Directions (1-5): Study the following line graph carefully and answer the questions given below:





1. The percentage increase or decrease in the income of company C_2 is highest in which of the following

- years?
- 1.2013
- 2.2012
- 3. 2011
- 4. 2009
- 5. 2010

2. If the expenditure of company C_1 in the year2009 was Rs. 2.25 lakh, then what was the profit percentage of C_1 in that year?

- 1.124%
- 2.112%
- 3. 122%
- 4. 108%
- 5.118%

3. If the profit percentage of company C_2 in the year 2011 is 20%, what was its expenditure in that year? (in Rs, lakh)

- 1. 5.83
- 2. 4.58
- 3. 4.12
- 4. 6.83
- 5. 3.45

4. What is the average income of company C_3 over all the years? (in Rs. lakh)

- 1.4.63
- 2.3.83
- 3. 4.83
- 4. 4.23
- 5. 4.18

5. What was the approximate percentage increase in the income of company C_1 in the year 2010 as compared with the year 2008?

- 1.40%
- 2.36%
- 3. 32.5%
- 4.34.75%
- 5.31%

Directions (6-11): Study the following line graph carefully and answer the questions given below:

Assuming that there is no fixed component and all the units produced are sold in the same year.



Years







- 6. In which of the following years is per unit cost the maximum?
- 1.2009
- 2.2010
- 3. 2007
- 4. 2011
- 5. 2013
- 7. What is the average cost during the period 2007 to 2014?
- 1. Rs. 1600.5
- 2. Rs. 1862.5
- 3. Rs. 1962.5
- 4. Rs. 1752.5
- 5. Rs. 1662.5

8. If the SP per unit decreases by 20% during 2007 to 2010 and the cost per unit increases by 20% during 2011 to 2014. then during how many years is there no profit or loss?

- 1. None
- 2. One
- 3. Two
- 4. Four

5. Three

- 9. What is the average of quantities sold during the period 2008 to 2012?
- 1.146
- 2.144
- 3.154
- 4.150
- 5.158

10. if the SP per unit decreased by 25% during 2007 to 2010 and the CP per unit increased by 25% during 2011 to 2014 then the cumulative profit for the entire period 2007 to 2014 decreased by:

- 1. Rs. 5725
- 2. Rs. 5125
- 3. Rs. 5225
- 4. Rs. 5600
- 5. Rs. 5825

Directions (11-15): Study the pie-charts carefully and answer the questions given below:

The following pie-charts show the run scored by a batsman against different countries in one-day internationals (ODI) and Twenty (T20) world cup matches. Runs scored by the batsman in ODI and T20 are 2800 and 2000 respectively.



11. If the batsman played 14 innings against Sri lanka in ODI and remained not out in 5 innings. Find his average runs scored against Sri lanka.

- 1.28
- 2.24
- 3.26

4. Other than the given options

5. 22

12. Runs scored by the batsman against New Zealand in T20 matches are approximately what percent of the runs scored against Pakistan in ODI?

- 1.64%
- 2.66%
- 3. 62%
- 4. Other than the given options
- 5.68%

13. In case of which of the following countries, the difference between the runs scored in ODI and T20 is the second lowest?

- 1. Sri lanka
- 2. Pakistan
- 3. South Africa
- 4. WI
- 5. Other than the given options

14. The runs scored by the batsman against WI in T20 is approximately what percent of the runs scored against Australia in ODI?

- 1. Other than the given options
- 2.71%
- 3. 75%
- 4. 73%
- 5.69%

15. If the batsman had scored 280 runs against Pakistan in T20 matches, What would habv been its percentage in the T20 match, if the total runs scored in T20 remains the same?

- 1. Other than the given options
- 2.12%
- 3.16%
- 4. 14%
- 5.10%

Directions (16-20): Study the following the pie-chart and table carefully to answer the questions given below:

The following pie-chart shows the distribution of the monthly family budget of a person.



The following table shows the further distribution (in percent) of the above-mentioned items among the five family members i.e P (the person himself), W (his wife), Rahul (son), Rohit (son), and Preeti (his daughter). His monthly family budget is Rs. 1,20,000

	Education	Food	Entertainment	Travelling	Other expenses
Р	10	30	10	40	20
W	15	25	30	10	25
Rahul	40	20	20	25	20
Rohit	25	15	25	10	10
Preeti	10	10	15	15	25

- 16. What is the average expenses of P?
- 1. Rs. 5620
- 2. Other than the given options
- 3. Rs. 5640
- 4. Rs. 5460
- 5. Rs. 5480

17. What is the approximate percentage increase in the amount Which Rahul enjoys for entertainment as compared to Preeti for the same?

- 1.33%
- 2.31%
- 3. Other than the given options
- 4. 37%
- 5.35%

18. The average expenses of Rohit is approximately what percent of the average expenses of W (Wife)?

1.76.4%

2.81.5%

3. 79.5%

4. 83.5%

5. Other than the given options

19. Find the difference (in percentage of the budget) between the average expenses of Education and the average expenses on Entertainment of the couple?

1.1.3%

2.0.9%

3.2%

4. Other than the given options

5. 2.5%

20. The total amount spent by Rahul on Travelling and Food is approximately what percent of the total amount spent by Preeti on Education and Food?

- 1. Other than the given options
- 2.168%
- 3. 171%
- 4. 175%
- 5.174%

Directions (21-25): Study the line graph carefully and answer the following questions:

The graph given below represents the production (in tonnes) and sales (in tonnes of a company 'A' from 2010-15.



Year

The table given below shows the ratio of the production (in tonnes) of company A to the production (in tonnes) of company B, and the ratio of the sales (in tonnes) of company A to the sales (in tonnes) of company B.

Year	Production	Sales
2010	17:16	4:5
2011	8:7	11:12
2012	9:10	9:14
2013	18:19	5:6
2014	7:6	12:11
2015	13:14	9:10

21. In which of the following year is the percentage increase/ decrease in the production of company A from the previous year the second highest?

- 1. 2012
- 2.2011
- 3. 2014
- 4. 2010
- 5. 2015

22. The total sale of company A in all the years together is approximately what percent of the total production of company A?

- 1.61.5%
- 2. Other than the given options
- 3. 63.5%
- 4.65%
- 5.67%

23. What is the average production of company B in all the years together?

- 1. 675 tonnes
- 2. 680 tonnes
- 3. 690 tonnes
- 4. 655 tonnes
- 5. other than the given options

24. What is the total sale of company B in all the years together?

- 1. 3182 tonnes
- 2. 3072 tonnes
- 3. Other than the given options
- 4. 3192 tonnes
- 5. 3172 tonnes

25. What is the ratio of production of company B in 2010 to the production of company A in 2012?

1.	77:62
2.	80:79

- 3. 80:61
- 4. 80:63
- 5. 79:63

Directions (26-32: Study the graph carefully and answer the following questions:

The graph given below represents the production (in tonnes) and sales (in tonnes) of a company from 2009-2014



Production and Sales (in tonnes)

Year

The table given below represents the ratio of the production (in tonnes) by company A to the production (in tonnes) by company B; and the ratio of the sales (in tonnes) by company A to the sales (in tonnes) by company B.

