## 

## *

## ENGLISH LANGUAGE

Directions (1-5) : In the following questions, some parts of the sentences have errors and some are correct. Find out which part of a sentence has an error. The number of that part is your answer. If a sentence is free from errors, your answer is (4) i.e. No error.

1. How serious is the country's (1)/ economic problems, and how (2)/ big an impact will these (3)/ have on the world economies? (4)/ No error. (5)
2. Shuber, the taxi service provider, is (1)/ growing like a weed, (2)/ spending millions of rupees (3)/ to establish its roots in the country. (4)/ No error. (5)/
3. The survey asked respondents (1)/ from more than 50 countries to (2)/ identify kinds of people (3)/ they would want of neighbours. (4)/ No error. (5)
4. The pace and scale of (1)/ the country's economic transformation (2)/ have no (3)/ his torical precedent. (4)/ No error. (5)
5. The countries most (1)/ affected by the economic slowdown (2)/ are likely to be (3) those whose export raw materials. (4)/ No error. (5)
Directions (6-10) : Rearrange the given six sentences/ group of sentences $(A),(B),(C),(D),(E)$ and $(F)$ in a proper sequence so as to form a meaningful paragraph and then answer the given questions.
(A) "It's undefined. No one knows if you reach it. it gives the flexibility to revise it later," he added.
(B) Of late, doubts are being raised concerning the health of the world's second- largest economy, China.
(C) This change is relatively small but suggests that the country's effort to meet its official growth target was tougher than it seemed.
(D) It comes as worries grow that China will struggled to reach this year's goal of "about' 7\%
(E) 'That's the beauty of using 'about' in your targets, "said IHS global Insight economist Brain Jackson.
(F) The reasons for these doubts stem from the fact that the country revised its 2014 growth rate to $7.3 \%$ from $7.5 \%$ due to a weaker-than-reported contribution from the service sector.
6. Which of the following should be the FIRST sentence after rearrangement?
(1) A
(2) C
(3) B
(4) F
(5) E
7. Which of the following should be the SIXTH (Last) sentence after rearrangement?
(1) C
(2) F
(3) D
(4) B
(5) A
8. Which of the following should be the FOURTH sentence after rearrangement?
(1) A
(2) D
(3) C
(4) F
(5) E
9. Which of the following should be the SECOND sentence after rearrangement?
(1) A
(2) $B$
(3) F
(4) D
(5) C
10. Which of the following should be the FIFTH sentence after rearrangement?
(1) A
(2) E
(3) D
(4) F
(5) C

Directions (11-15) : In the following questions, each blank indicating that something has been omitted. Choose the set of words for the blanks which best fits the meaning of sentence as a whole.
11. $\qquad$ he had mixed success in the past with his new technique; this time around the player had enough $\qquad$ up his sleeve to win this match.
(1) Since, talent
(2) Despite, drama
(3) Although, tricks
(4) Because, energy
(5) Hence, magic
12. Name of the roles offered to me the strong, funny and dynamic Indian woman that I had grown up.
(1) stated, today
(2) said, surrounded
(3) reflected, around
(4) depicted, to
(5) assessed, within
13. The $\qquad$ to the free simcard scheme offered by the telecom company has been $\qquad$ and most people expressed complete ignorance about the scheme.
(1) reaction, stupendous
(2) access, cordial
(3) contract, simple
(4) takers, high
(5) response, abysmal
14. In our close relations it is easy to come clever men and women, but $\qquad$ to find virtuous ones.
(1) find, simpler
(2) up, arduous
(3) see, terrible
(4) across, difficult
(5) close, impossible
15. Due to the $\qquad$ number of swine-flu cases in the district, the health department has decided to spread $\qquad$ about the disease.
(1) raising, alertness
(2) populated, knowledge
(3) prolonged, understanding
(4) increasing, awareness
(5) high, ability

Directions (16-25) : Read the following passage carefully and answer the questions given below it.

Certain words/phrases have been given in bold to help you locate them while answering some of the questions.

