$$\frac{x}{2} \times \frac{5 \times 3}{100} + \frac{x}{2} \times \frac{6 \times 5}{100} = 4500$$

$$\frac{x}{2} \left[\frac{15}{100} + \frac{30}{100} \right] = 4500$$

$$x = 20,000$$

From statement [II]

$$2420 = x \left[1 + \frac{10}{100} \right]^3 - x \left[1 + \frac{10}{100} \right]^2$$

$$2420 = x \times 1.1^3 - x \times 1.1^2$$

$$2420 = 1.331x - 1.21x$$

$$0.121x = 2420$$

$$x = 20,000$$

$\therefore$ Hence, Either statement [I] alone or statement [II] alone is sufficient to answer the question.

75. (c); From statement [I]

$$\text{Raju} + \text{Ramesh} + \text{Rajan} + \text{Rajguru} = 51.25 \times 4$$

$$= 205 \quad \dots(i)$$

$$\text{Rajan} + \text{Rajguru} = 47.5 \times 2 = 95 \quad \dots(ii)$$

$$\text{Ramesh} + \text{Rajguru} = 57.5 \times 2 = 115 \quad \dots(iii)$$

From statement [II]

Let Rajan weight = x

$$\text{Weight of 50 students} = 30 \times 50$$

$$= 1500 \text{ kg}$$

Weight after one students replaced by Rajan

$$= 1500 - 30 + x$$

$$30.4 \times 50 = 1470 + x$$

$$1520 - 1470 = x$$

$$x = 50$$

From [II]

$$50 \text{ kg}$$

$$1500 - 50 = 1450 \text{ kg}$$

$$1450 - 1450 = 0 \text{ kg}$$

$$1450 - 1450 = 0 \text{ kg}$$

$\therefore$ Hence, Statement I and II together are needed

to answer

Direction (76-80)

$$\text{Total} = \frac{60}{100} \times 50000 = 30,000$$

Spent on others in June

$$= \frac{50}{100} \times 30,000 = 15,000$$

$$= \frac{50}{100} \times 30,000 = 15,000$$

$$= \frac{50}{100} \times 30,000 = 15,000$$

$$= \frac{50}{100} \times 30,000 = 15,000$$

$$= \frac{50}{100} \times 30,000 = 15,000$$

77. (d); Money invested by Avanish = $\frac{10}{100} \times \frac{45}{100} \times 30,000$

$$= \text{Rs. } 1350$$

$$\therefore \text{Interest earned by him} = \frac{10}{100} \times 1350$$

$$= \text{Rs. } 135$$

78. (b); Amount saved in April = $\frac{40}{100} \times 50000$

$$= \text{Rs. } 20,000$$

$$\text{Amount spent on education} = \frac{38}{100} \times 30,000$$

$$= \text{Rs. } 11,400$$

$$\therefore \text{Required difference} = \text{Rs. } 8600$$

79. (a); Asked expenditure in February except education

$$= \frac{(100-20)}{100} \times 30000 = \text{Rs. } 24,000$$

80. (e); Required ratio = $\frac{\frac{20}{100} \times 30,000}{50,000} = \frac{3}{25}$