Year	Production	Sales
2009	9:8	2:3
2010	8:7	11:15
2011	5:9	4:7
2012	15:11	3:7
2013	5:3	7:5
2014	12:13	1:1

26) What is the approximate percentage increase in the production of company A from the year 2012 to the production of company A in the year 2013?

- 1.33%
- 2.30%
- 3.36%
- 4. 26%
- 5. 28%

27) What is the average production of company B (in tonnes) from the year 2009 to the year 2014?

- 1.368
- 2.362.5
- 3. 378.5
- 4. 372.5
- 5.376

28) The sales of company A in the year 2012 was approximately what percent of the production of company A in the same year?

- 1.44%
- 2.40%
- 3.36%
- 4. 38%
- 5. 42%

29) What is the ratio of the total production (in tonnes) of company A to the total sales (in tonnes) of company B in all the years together?

- 1.161:126
- 2.161:125
- 3. 161:123
- 4. 169: 126
- 5. 158: 126

30) What is the average sales of company A from the year 2009 to the year 2014?

- 1. 254
- 2.243
- 3. 234
- 4. 256
- 5. 248

31) What is the ratio of production of company B in the year 2009 to the production of company B in the year 2011?

1.9:10

- 3. 7:8
- 4. 5:6
- 5. 8:9

32) What was the approximate percentage more in the production of company B in the year 2014 as compared with the production of Company A in the year 2014?

- 1.6%
- 2.7%
- 3.8%
- 4. 10%
- 5. 12%

Directions (33-37): Study the following bar graphs to answer the questions given below:



Income of railways from the Super fast trains and Express trains

Year





33. In which of the following years is the percentage increase/ decrease in the percentage

increase/decrease in the total income of the Railways the maximum in comparison to its pevious year? 1. 2012 - 13

- 2. 2014 -15
- 3. 2011-12
- 4. 2013-14
- 5. Both 1) and 3)

34. In which of the following years is the profit of hte Railways the maximum?

- 1.2011-12
- 2.2012-13
- 3. 2013-14
- 4. Other than the given options
- 5. 2010- 11

35. In hoe many years is the income from Express trains less than the average income the Express trains in all the given years together?

- 1.3
- 2.1
- 3. None
- 4. Other than the given options
- 5. 2

36. What is the approxiamate percentage income from Super fast train in 2011-12 in comparison to the total income from Super fast trains for all the given years?

1. Other than the given options

2.24%

- 3. 28%
- 4. 20%
- 5. 29%

37. The total expenditure of the Railways on both the trains is approximately what percent of the total income of the Railway from both the trains for all the given years together?

- 1.83.7%
- 2.81.6%
- 3. Other than the given options
- 4. 78.9%
- 5.86.7%

Directions (38-42): Study the table carefully answer the questions given below.

Following table shows the percentage population of six states below poverty line and the proportion of males and females?

		Proportion of m	ale and female
State	Percentage population below poverty line	Below poverty line M: F	Above poverty line M: F
S ₁	16	4:3	3:2
S ₂	18	3:4	5:7
S ₃	26	2:3	4:5
S_4	28	5:6	1:2
S ₅	12.5	3:2	6:5
S ₆	36	4:5	2:3

38. If the total population of state S_1 is 4400, then what is the approximate number of females above the poverty line in state S_1 ?

- 1.1478
- 2. Other than the given options
- 3. 1578
- 4. 1484
- 5. 1487

39. If the total population of state S_3 and s_4 together is 17000, then what is the total number of females below the poverty line in the above-mentioned states?

- 1.1320
- 2.6820
- 3. 4850
- 4. Data inadequate
- 5. Other than the given options

40. If the population of males below the poverty line in state S_1 is 18000 and that in state S_5 is 24000, then what is the ratio of the total population of state S_1 to that of state S_5 ?

- 1. 315:512
- 2.316:513
- 3. Other than the given options
- 4. 315:513
- 5. 319:512

41. If the population of males above the poverty line in state S_2 is 4100 then what is the total population of that state?

- 1.Other than the given options
- 2.12500
- 3.13000
- 4.14000
- 5.12000

42. If in state S_{δ} the population of females above the poverty line in 4800 then what is the population of males below the poverty line in that state?

- 1.2400
- 2.2000
- 3.2500
- 4. Other than the given options
- 5. 2800

Directions (43-47): Study the following information carefully and answer the questions given below:

On the occasion of a cultural program in a stadium, there are 400 artists in all who are participating in four different events viz- Drama, Dance, Skit, and Singing.

The ratio of male to female artists is 2:3. 25% of the female artists are participating in Drama. 40% of the female artists are participating in Dance. The remaining female artists are participating in Skit and Singing in the ratio of 4:3. The ratio of male artists who are participating in Drama and other events together is 1:7. 25% of those male artists who are not participating in Drama are participating in Singing. The remaining male artists are participating in Dance and Skit in the ratio of 3:4.

43. What is the total number of female artists who are participating in Drama and Skit together? 1. 106

2.104			
3. 108			
4. 112			
5. 110			

44. What is the difference between the male artists participating in Skit and the female artists participating in Singing?

1.20

- 2.24
- 3. 22
- 4. 25
- 5. 21

45. What is the ratio of the female artists participating in Singing to those male artists participating in Dance?

- 1. 2:3
- 2. 5:6
- 3. 3:4
- 4. 6:7
- 5. 4:5

46. What is the total number of artists participating in Dance and Drama together?

- 1. 221
- 2. 222
- 3. 208
- 4. 228
- 5. 218

47. What is the ratio of the male artists participating in Singing to the female artists participating in Skit?

- 1. 39:47
- 2. 38:47
- 3. 36:47
- 4. 35:48
- 5. 35:47

Directions (48-52): Study the table carefully answer the questions given below.

In six years, the number of students taking admissions and leaving from the five different colleges which were founded in 2010 is given below.

A B C D E

College Years	Α	L	Α	L	А	L	Α	L	А	L
2010	1125		1050		1200		1600		1550	
2011	330	220	450	250	420	230	440	250	350	225
2012	290	210	325	215	400	250	400	260	380	230
2013	345	200	285	210	360	225	395	220	410	220
2014	380	250	300	190	340	240	420	225	440	210
2015	350	230	340	220	410	280	460	240	425	215

Note:

- A admitted
- L Leaving

48. What is the average number of students studying in all the five colleges in 2012?

- 1. Other than the given options
- 2.1594
- 3. 1694
- 4. 1574
- 5. 1584

49. What was the number of students studying in college B in 2014?

- 1. 1555
- 2. Other than the given options
- 3. 1445
- 4. 1545
- 5. 1645

50. The number of students leaving college from the year 2010 to 2015 is approximately what per cent of the number of students taking admission in the same college and during the same year?

- 1.37%
- 2.43%
- 3.39%
- 4.41%
- 5. Other than the given options

51. What is the difference behaviour the number of students taking admission between 2011 and 2015 in college D and B?

- 1.415
- 2.395

3. 435

4. Other than the given options

5. 385

52. In which of the following colleges, is the percentage increase in the number of students from the year 2010 to 2015 the maximum?