There is good news in the form of Europe's unemployment falling from $11.1 \%$ in June to $10.0 \%$ in July. But unemployment generally lags behind the economic cycle. Business surveys, which provide more up-to date readings of activity, point to a continuing subdued recovery in Europe. The European commission's long- running economic-sentiment indicator, which combines business as well as consumer confidence and tends to track GDP has been broadly stable since picking up in early 2015. This suggests that the Euro area is not about to break out of its unspectacular growth. This is worrying because the eurozone economy is benefitting from a powerful triple stimulus. Lower energy costs caused by the slump in global oil prices have been providing the same effect as a tax cut. A big programme of quantitative easing ( QE ), has been under way since, early in the year under which the European Central Bank (ECB) is creating money to buy 60 billion ( $\$ 67$ billion) of pound's each month. As well as pushing down longterm interest rates QE has helped to keep the euro down on the currency markets to the benefit of exporters. Given the extent of help that the euro area has been getting, growth should be faster. The sluggish performance leaves it vulnerable to China's slowdown. a particular worry is the impact of weakening Chinese growth on Germany, the hub economy of the region, whose resilience has been crucial in sustaining Europe since the euro crises started five years ago. One reason has been strong Chinese demand for traditional German manufacturing strengths. Even though German exports appear to be holding up for the time being, that boost from China is waning. Lacklustre growth in the euro area will in turn make it harder for the ECB to meet its goal of pushing inflation back towards its goal of almost $2 \%$ Although core inflation (excluding in particular energy and food) has moved up from its low of $0.6 \%$ earlier this year, to $1.0 \%$, headline inflation has been stuck at $0.2 \%$ over the summer. There is increasing concern that the ECB's effort to break the grip of "lowflation" will be swamped by global deflationary effects. The ECB's council is not expected to make a change in policy and is likely to indicate that the ECB recognises the downside risk to growth and stands ready to respond if they materialise. That may in turn produce
a policy erasing later this year. One option would be to raise the amount of assets that it is buying each month from the current amount of 60 billion. A more likely decision would be for, the ECB to extend the planned length of its purchase some for another year. Whether that is enough is question for another day.
16. What is the author's view regarding the reforms implemented by ECB?
(1) He is outraged that these measures are being continued.
(2) He is doubtful about the reforms as inflation is rising.
(3) These reforms are tough and unpopular in Euro countries.
(4) These are not focused and have not been effective at all.
(5) Other than those given as options.
17. What do the statistics cited in the passage about ECB convey?
(1) Its stimulus package for Europe's economy is too low in value.
(2) ECB is likely to fast run out of 'bailout' funds.
(3) Despite the ECB's best efforts, its reforms have been unsuccessful.
(4) It is time ECB withdraws its stimulus package to rich countries.
(5) ECB has not been proactive in the economic recovery.
18. Choose the word which is most similar in meaning to the word SUNDUED give in bold as used in the passage.
(1) passive
(2) necessary
(3) sleep
(4) diluted
(5) expensive
19. Choose the word which is most opposite in meaning to the word BROADLY given in bold as used in the passage.
(1) widely
(2) barely
(3) softly
(4) responsibly
(5) dimly
20. Which of the following best describes the conclusion which can be drawn from economic indicators of Europe?
(1) Investors do not have confidence in European markets.
(2) Germany is the only economy unaffected by the crisis of 2008 and China's slowdown.
(3) Tax rates in Europe are being raised which has hampered growth.
(4) By and large Europe's economic performance is steady but not accelerating.
(5) Europe has not taken measures to protect itself from the crisis in emerging markets.
21. Which of the following is TRUE in the context of the passage?
(1) Germany's economic performance is linked to the Chinese market.
(2) Europe's large economies have recovered from the global crisis.
(3) Exorbitant oil prices are negating the effects of ECB's stimulus.
(4) Europe's unemployment rate is rising but it may not continue to do so.
(5) None of the given options is true in the context of the passage.
22. According to the passage, which of the following has affected inflation in Europe?
(A) Global deflation is prevailing.
(B) Frequent rising of ECB's interest rates.
(C) The ECB has withdrawn its Quantitative Erasing programme.
(1) Only (B)
(2) Only (A)
(3) All (A), (B) and (C)
(4) both (A) and (C)
(5) Only (B) and (C)
23. Choose the word which is most opposite in meaning to the word MATERIALISE given in bold as used in the passage.
(1) disappear
(2) perform
(3) terrorise
(4) occur
(5) substance
24. Which of the following is the central idea of the passage?
(1) The European economy is buoyant as its energy and manufacturing sectors are doing well.
(2) Emerging markets have been responsible for Europe's slow economic performance.
(3) The European Central Bank is in denial about the imminent crisis Europe is facing.
(4) Europe has reduced its exposure to America and Asia.
(5) The European economy is stagnating leaving it vulnerable to future crises
25. Choose the word which is most nearly the same in meaning to the word GRIP given in bold as used in the passage.
(1) understanding
(2) authority
(3) awareness
(4) clutches
(5) fascination