ENGLISH LANGUAGE

- 81. (a);** Refer the first sentence of the second paragraph, "The greatest concern of European specialists is the increasing number of young people who take their own lives."
- 82. (e);** Refer the first two sentences of the third paragraph, "Experts see the transformation of European society as the key to the recent increases in European suicides. The modernization of the workforce, the increasing social and geographical mobility and the consequent breakdown of old family structures and support networks all play a role."
- 83. (b);** Refer the third sentence of the third paragraph, "In a comparative study of suicide in 20 European countries over two decades, it was found that factors such as divorce, unemployment, the number of working women in a society, the prevalence of violence and the presence of violent crime, are useful in predicting the suicide rates."
- 84. (b);** Refer the third sentence of the third paragraph, "While in Austria, Hungary, Switzerland and Scandinavia have remained relatively stable, rates in Latin Catholic countries have now dramatically increased in the last 20 years."
- 85. (a);** Refer the third last sentence of the third paragraph, "In parts of Hungary, where suicides with a rate of 100 per 100,000, the rate among the elderly is 150 per 100,000."
- 86. (e);** Refer the third sentence of the third paragraph, "In parts of Hungary, where suicides with a rate of 100 per 100,000, the rate among the elderly is 150 per 100,000."
- 87. (b);** According to the last sentence of the second paragraph, one-third of the Danish people, who die, kill themselves.
- 88. (d);** Refer the second last sentence of the third paragraph, "As European Southern tier becomes more prosperous, families are becoming smaller, relationship less stable and suicides are increasing."
- 89. (b);** Sentence (b) is not true in the context of the passage.
- 90. (a);** Refer the first sentence of the last paragraph "In a world where the old maxim 'one technology one industry' no longer applies, a singular breakthrough strategy is inadequate; companies need to include both the breakthrough and fusion approaches in their technology strategy."
- 91. (d);** Here 'Phase' is going correctly and similar with the word 'generation' in the context of the passage.
- 92. (d);** The author has highlighted the two approaches that have been described in the entire passage.
- 93. (c);** The author wanted to highlight the widespread of technological innovations, as indicated in the first sentence of the passage, "From 'apparel to aerospace', 'steel to software', the pace of technological innovation is quickening."
- 94. (a);** Refer the third sentence of the first paragraph "Adding to the pressure, innovations are increasingly crossing industry boundaries; a new fiber developed by the textile industry has potential for building materials and medical equipment."
- 95. (b);** Refer the second sentence of the first paragraph "No longer can companies afford to miss generation of ideas to remain competitive."
- 96. (d);** Frugal and extravagant are opposite in meaning. Frugal means lacking restraint in spending money.
- 97. (c);** Vivid and evocative are similar in meaning. Vivid means evoking powerful feelings or strong, clear images. Evocative means evoking strong images, memories, or feelings.
- 98. (c);** Desultory and purposeful are opposite in meaning. Desultory means lacking a plan, purpose, or direction.
- 99. (d);** Sagacious means wise or shrewd. It is not applicable to a particular matter; it is a quality.
- 100. (a);** Awkward is an antonym of Debonair. Debonair means (of a man) confident, stylish, and charming.
- 101. (c);** "To add insult to injury" is the right choice which means 'to make a situation worse'.
- 102. (e);** 'A piece of cake' is the right choice which means something is very easy.
- 103. (a);** 'Let the cat out of bag' is the correct choice which means to accidentally reveal a secret.
- 104. (d);** The conjunction 'BECAUSE' is used to introduce a word or phrase that stands for a clause expressing an explanation or reason. "The federal department has twice rejected LePage's requests for centralization because he didn't work in collaboration with federal department."

105. (d); The phrase “BY THE TIME” is used for saying what has already happened at the time that something else happens. The phrase can be used to connect only the sentences (D) and (B) to frame a coherent sentence. Other alternatives would alter the intended meaning of the sentences so formed. Hence option (d) is the correct choice.

By the time storm reaches New England, it's expected to gust with strong 30 to 50 mph winds, bringing dangerous, power line-snapping blizzard conditions and coastal flooding.”

106. (e); Option (e) is a correct choice as other options tell us about what digital radio is and where it stands in comparison to FM while option (e) is in stark contrast and gives us information about the shortcomings of DAB . Hence option (e) is correct.

107. (d); Option (d) is not a part of coherent paragraph. As other options tell us about election campaigning system with their l, option (d) tell us about is different from the ce graph. Hence option (d) is tr

108. (a); Option (a) is not a part graph. Other options tell us about in South CEBD wh option (a) is not in h theme of paragraph.

109. (e); All the given sentence cally correct.

110. (e); In this sentence, use subject of 'Being' is whenever a sentence with only one Subject Subject is not required e.g. Being tired, he sat down.]

111. (e); greater

112. (b); unhealthy

113. (c); generates

114. (d); deterioration

115. (a);

116. (c); “defining” is the correct word replacement as it means state or describe exactly the nature, scope, or meaning of. Here, defining is used to describe a whistle-blower. Other options do not fit into sentence in context of their meanings.

117. (d); “expose” is the correct word replacement as it means make (something) visible by uncovering it. It is to be noted that the verb it requires should be plural as the Subject it denotes is Plural (government officials). Hence based on Subject-Verb agreement and its meaning, option (d) is the correct choice.

118. (a); “developing gradually or in progressive expansion” adds graph. Hence option (a) is the

119. (b); “in correct word replacement as it conveyed or represented by a particular or sequence of things. Options (c) and (d) can be easily eliminated as they can be obtained under RTI Act. Hence “on the basis of they obtained under the Right to Information Act” makes a good choice.

120. (e); correct word replacement as it means make (someone) stronger and more confident especially in controlling their life and claiming their rights. Other options are neglected on the basis of the same.