1. D 2. A 3. B 4. E 5. C

Directions (53-57): Study the following information carefully and answer the questions given below:

In a college there are 1400 students who are doing graduation in any one of the subjects, out of the five different subjects viz. zoology,

Botany, Mathematics, Physics and Statistics. The ratio of the number of boys and girls among them is 6:8.30% of the total girls are doing graduation in Zoology and 20% of the total girls are doing graduation in Statistics. The total number of students doing graduation in Botany is 220. 250 students are doing graduation in Mathematics. The ratio of the number of girls and the number of boys doing graduation in Statistics is 2:1.20% of the total number of boys are doing graduation in Botany. The ratio of the number of girls and that of boys doing graduation in Mathematics is 2:3. There are an equal number of boys and girls doing graduation in Physics. 290 students are doing graduation in Zoology.

53. What is the total number of students doing graduation in physics and Statistics together?

1.510

2.540

3. 640

4. 620

5. 660

54. What is the ratio of the number of boys doing graduation in Mathematics and to a number of girls doing graduation in Botany?

- 1. 1:2
- 2. 3:1
- 3. 3:4
- 4. 3:2
- 5. 2:1

55. What is the difference between the number of boys doing graduations in Zoology and the number of girls doing graduation in Mathematics?

1.	50	
2.	75	
3.	60	

- 4. 45
- 5. 55

56. In which of the following graduation courses, the number of the girls the highest and in which course is the number of boys is second lowest respectively?

- 1. Statistics and Zoology
- 2. Zoology and Botany
- 3. Physics and Statistics
- 4. Zoology and Statistics
- 5. Physics and Zoology

57. The number of girls doing graduation in Statistics is what percent of the number of boys doing graduation in physics?

- 1.76%
- 2.75%
- 3.80%
- 4.81%
- 5. 78%

Direction (58-62): Study the bar graph and line graph carefully to answer the questions given below.

The bar graph shows the number of males and females (in thousand) in town X during the given years.



Year

The line graph shows the number of males and females (in thousand) in town Y during the given years.



58. What is the ratio of the average number of males in town X to the average of males in town Y for the given period?

- 1. 269:282
- 2. 265:281
- 3. 265:283
- 4. 265:282
- 5. Other than the given options

59. In which of the following years, is the percentage increase or decrease in the number of females for town Y the minimum?

- 1.2015
- 2.2014
- 3. 2012
- 4. 2013
- 5. Both 1) and 2)

60. The population o town X in 2011 and 2012 together is approximately what per cent of the population of town Y in 2014 and 2015 together?

- 1. Other than the given options
- 2.81.6%
- 3. 89.6%
- 4.84.5%
- 5.86.6%

61. Find the number of years in which the number if females in town X and Y are less their respective average numbers.

- 1. One, Two
- 2. Two, Two
- 3. None
- 4. Three, Two
- 5. Other than the given options

62. In which of the following pairs of years in the difference in the number of males and females the maximum for town Y and minimum for town Y and minimum for town X respectively?

- 1. 2011 and 2014
- 2. 2015 and 2011
- 3. 2015 and 2014
- 4. 2013 and 2015
- 5. Other than the given options

Direction (63-68): Study the table carefully and answer the questions given below:

Details of employees deployed at different levels by a company in different departments.

	Mana	ger	Offic	er
Department	Number	M : F	Number	M : F
Operations	2200	7:4	2800	6:8
Public relations	1800	5 : 4	2500	9:11
Finance	2500	14 : 11	3200	17 : 15
Advertising	2900	12 : 17	1600	9:7
Sales	2400	9:7	2600	8 : 5
Procurement	2700	5 : 4	2200	9:13

63. The total number of female employees (Managers and Officers) in Procurement department is approximately by what per cent more than their male counterparts?

- 1.2%
- 2.6%
- 3.4%
- 4.8%
- 5.9%

64. The number of female managers in Finance department is what per cent of the total number of male managers in Sales department?

1	7	7	%	

- 2.82%
- 3. 78%
- 4. 84%
- 5.81%

65. What is the ratio of the total number of female managers in Operations and Finance departments to that of male officers in these two departments?

- 1. 25:29
- 2.19:26
- 3. 19:25
- 4. 19:29
- 5. 22:29

66. The total number of male officers in Advertising nad Sales departments is approximately what per cent the total number of officers in these two department?

- 1.55.8%
- 2.56%
- 3. 57.5%
- 4. 54%
- 5. 59.5%

67. What is the different between the total number of female officers in Advertising and Public Relations department and the total number of female managers in these two department?

- 1. 405
- 2.415
- 3. 425
- 4. 435
- 5. 395

68. What is the ratio of the total number of managers in Public relations, Finance, Sales and Operations department to the total number of officers in Finance, Advertising. Sales and procurement department?

- 1. 89:95
- 2.87:96
- 3. 87:89
- 4. 93:95
- 5. 89:96

Directions (69-73): Study the following pie - charts carefully and answer the questions given below:

Percentage break up of the number of children in five different villages and break up of children Attending school from those villages



V3 14%

69. What is the total number of children not attending school from village V_2 and V_3 together?

V4 21%

- 1.528
- 2.508
- 3.518
- 4.618
- 5.628

70. The number of children attending school from village V_1 is approximate, what percent of the number of children from that village?

1.54%

- 2.56%
- 3.60%
- 4. 53%
- 5. 58%

71. What is the approximate average number of children not attending school from village V_2 , V_3 and V_4 together?

- 1.269
- 2. 258
- 3. 264
- 4.270
- 5. 266

72. The number of children not attending school from village V_4 and V_5 is approximately what percent of the total number of children from village V_4 and V_5 together?

- 1.43.65%
- 2.42.5%
- 3. 48%
- 4.46%
- 5.49.45%

73. What is the ratio of the total number of children from village V_4 to the number fo children attending school from the same village?

- 1.22:21
- 2. 29:28
- 3. 29:21
- 4. 29:27
- 5. 23:21

Directions (74-78): Study the following pie- charts and table carefully and answer the questions given below:

Details of students who scored from six schools of Delhi in Class XIIthe result:



Ratio of Girls to Boys

School	95 per cent and above	Between 90-95 percent
--------	-----------------------	-----------------------

Sı	11:5	3:2
S_2	5:7	1:4
S_3	3:5	5:3
S ₄	7:1	2:3
S ₅	5:4	9:5
S_{6}	5:3	3:4

74. What is the difference between the no. of boys who scored 95 percent and above from schools S_5 and the no. of boys who scored between 90-95 per cent from school S_5 ?

- 1.115
- 2.120
- 3.100
- 4.110
- 5. 125

75. The number of girls of school S_2 who scored between 90-95 percent is approximately what percent of the no. of girls of school S_4 who scored 95 percent and above?

- 1.28.57%
- 2.22.46%
- 3.29.95%
- 4.35.48%
- 5. 32.46%

76. The number of boys of school S_5 and S_6 together who scored 95 percent and above is approximately what percent more or less than the number of girls of school S_2 and S_5 together who scored between 90-95 percent?