Directions (26-30) : In the following passage, there are blanks, each of which has been numbered. Against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

Creating a few more schools or allowing hundreds of colleges and private universities to (26) is not going to solve the crises of education in India. And a crisis it is _ we we in a country where people are spending their parents' savings and borrowed money on education $\qquad$ and even then not getting standard education, and struggling to find employment of their (27). In this country, millions of students are (28) of an unrealistic, pointless, mindless rat race. The mind numbing competition and rote learning not only (29) the creativity and originality of millions of Indian students every year, but also (30) brilliant students to adopt drastic measures.
26. (1) base
(2) mushroom
(3) point
(5) crop
27. (1) parents
(2) money
(3) fashion
(4) equal
(5) choice
28.
(1) victims
(2) member
(3) party
(4) associates
29. (1) crush
(2) flourish
(3) stir
(4) halting
(5) push
30. (1) aim
(2) drive
(3) stop
(4) responsible
(5) make

## QUANTITATIVE APTITUDE

31. The sum invested in Scheme B is twice the sum invested in Scheme A. Investment in Scheme A is made for 3 years at $8 \%$ p.a. simple interest and in Scheme B for 2 years at $9 \%$ p.a. simple interest. The total interest earned from both the Schemes is Rs. 1800. How much was invested in Scheme A?
(1) Rs. 4000
(2) Rs. 3500
(3) Rs. 3000
(4) Rs. 2500
(5) Rs. 4500
32. A bag contains 5 red balls, 7 yellow balls and 3 pink balls. If the two balls are drawn at random from the bag, one after another, what is the probability that the first ball is red and the second ball is yellow?
(1) $\frac{5}{12}$
(2) $\frac{3}{8}$
(3) $\frac{1}{4}$
(4) $\frac{1}{8}$
(5) $\frac{1}{6}$
33. Ram and Shyam are travelling from point A to $B$, which are 60 kms apart. Travelling at a certain speed Ram takes one hour more than Shyam to reach point B. If Ram doubles his speed he will take 30 minutes less than Shyam to reach point B. At what speed was Ram driving from point $A$ to point $B$ ?
(1) 15 kmph
(2) 25 kmph
(3) 30 kmph
(4) 25 kmph
(5) 20 kmph
34. The sum of the radius and height of a cylinder is 18 metre. The total surface area of the cylinder is 792 sq. metre. What is the volume of the cylinder? (in cubic metre)
(1) 1848
(2) 1440
(3) 1716
(4) 1724
(5) 1694

Directions (35-39) :Refer to the graph carefully and answer the given questions.
Number of gloves of 'XYZ; brand sold in Town a and Town $B$ in 6 different months:

35. The number of gloves sold in Town B increased by what percent from October to December?
(1) $165 \frac{2}{3}$
(2) $161 \frac{1}{3}$
(3) $164 \frac{1}{2}$
(4) $166 \frac{2}{3}$
(5) $162 \frac{1}{2}$
36. What is the difference between the total number of gloves sold in both the towns together in January and the total number of gloves sold in both the towns together in February?
(1) 280
(2) 270
(3) 290
(4) 260
(5) 250
37. The number of gloves sold in town A in November is what percent more than the number of gloves sold in Town B in the same month?
(1) 32
(2) 28
(3) 25
(4) 30
(5) 20
38. What is the average number of gloves sold in Town A in October, November, December and March?
(1) 215
(2) 220
(3) 225
(4) 210
(5) 205
39. The total number of gloves sold in Town $B$ in September is $20 \%$ less than the number of gloves sold in the same town in October. What is the respective ratio between the number of gloves sold in September and those sold in December in the same town?
(1) $2: 9$
(2) $1: 5$
(3) $2: 7$
(4) $4: 9$
(5) $3: 10$