- 1. 26% more
- 2.22% more
- 3. 26% less
- 4. 24% more
- 5. 32% less

77. The average number of girls who scored 95 percent and above from all the schools together is

- 1.503
- 2.506
- 3. 518
- 4. 545
- 5. 556

78. What was the ratio of the number of boys of school S_3 who scored between 90-95 percent to the number of boys, who scored 95 percent and above in the same school?

- 1. 5:9
- 2.10:17
- 3. 10:13
- 4. 8:9
- 5. 12:17

Directions (79-83): Study the following line graph and table carefully and answer the questions given below.

Numbers of employees working in five different banks A, B, C, D and E.



Banks

Ratio of males to females employees

Bank	M : F
А	13:6
В	4:3
С	9:11
D	10:13
E	13:7

79. What is the total number of male employees taking all the banks together?

1. Other than the given options

2.4060

- 3. 4120
- 4. 4180
- 5. 4280

80. What is the average number of female employees taking all the banks together?

- 1.656
- 2.686
- 3. 668
- 4. Other than the given options
- 5. 646

81. Approximately by what percent is the number of male employees working in banks A and C together more than that of the total number of female employees working in bank B and D?

- 1. Other than the given options
- 2.9%
- 3. 15%
- 4.11%
- 5.13%

82. What is the ratio of female employees working in bank D to that in E?

- 1. 7:4
- 2. Other than the given options
- 3. 8:5
- 4. 7:3
- 5. 9:5

83. Approximately by what per cent is the number of total employees o bank C more than that of bank D?

- 1.8%
- 2.6%
- 3. Other than the given options
- 4.4%
- 5. 10%

Directions (84-91): Study the following graph carefully and answer the questions given below:

The line graph represents the percentage candidates qualifies in a competitive examination from 6 states during the given two years.



-		
- 5	ta	te
-		

The table given below represents the total number of candidates appeared, percentage of candidates qualified in all the six states together in the year 2013 and 2014.

Year	Appeared	Qualified
2013	1,42,000	45%
2014	1,80,000	52%

Ratio of male to the female candidates qualified from different states in both the years.

State	2013	2014
S ₁	5:4	28:17
S_2	3:1	5:3
S ₃	7:5	11:5
S ₄	13:11	15:11
S ₅	13:12	15:9
S ₆	8:1	11:9

84. The number of female candidates qualified from state S_2 in 2013 is approximately what per cent of the male candidates qualified from S_1 in 2014?

- 1.16%
- 2.22%
- 3.20%

4.14%

5. 18%

85. If in 2014 in state S_1 four female candidates qualified are not eligible then what is the average number of female candidates qualified from all the states together in the year 2014?

- 1.5990
- 2.5900
- 3. 5920
- 4. 5940
- 5. 5960

86. What is the ratio of the number of female candidates qualified from states S_1 and S_3 together in 2013 to the number of male candidates qualified from the same states in the year 2014?

- 1.8307:21844
- 2.8407:21944
- 3.8307:21944
- 4.8307:20894
- 5.8037:29144

87. What is the average number of candidates qualified from states S_2 , S_3 , S_4 and S_6 together in the year 2013?

- 1.9405.75
- 2.9005.75
- 3.9105.75
- 4.9505.75
- 5.9205.75

88. What is the approximate average number of male candidates qualified from all the states together in the year 2013?

- 1.6427
- 2.6267
- 3.6672
- 4. 6607
- 5.6627

89. The number of male candidates qualified from state S_5 in 2014 is what per cent more or less than the number of male candidates qualified from state S_6 in 2013?

- 1. 72% less
- 2.74% more
- 3. 70% less
- 4. 76% more
- 5. 78% more

90. From which of the following states in the year 2013, is the number of female candidates qualified the maximum?

- 1. S₅
- 2. S₆
- 3. S₄
- 4. S₁
- 5. S₂

91. From which of the following states in the year 2014, the number of male candidates qualified is minimum?

- 1. S₄
- 2. S₁
- 3. S₅
- 4. S₂
- 5. S₃

Direction (92-96): Study the following table and pie- chart carefully to answer the questions given below:

The table shows the state - wise foreign investments and the pie- chart shows the percentage distribution of investments in different sectors in 2014-2015 for each states.

State	Foreign investments (in Rs. crore)
Rajasthan	1560
MP	1780
Gujarat	1970
TN	690
AP	730
Delhi	830
Maharashtra	1940



92. What is the total foreign investment in Other sectors by all the given states together? (in Rs. Crore)

- 1.1648.5
- 2.1752.5
- 3. 1852.5
- 4. 1438.5
- 5. 1952.5

93. The foreign investment in Insurance sector in Rajasthan is approximately what percent of the foreign investment in Construction sector in Maharashtra?

- 1. Other than the given options
- 2.101%
- 3.108%
- 4. 107%
- 5. 103%

94. The foreign investment in Pharmaceutical sector in AP is approximately what percent less than the foreign investment in Telecom sector in delhi?

- 1.47.6%
- 2.44.6%
- 3. Other than the given options
- 4. 49.6%
- 5. 45.8%

95. For which of the following pairs of states, the ratio of foreign investment in Defence sector is 52:23?

- 1. Rajasthan, TN
- 2. Maharashtra, TN
- 3. MP, AP
- 4. MP, TN
- 5. Gujarat, Delhi

96. What is the ratio of the foreign investment in Defence sector in Gujarat to that in Construction and Insurance sector together in MP?

1.27246:27284

- 2.25216:29381
- 3. 25316:28391
- 4. 25216:29281
- 5. Other than the given options

Direction (97-101): Study the following pie-chart and table carefully and answer the question given below:



Ratio of male to female workforce in different

employment sectors.

Sector	M:F
Service	3:2
Sales	5:3
Construction and Maintenance	5:4
Professionals	5:7
Management	3:4
Production and Transport	5:3
Others	3:5

97. What is the average number of male workforce (in lakh) in all the sectors together? (rounded off to two decimal places)

1.6.39

2. Other than the given options

3. 4.69

4. 5.96

5. 7.48

98. The number of female workforce in Service and Professional sectors together is what per cent of the number of male workforce in Construction and Maintenance sector?

- 1.330%
- 2.318%
- 3. 320%
- 4. 328%
- 5. Other than the given options

99. The number of male workforce in Sales and Management Sectors is approximately what per cent of the total number of workforce in Production and transport sector?

- 1. Other than the given options
- 2.82%
- 3. 87%
- 4. 89%
- 85%

100. The number of female workforce in Sales and Management sectors is approximately by what per cent more than the number of female workforce in Production and Transport Sector?

- 1.128.8%
- 2.131.6%
- 3. Other than the given options
- 4. 126.5%
- 5. 134.7%

101. What is the ratio of hte number of female workforce in constructions and Maintenance sector to the number of male workforce in Professionals and other sectors?

- 1. 17:39
- 2. 16:37
- 3. 16:35
- 4. Other than the given options
- 5. 16:39

Direction (102-106): Study the following pie-chart and table carefully and answer the question given below:

The pie-chart given below shows the percentage distribution of population of 6 cities. The table given below shows the ratio of males to females and the percentage of adult population in these cities.