Directions (40-44) : In these questions two equations numbered I and II are given. You have to solve both the equations and give answer
(1) if $x<y$
(2) if $x>y$
(3) if $x \leq y$
(4) if $x \geq y$
(5) if $x=y$ or relationship between $x$ and $y$ cannot be established
40. I. $x^{2}+x-12=0$
II. $y^{2}+2 y-8=0$
41. I. $4 x^{2}-13 x+9=0$
II. $3 y^{2}-14 y+16=0$
42. I. $8 x^{2}+18 x+9=0$
II. $4 y^{2}+19 y+21=0$
43. I. $3 x^{2}+16 x+21=0$
II. $6 y^{2}+17 y+12=0$
44. I. $x^{2}=49$
II. $y^{2}-4 y-21=0$
45. $A$ and $B$ started a business with the investments in the ratio of $5: 3$ respectively. After 6 months from the start of the business, C joined and the respective ratio between the investments of $B$ and $C$ was $2: 3$. If the annual profit earned by them was Rs. 12,300, what was the difference between B's share and C's share in the profit?
(1) Rs. 900
(2) Rs. 800
(3) Rs. 600
(4) Rs. 400
(5) Rs. 700
46. The respective ratio between total number of students studying in College A and College B
is $5: 8$. In college $B$, out of the total number of students, $\frac{5}{8}$ th are boys, out of which $60 \%$ study Comerce and the remaining 800 boys study in other streams. What is the total number of students in College A?
(1) 1500
(2) 2500
(3) 1200
(4) 4000
(5) 2000

Directions (48-52) : Study the table carefully and answer the given questions.
Data related to number of employees in 5 different organizations in April 2013

| Companies | Total number of <br> employees | Out of the total number of employees |  |  |
| :---: | :--- | :--- | :--- | :--- |
|  |  | Percentage of science <br> Graduates | Percentage of <br> Commerce Graduates | Percentage of Arts <br> Graduates |
| A | - | $40 \%$ | $30 \%$ | - |
| B | - | $40 \%$ | - | $25 \%$ |
| C | 900 | - | $44 \%$ | $35 \%$ |
| D | 1300 | $48 \%$ | - | - |
| E | - | $30 \%$ | - | $50 \%$ |
| F | - | $30 \%$ | - | $50 \%$ |

## NOTE:

(I) Employees of the given companies can be categorized only in three types: Science graduation, Commerce graduation and Arts graduation
(II) Few values are missing in the table (indicated by-). A candidate is expected to calculate the missing value, if it is required to answer the given question, on the basis of the given data and information.
48. The average number of Science graduate employees and Commerce graduate employees in company A was 518. what was the total number of employees in company A?
(1) 1480
(2) 1520
(3) 1560
(4) 1580
(5) 1440
49. Total number of employees in Company E was 3 times the total number of employees in Company B. If the difference between number of Commerce graduate employees in company E and that in Company B was 300, what was the total number of employees in Company B ?
(1) 900
(2) 1500
(3) 1200
(4) 1320
(5) 1290
47. The respective ratio between speed of the boat upstream and speed of the boat downstream is $3: 4$ What is the speed of the boat in still water if it covers 70 km downstream in 3 hours 30 minutes? (in km/h)
(1) 18
(2) 18.5
(3) 17
(4) 17.5
(5) 16
(3) 590
(4) 570
(5) 510
52. What was the difference between number of Science graduate employees and Arts graduate employees in Company C?
(1) 136
(2) 132
(3) 128
(4) 122
(5) 126
53. At present, the respective ratio between the ages of A and B is $3: 4$ and that between A and $C$ is $1: 2$ Six years hence, the sum of the ages of $A, B$ and $C$ will be 96 years. What is the present age of A ?
(1) 12 years
(2) 21 years
(3) 18 years
(4) 15 years
(5) 9 years
54. A tank has two inlets : A and B. A alone takes 2 hours and B alone takes 3 hours to fill the empty tank completely when there is no leakage. A leakage was caused which would empty the full tank completely in ' $x$ ' hours when no inlet is open. Now, when only inlet A was opened, it took 3 hours to fill the empty tank completely. How much time will B alone take to fill the empty tank completely? (in hours)
(1) 4.5
(2) 7.5
(3) 3
(4) 9
(5) 6
55. 'A' sold an article for Rs. 8000 and incurred a loss. Had he sold the article for Rs. 9800 , his gain would have been twice the amount of loss. At what price should the article be sold to earn $20 \%$ profit?
(1) Rs. 10,840
(2) Rs. 9,820
(3) Rs. 10,320
(4) Rs. 9,840
(5) Rs. 10,480