City	Male: Female	% Adult
U	6:5	55%
V	11:8	<mark>60%</mark>
W	9:8	<mark>68%</mark>
Х	3:4	<mark>66%</mark>
Y	2:1	72%
Z	4:3	<mark>70</mark> %

102. The number of adults in city Y is approximately what per cent of the number of males in city X?

- 1.70%
- 2.72%
- 3.66%
- 4. 68%
- 5.74%

103. What is the difference the total number of males and the total number of females in city V?

- 1.79000
- 2.80000
- 3.84000
- 4. 76000
- 5.81000

Answer :

1.3;

The percentage increase/decrease in the income of company C_2 in:

$$2009 = \frac{6-5}{5} \times 100 = 20\% \text{ (increase)}$$

$$2010 = \frac{5.5-6}{6} \times 100 = 8.3\% \text{ (decrease)}$$

$$2011 = \frac{7-5.5}{5.5} \times 100 = 27.27\% \text{ (increase)}$$

$$2012 = \frac{6.5-7}{7} \times 100 = 7.14\% \text{ (decrease)}$$

$$2013 = \frac{5.5-6.5}{6.5} \times 100 = 15.3\% \text{ (decrease)}$$

Hence, highes is in the year 2011.

2.3;

Company C_1 in 2009:

:: Profit percentage =

$$\therefore \text{ Profit Percentage} = \frac{5-2.25}{2.25} \times 100 = 122\%$$

MAN WILL /

$$20 = \frac{7 - Expenditure}{Expenditure} \ge 100$$

$$\Rightarrow$$
 20 Expenditure = 700 - 100E

$$\Rightarrow E = \frac{700}{120} = \text{Rs. 5.83 lakh}$$

4.3;

Average income of company C_3

$$= \text{Rs.}\left(\frac{6+4.5+5+4+5+4.5}{6}\right) \text{lakh} = \text{Rs.} 4.83 \text{ lakh}$$

5. 1;

Required percentage increase

$$=\frac{5.6-4}{4} \times 100 = 40\%$$

Suppose x units are produced in each year In year 2007: 25 x = 4500 or, x = 180 : profit = Rs. 2500 : CP = Rs. (4500-2500) = Rs. 2000 : Cost per unit $= \frac{2000}{180} = \text{Rs. 11.11}$

In year 2008: 20x = 4000 or, x = 200 ∵ profit = Rs. 2000 ∴ CP = Rs. (4000-2000) = Rs. 2000 ∴ Cost per unit

$$=\frac{2000}{200}$$
 = Rs. 10

In year 2009: 30x = 4200 or, x = 140 ∵ profit = Rs. 2500 ∴ CP = Rs. (4200-2500) = 1700 ∴ Cost per unit

 $=\frac{1700}{140}$ = Rs. 12.14

In year 2010: 30x = 5100 or, or x = 170 ∵ profit = Rs. 3000 ∴ CP = Rs. (5100 - 3000) = Rs. 12.35

In year 2011: 25x = 4000 or, x = 160 ∵ Profit = Rs. 1500 ∴ CP = Rs. (4000-1500) = 2500 ∴ Cost per unit

$$=\frac{2500}{160}$$
 = Rs. 15.625

In year 2012: 35x = 3500 or, x = 100 ∵ profit = 2500 ∴ CP = Rs. (3500 - 2500) = Rs. 1000 ∴ Cost per unit

 $=\frac{1000}{100}$ = Rs.10

In year 2013: 25x = 3500 or, x = 140 ∵ profit = 2000 ∴ CP = Rs. (3500-2000)= Rs. 1500 ∴ Cost per unit

 $=\frac{1500}{140}$ = Rs.10.71

In year 2014: 20x = 4000 or, x = 200 ∵ profit = Rs. 3500 ∴ CP = Rs. (4000 - 3500) = Rs. 500 ∴ Cost per unit

 $=\frac{500}{200}$ = Rs.2.5

Hence, in 2011 cost price per unit is the maximum.

7. 5; Cost = Revenue - Profit Cost in 2007 = 4500 - 2500 = 2000 2008 = 4000 - 2000 = 2000 2009 = 4200 - 2500 = 1700 2010 = 5100 - 3000 = 2100 2011 = 4000 - 1500 = 2500 2012 = 3500 - 2500 = 1000 2013 = 3500 - 2000 = 1500

Average =
$$\frac{2000+2000+1700+2100+2500+1000+1500+500}{8}$$
 = Rs. 1662.5

8.1;

Year	Revenue	Total cost (old revenue – profit)
2007	80% of 4500 = 3600	4500-2500=2000
2008	80% of 4000 = 3200	4000-2000=2000
2009	80% of 4200 = 3360	4200-2500=1700
2010	80% of 5100 = 4080	5100-3000=2100
2011	4000	120% of (4000-1500 = 2500) = 3000
2012	3500	120% of (3500-2500=1000) = 1200
2013	3500	120% of (2500-1000=15000)=1800
2014	4000	120% of (4000-3500=500)=600

:: 'None' is the answer.



Average of quantities sold

$$= \left(\frac{4000}{20} + \frac{4200}{30} + \frac{5100}{30} + \frac{4000}{25} + \frac{3500}{35}\right) \times \frac{1}{5}$$
$$= (200 + 140 + 170 + 160 + 100) \times \frac{1}{5}$$
$$= 770 \times \frac{1}{5} = 154$$

9.3;

Total decrease in revenue

= 25% of (4500 + 4000 + 4200 + 5100) = 4450

Total increase in cost

= 25% of (2500 + 1000 + 1500 + 500) = 1375

: Decrease in cumulative profit

= Total decrease in recenue + Total increase in cost

= 4450 + 1375 = Rs. 5825

(11-15):

Countries	ODI	Т20
Pakistan	294	190
Australia	490	230
England	308	180
Sri Lanka	252	250
S. Africa	350	330
New Zealand	336	200
Zimbabwe	378	260
WI	392	360

11.1;

Required average runs

$$=\frac{252}{14-5}=28$$

12.5; Required percentage

$$=\frac{200}{294} \times 100 = 68\%$$

13.3;

The difference between the runs scored in ODI and T20 against:

Pakistan = 140	Australia = 260
England = 128	Sri Lanka = 2
S. Africa = 20	New Zealand = 136
Zimbabwe = 118	WI = 32

Hence, second lowest is of South Africa.

14.4;

Required percentage

$$=\frac{360}{490} \times 100 = 73\%$$

15.4;

Required percentage

$$=\frac{280}{2000} \times 100 = 14\%$$

16. 4;

Average expenses of P

$$= (10\% \text{ of } \frac{96}{360} + 30\% \text{ of } \frac{129}{360} + 10\% \text{ of } \frac{36}{360^{\circ}} + 40\%$$

Of $\frac{51}{360} + 20\% \text{ of } \frac{48}{360}$) x $\frac{1,20,000}{5}$
$$= \frac{960 + 3870 + 360 + 2040 + 960}{3600} \text{ x } \frac{1,20,000}{5}$$

$$= \text{Rs. 5460}$$

17.1;

Amount spent by Rahul on Entertainment

$$=\frac{20}{100} \times \frac{36}{360} \times 1,20,000 = \text{Rs. } 2400$$

Amount spent by Preeti on Entertainment

$$=\frac{15}{100} \times \frac{36}{360} \times 1,20,000 = \text{Rs. }1800$$

: Required percentage increase

$$= \frac{2400 - 1800}{1800} \times 100 = 33\%$$

18.4; Average expenses of Rohit

$$= (25\% \text{ of } \frac{96}{360} + 15\% \text{ of } \frac{129}{360} + 25\% \text{ of } \frac{36}{360} + 10\%$$
Of $\frac{51}{360} + 10\% \text{ of } \frac{48}{360}$) x 1,20,000
$$= \frac{2400 + 1935 + 900 + 510 + 480}{36000} \text{ x} \frac{1,20,000}{5}$$

$$= \text{Rs. } 4150$$

Average expenses of W (wife)

$$= (15\% \text{ of } \frac{96}{360} + 25\% \text{ of } \frac{129}{360} + 30\% \text{ of } \frac{36}{360} + 10\%$$
Of $\frac{51}{360} + 25\% \text{ of } \frac{48}{360}$ x $\frac{1,20,000}{5}$

$$= \frac{1440 + 3225 + 1080 + 510 + 1200}{36000} \text{ x } \frac{1,20,000}{5}$$

$$= \text{Rs. 4970}$$

« Required percentage

$$= \frac{4150}{4970} \times 100 = 83.5\%$$

19.1;

Required difference

= ((10+15) of
$$\frac{96}{360}$$
 -(30+10)% of $\frac{36}{360}$) x $\frac{1,20,000}{2}$
= $\frac{2400-1440}{36000}$ x $\frac{1,20,000}{5}$ = Rs. 1600

:: Required percentage

$$= \frac{1600}{1,20,000} \times 100 = 1.3\%$$

20.3; Required percentage

$$= \frac{20\% of \frac{129}{260} + 25\% of \frac{51}{260}}{10\% of \frac{96}{260} + 10\% of \frac{129}{360}} \times 100$$
$$= \frac{20\times129 + 25\times51}{960+1290} \times 100$$
$$= \frac{2580+1275}{960+1290} \times 100 = \frac{3855}{2250} \times 100 = 171\%$$

21.1;

Percentage increase/decrease in the production of company A are:

$$2011 = \frac{880 - 850}{850} \times 100 = 3.53\%$$
$$2012 = \frac{630 - 880}{880} \times 100 = 28.41\%$$
$$2013 = \frac{540 - 630}{630} \times 100 = -14.29\%$$
$$2014 = \frac{700 - 540}{540} \times 100 = 29.63\%$$
$$2015 = \frac{650 - 700}{700} \times 100 = -7.14\%$$

22.3; Required percentage

$$=\frac{2700}{4250} \times 100 = 63.5\%$$

23.3;

Required answer

$$=\frac{4140}{6}$$
 = 690 tonnes

24. 5; Required answer = 3172 tonnes

25.4;

Required ratio = 880 : 630 = 80:63

26) 1;

Production of company A in 2012

$$=\frac{15}{26} \times 650 = 375$$

Production of company A in 2013

$$=\frac{5}{8} \times 800 = 500$$

: Required percentage increase

$$=\frac{500-375}{375} \times 100 = 33\%$$

Required average

$$= \left(\frac{\frac{8}{17} \times 850 + \frac{7}{15} \times 900 + \frac{9}{14} \times 700 + \frac{11}{26} \times 650 + \frac{3}{8} \times 800 + \frac{13}{25} \times 750\right) \times \frac{1}{6}$$
$$= \frac{400 + 420 + 450 + 275 + 300 + 390}{6} = 372.5$$

28) 2;

Required percentage

$$=\frac{\frac{3}{10}\times500}{\frac{15}{26}\times650} \times 100 = 40\%$$

29) 1;

Total production of company A in all the years together

$$= 850 \times \frac{9}{17} + 900 \times \frac{8}{15} + 700 \times \frac{5}{14} + 650 \times \frac{15}{26} + 800 \times \frac{5}{8} + 750 \times \frac{12}{25}$$

= 450 + 480 + 250 + 375 + 500 + 360 = 2415

Total sales of company B

$$=\frac{3}{5} \times 400 + \frac{15}{26} \times 650 + \frac{17}{11} \times 550 + \frac{7}{10} \times 500 + \frac{5}{12} \times 600 + \frac{1}{2} \times 650$$

 $= (\ 240 + 375 + 350 + 350 + 250 + 325) = 1890$

:: Required ratio = 2415 : 1890 = 161:126

30) 2;

Average sales of company A

$$=\frac{Total \ sales - Total \ sales \ of \ company \ B}{6}$$
$$=\frac{3350 - 1890}{6} = 243$$

31) 5;

Required ratio

$$=\frac{8}{17} \times 850: \frac{9}{14} \times 700$$

= 400 : 450 = 8:9

32) 3;

Required percentage increase

 $=\frac{\frac{1}{25}\times750}{\frac{12}{25}\times750} \times 100$

= 8.3% = 8%

33. 3

 $\ln 2011 - 12 = \frac{12130 - 11080}{11080} \times 100 = 9.48\%$ $2012 - 13 = \frac{11970 - 12130}{12130} \times 100 = -1.32\%$ $2013 - 14 = \frac{12660 - 11970}{11970} \times 100 = 5.76\%$ $2014 - 15 = \frac{13830 - 12660}{12660} \times 100 - 9.24\%$

Hence, maximum increase is in 2011-12

34.2;

Profits in (Rs. Crore): 2010 -11 = 1370, 2011-12 = 2270, 2012-13 = 3010 2013-14 = 2060,2014 - 15 = 1330 Hence, maximum profit is in 2012-13 $\frac{21220}{5}$ = Rs. 4244 crore

In 3 years (i.e 2010-11, 2011-12, 2012-13) income from the Express trains is less than the average income from Express trains.

36.4;

Required percentage =

 $\frac{7970}{40450} \times 100 = 20\%$

37.1;

Required percentage =

⁵¹⁶³⁰/₂₁₂₂₀₊₄₀₄₅₀ x 100

 $\frac{51630}{61670} \times 100 = 83.7\%$

38.1;

Number of females above poverty line

$$=\frac{100-16}{100} \times 4400 \times \frac{2}{5} = 1478.4 = 1478$$

39.4;

Since we cannot find the population of states separately, so we cannot find the required answer.