Directions (56-60) : What approximate value will come in place of the question mark (?) in the given questions? (You are not expected to calculate the exact value)
56. $241 \div 15 \times 287.98 \div 18.04=?^{2}$
(1) 26
(2) 24
(3) 18
(4) 14
(5) 15
57. ?\% of $1049+74.99 \%$ of $420.12=524.98$
(1) 15
(2) 20
(3) 10
(4) 35
(5) 25
58. $246.01+2953.98-449.98-300.2=$ ?
(1) 2020
(2) 2800
(3) 2450
(4) 3000
(5) 3050
59. $299.85-145.05+29.99 \times 12.02=$ ?
(1) 515
(2) 395
(3) 475
(4) 425
60. $\sqrt{325} \times 7.99+705.97=$ ?
(1) 895
(2) 750
(3) 675
(4) 850
(5) 800

Directions (61-65) : What should come in place of the question mark (?) in the following number series?
61. $6 \quad 5 \quad 6 \quad 10.5 \quad 23$ ?
(1) 85
(2) 60
(3) 78
(4) 49
(5) 97
62. $59 \quad 66 \quad 80 \quad 108 \quad ? \quad 276$
(1) 150
(2) 125
(3) 164
(4) 132
(5) 178
63. $47 \quad 23 \quad 11 \quad 5 \quad 2 \quad$ ?
(1) 0.2
(2) 1
(3) 0.4
(4) 2
(5) 0.5
64. $\begin{array}{llllll}1 & 2 & 6 & 21 & 88\end{array}$
(1) 539
(2) 398
(3) 216
(4) 445
(5) 615
65. $300 \quad 298 \quad 307 \quad 279 \quad 344 \quad$ ?
(1) 265
(2) 218
(3) 253
(4) 289
(5) 298

## REASONING

Directions (66-70) : In each of the following questions two or three statements followed by two Conclusions numbered I and II are given. You have to take the given statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given Conclusions logically follows from the given statements disregarding commonly known facts.

Give answer (1)if neither Conclusion I nor Conclusion II follows.
Give answer (2)if either Conclusion I or Conclusion II follows.
Give answer (3)if only Conclusion I follows.
Give answer (4)if both the Conclusion I and Conclusion II follow.
Give answer (5)if only Conclusion II follows.

## (66-67) : Statements

Some tasks are hurdles.
All hurdles are jobs.
Some jobs are works.
66. Conclusions
I. All works being hurdles is a possibility.
II. At least some works are tasks.
67. Conclusions
I. Some jobs are tasks.
II. All jobs are tasks.
68. Statements

Some problems are solutions.
No solution is a trick.
All rules are tricks.
Conclusions
I. No rule is a solution.
II. Some problems are definitely not tricks.

## 69. Statements

All ministers are deans.
Some deans are heads.
Some heads are principals.

## Conclusions

I. No principal is a minister.
II. All heads being ministers is a possibility.
70. Statements

No queue is a line.
Some queues are rows.

## Conclusions

I. No row is a line.
II. Some rows are lines.

Directions (71-75) : Study the following information carefully and answer the questions given below:

Ten persons are sitting in two parallel rows containing five people each, in such a way that there is equal distance between adjacent persons. In row-1$\mathrm{J}, \mathrm{K}, \mathrm{L}, \mathrm{M}$ and N are seated (not necessarily in the some order) and all of them are facing North. In row-$2-\mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}$ and V are seated (not necessarily in the same order) and all of them are facing South. There fore in the given seating arrangement each member seated in a row faces another member of the other row.

V sits at one of the extreme ends of the line. Only two people sit between V and R. The one who faces R sits to the immediate left of L . Only one person sits between L and K . The one who faces K sits to the immediate left of S.N sits second to the right of J. Neither K nor L faces U.
71. Who amongst the following is facing M ?
(1) U
(2) $R$
(3) T
(4) V
(5) S
72. Four of the following five are alike in a certain way based on the given arrangement and hence form a group. Which of them does not belong to that group?
(1) NK
(2) JL
(3) ML
(4) RU
(5) ST
73. What is the position of $U$ with respect to $S$ ?
(1) Second to the right
(2) Immediate left
(3) Second to the left
(4) Third to the right
(5) Immediate right
74. Which of the following statements is true regarding N ?
(1) N sits at an extreme end of the row.
(2) Only two persons sit between N and M .
(3) N faces one of the immediate neighbours of R.
(4) None of the given statements is true.
(5) L sits to the immediate right of N .
75. Who amongst the following is facing T ?
(1) N
(2) M
(3) K
(4) J
(5) L

Directions (76-80) : In each of the following questions, relationship between different elements is shown in the statements. The statements are followed by two Conclusions numbered I and II. Study the Conclusions based on the given statements and mark the appropriate answer.

## Give answer (1)if neither Conclusion I nor

 Conclusion II is trueGive answer (2)if either Conclusion I or Conclusion II is true

Give answer (3)if only Conclusion I is true
Give answer (4)if both the Conclusion I and Conclusion II is true

Give answer (5)if only Conclusion II is true (76-77) : Statements
$\mathrm{P}<\mathrm{L} \leq \mathrm{A}=\mathrm{N} \geq \mathrm{E} \geq \mathrm{D} ; \mathrm{Q} \geq \mathrm{N}<\mathrm{O}$
76. Conclusions
I. $\mathrm{L} \leq \mathrm{E}$
II. $\mathrm{P}<\mathrm{Q}$
77. Conclusions
I. $\mathrm{Q} \geq \mathrm{D}$
II. $\mathrm{A}<\mathrm{D}$
(78-79) : Statements
$\mathrm{P} \leq \mathrm{U}=\mathrm{N} \leq \mathrm{C} \geq \mathrm{H}>\mathrm{S} ; \mathrm{K} \geq \mathrm{C}$
78. Conclusions
I. $\mathrm{P} \leq \mathrm{C}$
II. $\mathrm{U}>\mathrm{H}$
79. Conclusions
I. $K>U$
II. $U=K$
80. Statements
$\mathrm{D} \geq \mathrm{I}>\mathrm{S} \geq \mathrm{M} \leq \mathrm{A}<\mathrm{L}$
Conclusions
I. $\mathrm{D} \geq \mathrm{A}$
II. $\mathrm{L}>\mathrm{I}$

Directions (81-85) : Study the following information carefully and answer the questions given blow:

In a certain code language, 'committee to review papers, is written as 'es fr re pt' 'review meeting in morning is written as ' ch ba mo fr' ' meeting to appoint members' is written as 're dv ch gi' 'appoint chairman in review' is written as 'mo gi fr yu' (All the codes are two letter codes only)
81. What is the code for 'morning' in the given code language?
(1) mo
(2) yu
(3) ch
(4) other than those given as options
(5) ba
82. In the given code language, what does the code ' pt ' stands for?
(1) appoint
(2) either 'papers' or committee'
(3) morning
(4) review
(5) either 'for' or 'members'
83. What is the code for 'review call' in the given code language?
(1) dv lq
(2) lq gi
(3) lq fr
(4) gi es
(5) fr dv
84. What is the code for 'to' in the given code language?
(1) mo
(2) fr
(3) gi
(4) re
(5) dv
85. If 'appoint new members' is coded as ' $d v$ wz gi' in the given code language, then what is the code for new chairman meeting?
(1) ch wz yu
(2) yu mo wz
(3) fr es wz
(4) ch yu fr
(5) wz ch es

Directions (86-90) : Study the following information carefully and answer the questions given below:

Eight persons- C, D, E, F, P, Q, R and S- are sitting around a circular table facing the centre with
equal distance between each other (but not necessarily in the same order). Each one of them is also related to D in some way or the other.