40.1;

Population of state S_1 below poverty line

$$= 18000 \times \frac{4+3}{4} = 31500$$

Total population of state S_1

$$= 31500 \times \frac{100}{16} = 196875$$

Population of state S5 below poverty line

$$= 24000 \text{ x} \frac{3+2}{3} = 40000$$

Population of state S_5

$$= 40000 \text{ x} \frac{100}{12.5} = 320000$$

:: Required ratio = 196874: 320000 = 315: 512

41.5;

Total population of state S_2

$$= 4100 \times \frac{5+7}{5} \times \frac{100}{100-18} = 12000$$

42.2;

Number of males below poverty line

$$= 4800 \times \frac{2+3}{3} \times \frac{100}{100-36} \times \frac{36}{100} \times \frac{4}{9} = 2000$$

(43-48):

Number of male artists = 160

Number of female artists = 240

Male	Female
$Drama = \frac{1 \times 160}{8} = 20$	$Drama = \frac{25 \times 240}{100} = 60$
Dance = $105 \times \frac{3}{7} = 45$	Dance = $\frac{40 \times 240}{100}$ = 96
Skit = $105 \times \frac{4}{7} \times 60$	$\text{Skit} = \frac{4}{7} \times 84 = 48$
Singing = $\frac{25 \times 140}{100}$ = 35	Singing = $\frac{3}{7} \times 84 = 36$

43.3;

Required answer = 60 + 48 = 108

44. 2;

Required difference = 60 - 36 = 24

45. 5;

Required ratio = 36 : 45 = 4:5

46. 1;

Required answer = (20+45) + (60+96) = 65+ 156 = 221

48.2;

Total number of students studying in all the colleges in 2012 = (1125 + 330 + 290 + 1050 + 450 + 325 + 1200 + 420 + 400 + 1600 + 440 + 400+ 1550 + 350 + 380) - (220 + 2 10 + 250 + 215 + 230 + 250 + 260 + 225 + 230) = 7970 ∴ Required average = 7970/5 = 1594

49.4;

Required number of students = 1050 + (450-250) + (325-215) + (285 - 210) + (300-190) = 1545

50.3;

Required percentage = 1225/3130 x 100 = 39%

51.1;

Required difference = (440 + 400 + 395 + 420 + 460) - (450 + 325 + 285 + 300 + 340) = 2115 - 1700 = 415



52.5;

Increase in the number of students in college A

= (330 - 220) + (290 - 210) + (345 - 200) + (380 - 250) + (350 - 230)

= 585

Percentage increase in 2015 from 2010

$$=\frac{585}{1125} \times 100 = 52\%$$

Similarly, for

College B =
$$\frac{615}{1050} \times 100 = 58.57\%$$

College C = $\frac{705}{1200} \times 100 = 58.75\%$
College D = $\frac{920}{1600} \times 100 = 57.5\%$
College E = $\frac{905}{1550} \times 100 = 58.38\%$

Hence, maximum is for college C.

Number of boys = 600 Number of girls = 800

	Girls	Boys
Zoology	30 x 8 = 240	290 - 240 = 50
Botany	220 - 120 = 100	20 x 6 = 120
Mathematics	2/5 x 250 = 100	3/5 x 350 = 150
Physics	200	200
Statistics	20 x 8 = 160	160/2 = 80

53.3;

Required answer = 200 + 200 + 160 + 80 = 640

54.4;

Required ratio = 150 : 100 = 3:2

55.1;

Required difference = 100 - 50 = 50

56.4;

Zoology and statistics

57.3;

Required percentage = 160/200 x 100 = 80%

58. 4; Required ratio

 $=\frac{\frac{50+52+55+53+55}{5} \times 1000}{\frac{53+54+55+58+62}{5} \times 1000} = 265 : 282$

59. 1; The percentage increase or decrease in the number of females for town Y are as under;

$$2012 = \frac{52 - 50}{50} \ge 100 = 4\%$$
$$2013 = \frac{54 - 52}{52} \ge 100 = 3.85\%$$
$$2014 = \frac{56 - 54}{54} \ge 100 = 3.70\%$$
$$2015 = \frac{55 - 56}{56} \ge 100 = 1.78\%$$

Hence, minimum is in 2015.

60. 5; Required percentage

$$=\frac{(50+49)+(52+49)}{(58+56)+(62+55)} \times 100$$
$$=\frac{200}{231} \times 100 = 86.6\%$$

61. 2; Average number of females for town X = 51000 Average number of females for town Y = 53400

So, 2011 and 2012 are two desired years for town X. Also, 2011 and 2012 are two desired years for town Y.

62.3	3; Difference	between tl	he popu	lation of	males	and	females;
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	2011	2012	2013	2014	2015
x	1000	3000	3000	0	3000
Y	3000	2000	1000	2000	7000

.: Desired pair is 2015 and 2014.

63.3;

Procuremet Department:

Male manager =
$$\frac{5}{9} \times 2700 = 1500$$

Female Manager = $\frac{4}{9} \times 2700 = 1200$
Male Officers = $\frac{9}{22} \times 2200 = 900$
Female Officers = $\frac{13}{22} \times 2200 = 1300$

Total female employees = 1200 + 1300 = 2500Total male employees = 1500 + 900 = 2400 ∴ Required percentage more

$$=\frac{2500-2400}{2400} \times 100 = 4\%$$

$$=\frac{11}{25} \times 2500 = 1100$$

Male managers in Sales department

$$=\frac{9}{16} \times 2400 = 1350$$

.: Required percentage

$$=\frac{1100}{1350} \times 100 = 81\%$$

65.4;

Female managers in Operation and Finance departments together

$$=\frac{4}{11} \times 2200 + \frac{11}{25} \times 2500$$

= 800 + 1100 = 1900 Male officers in Operation and Finance department together

$$=\frac{6}{14} \times 2800 + \frac{17}{32} \times 3200$$

= 1200 + 1700 = 2900 ∴ Rquired ratio = 19: 29

66. 5;

Male officers in Advertising and Sales departments

$$=\frac{9}{16} \times 1600 + \frac{8}{13} \times 2600$$

= 900 + 1600 = 2500

.: Required percentage

$$=\frac{2500}{1600+2600} \times 100 = 59.5\%$$

67.3;

Female officers in Advertising and Public relation

$$=\frac{7}{16} \times 1600 + \frac{11}{20} \times 2500$$

= 700 + 1375 = 2075 Female managers in Advertising and Public Relation

$$=\frac{17}{29} \times 2900 + \frac{4}{9} \times 1800$$

= 1700 + 800 = 2500 ∴ Required difference = 2500 - 2075 = 425

68.5;

Required Ratio = (1800 + 2500 + 2400 + 2200) : (3200 + 1600 + 2600 + 2200) = 8900 : 9600 = 89:96

69.3;

Required answer

$$= \left(\frac{24}{100} \times 5800 - \frac{28}{100} \times 3600\right)$$
$$+ \left(\frac{11}{100} \times 5800 - \frac{14}{100} \times 3600\right)$$

= 1392 - 1008 + 638 - 504 = 384 + 134 = 518

Required percentage

 $=\frac{15\times36}{16\,x\,58}\,x\,100=58\%$

71.1;

Required average

$$= \frac{(24 \times 58 - 28 \times 36) + (11 \times 58 - 14 \times 36) + (18 \times 58 - 21 \times 36)}{3}$$
$$= \frac{1392 - 1008 + 638 - 504 + 1044 - 756}{3}$$
$$= 268.67 = 269$$

72.4;

Required percentage

$$= \frac{(18 \times 58 - 21 \times 36) + (31 \times 58 - 22 \times 36)}{(31 \times 58 + 18 \times 58)} \times 100$$
$$= \frac{(1044 - 756) + (1798 - 792)}{1798 + 1044} \times 100$$
$$= \frac{288 + 1006}{1798 + 1044} \times 100 = \frac{1294}{2833} \times 100 = 46\%$$



73.3;

Required ratio = 18 x 58 : 21 x 36 = 58 : 42 = 29 : 21

74.4;

Required difference

$$= \frac{5}{14} \times \frac{21}{100} \times 10000 - \frac{4}{9} \times \frac{24}{100} \times 6000$$
$$= 750 - 640 = 110$$

$$\frac{\frac{6}{100} \times 10000 \times \frac{1}{5}}{\frac{8}{100} \times 6000 \times \frac{7}{8}} \times 100$$

= 28.57%

76.3;

Number of boys (as required)

$$= \frac{24}{100} \times 6000 \times \frac{4}{9} + \frac{20}{100} \times 6000 \times \frac{3}{8}$$
$$= 640 + 450 = 1090$$

Number of girls (as required)

$$= \frac{6}{100} \times 10000 \times \frac{1}{5} + \frac{21}{100} \times 10000 \times \frac{9}{14}$$
$$= 120 + 1350 = 1470$$

:: Required percent less

= $\frac{1470 - 1090}{1470}$ x 100 = 26% less



77. 5;

Required average

$$= \left[\frac{13 \times 11}{16} + \frac{18 \times 5}{12} + \frac{17 \times 3}{8} + \frac{8 \times 7}{8} + \frac{24 \times 5}{9} + \frac{20 \times 5}{8}\right] \times \frac{6000}{100 \times 6}$$
$$= \left[\frac{143}{16} + \frac{15}{2} + \frac{51}{8} + \frac{56}{8} + \frac{40}{3} + \frac{100}{8}\right] \times 10$$
$$= \left[\frac{143 + 120 + 102 + 112 + 200}{16} + \frac{40}{3}\right] \times 10$$
$$= \left(\frac{677}{16} + \frac{40}{3}\right) \times 10$$
$$= \left(\frac{2031 + 640}{48}\right) \times 10 = 556$$

78.2; Required ratio

$$=\frac{3}{8} \times \frac{10}{100} \times 10000 : \frac{5}{8} \times \frac{17}{100} \times 6000 = 10:17$$

(79-83):

Banks	Male employee	Female employees
А	1040	480
В	960	720
С	657	803
D	600	780
E	923	497

79.4;

Required answer = 4180

80.1;

Required average

$$=\frac{3280}{5}=656$$



81. 5;

Required percentage more

$$= \frac{(1040+657)-(720+780)}{720+780} \ge 100$$
$$= \frac{1697-1500}{1500} \ge 100 = 13\%$$

82.2;

Required ratio = 780:497

83.2;

Required percentage

$$=\frac{1460-1380}{1380} \ge 100 = 6\%$$

(84-91):

Number of candidates qualified in the year 2013 = 45 x 1420 = 63900 2014 = 52 x 1800 = 93600

States	2013	20	13	2014	20	14
	Qualified	М	F	Qualified	М	F
S ₁	18 x 639 = 11502	6390	5112	20 936 = 18720	11648	7072
S_2	16 x 639 = 10224	7668	2556	12 x 936 = 11232	7020	4212
S ₃	12 x 639 = 7668	4473	3195	16 x 936 = 14976	10296	4680
S ₄	16 x 639 = 10224	5538	4686	15 x 936 = 14040	8100	5640
S ₅	25 x 639 = 15975	8307	7668	22 x 936 = 20592	12870	7722
S ₆	13 x 639 = 8307	7384	923	15 x 936 = 14040	7722	6318

87.2;

Required percentage

$$=\frac{2556}{11648} \times 100 = 22\%$$

85.1; Required average

$$=\frac{7068+4212+4680+5940+7722+6318}{6}=5990$$

86. 3; Required ratio = 5112 + 3195 : 11648 + 10296 = 8307 : 21944

87.3;

Required average

$$=\frac{10224+7668+10224+8307}{4}=9105.75$$

88.5;

Required average

 $=\frac{6390+7668+4473+5538+8307+7384}{6}=6627$

89.2;

Required percentage more

$$=\frac{12870-7384}{7384} \times 100 = 74\%$$

90.1

91.4

92. 3; Total foreign investment in other sectors = 19.5/100 x (1560+1780+1970+690+730+830+1940)

= Rs. 18.52 crore

93.5;

Required percentage

$$= \frac{18.5 \times 1560}{14.4 \times 1940} \ge 100$$
$$= \frac{28860}{27936} \ge 100 = 103\%$$

94.2;

$$=\frac{730\times8.5}{100}$$
 = Rs. 62.05 crore

Foreign investment in telecom sector in Delhi

$$= 830 \times \frac{13.5}{100} = \text{Rs. } 112.05 \text{ crore}$$

:: Required percentage less =

$$=\frac{112.05-62.05}{112.05} \ge 100 = 44.6\%$$

95.1;

Ratio of foreign investment in Defence sector in states are as under Rajasthan : TN = 1560 : 690 = 52:23 Maharashtra : TN = 1940 : 690 = 194:69 MP : AP = 1780 : 730 = 178: 73 MP : TN = 1780 : 690 = 178: 69 Gujarat : Delhi = 1970 : 830 = 197 : 83

96.4;

Required ratio =

 $=\frac{25.6}{100} \ge 1970 : \frac{(14.4+18.5)}{100} \ge 1780$

= 256 x 197:329 x 178 = 25216: 29281

(97-101)

Sector	Total Workforce (in lakh)	Male (in lakh)	Female (in lakh)
Service	12	7.2	4.8
Sales	9.6	6	3.6
Construction and Maintenance	7.2	4	3.2

Professionals	14.4	6	8.4
Management	16.8	7.2	9.6
Production and Transportation	15.2	9.5	5.7
Others	4.8	1.8	3

97. 4; Required average = = 5.96 lakh
98. 1; Required percentage = x 100 = 330%
99. 3; Required percentage = x 100 = 87%
100. 2; Required percentage
= x 100 = 131.6%
101. 5; Required ratio = 3.2 : 6 + 1.8
= 3.2 : 7.8 = 32: 78 = 16:39

(102-106)

	CALL /	
City	Population	Adults
U	20 x 28000 = 560000	55 x 5600 = 308000
V	19 x 28000 = 532000	60 x 5320 = 319200
W	17 x 28000 = 476000	68 x 4760 = 323680
X	21 x 28000 = 588000	66 x 5880 = 388080
Y	9 x 28000 = 252000	72 x 2520 = 181440
Z	14 x 28000 = 392000	70 x 3920 = 274400

102. 2; Total number of adults in city Y = 181440
Total number of males in city X
= x 588000 = 252000

 \therefore Required percentage = x 100 = 72%

103. 3; Required difference = x 532000= 84000