P sits third to the right of E. D sits to the immediate left of $E$. Only one person sits between $P$ and $D$ 's son. R sits to the immediate right to D's son. Only three persons sit between D's husband and R. Only one person sits between D's husband and C, F sits to the immediate right of Q , D's father sits second to the right of F. Only three persons sit between D's father and D's brother. D's daughter sits second to the right of S. D's sister sits third to the right of D's mother.
86. Which of the following statements is TRUE with respect to the given information?
(1) $S$ is the brother of $R$.
(2) Only three persons sit between $Q$ and $S$.
(3) E sits third to the right of D's daughter.
(4) All the given options are true
(5) R is an immediate neighbour of D .
87. Who amongst the following is the brother of D ?
(1) Q
(2) $E$
(3) F
(4) C
(5) R
88. As per the given seating arrangement, $\mathrm{Q}: \mathrm{P}$ in the same way as R: EThen following the same pattern D: ?
(1) R
(2) S
(3) Q
(4) C
(5) F
89. Who sits to the immediate left of D's son?
(1) D's father
(2) R
(3) Q
(4) S
(5) D's mother
90. How is Q related to P ?
(1) Sister
(2) sister-in- law
(3) Niece
(4) Brother- in- law
(5) Aunt

Directions (91-92) : Study the following information carefully and answer the questions given below :

D is the father of $\mathrm{A}, \mathrm{D}$ is married to $\mathrm{P}, \mathrm{P}$ is the mother of J , P has only one daughter. J is married to $U . U$ is the son of $L$.
91. How is J related to L ?
(1) Daughter
(2) Granddaughter
(3) Cannot be determined
(4) Niece
(5) Daughter-in-law
92. How is A related to U ?
(1) Cannot be determined
(2) Brother-in- law
(3) Brother
(4) Sister
(5) Sister-in-law

Directions (93-95) : Study the following information carefully and answer the questions given below :

Each of the six buses-R, S, T, U, V and W- has different number of occupants. T has more number of occupants than $R$ and $S$ but less than $V$. U has less number of occupants than W. S does not have the lowest number of occupants. The bus having second lowest number of occupants has 20 occupants and the bus having second highest number of occupants has 64 occupants. Thas 21 less number of occupants than U .
93. Which of the following buses has third lowest number of occupants?
(1) S
(2) T
(3) $R$
(4) U
(5) V
94. If the number of occupants of bus R is more than 7 and is an odd number which is divisible by 3 but not 5, how many occupants are there in bus R?
(1) 9
(2) 21
(3) 15
(4) 27
(5) 19
95. How many occupants does bus V possibly have?
(1) 43
(2) 72
(3) 52
(4) 36
(5) 68

Directions (96-100) : Study the following information carefully and answer the questions given below:

Seven persons namely, M, N, O, P, Q, R and S have an anniversary but not necessarily in the same order, in seven different months (of the same year) namely February, March, April, June, September, October and November. Each of them also like a different flower namely Rose, Jasmine, Lily, Marigold, Daffodil, Sunflower and Orchid but not necessarily in the same order.
$R$ has an anniversary in the month which has more than 30 days. Only one person has an anniversary between R and the one who likes Rose. Both S and O have an anniversary in one of the months after the one who likes Rose. S has an anniversary immediately before O . The one who likes Lily has an anniversary in the month which has less than 30 days. Only three persons have an anniversary between the one who likes Lily and the one who likes Orchid. Only two persons have an anniversary between $S$ and the one who likes Marigold. P has anniversary immediately after the one who likes Marigold. Only two persons have an anniversary between $P$ and $Q$. $M$ has an anniversary immediately before the one who likes Jasmine. O does not like Sunflower.
96. Which of the following represents the month in which $S$ has an anniversary? (1) Cannot be determined
(2) October
(3) March
(4) April
(5) September
97. Which of the following does O like?
(1) Rose
(2) Jasmine
(3) Marigold
(4) Daffodil
(5) Orchid
98. As per the given arrangement, Lily is related to April and Marigold is related to September following a certain pattern, with which of the following is Orchid related to following the same pattern?
(1) February
(2) June
(3) October
(4) March
(4) November
99. Which of the following represents the persons who have an anniversary in April and November respectively?
(1) $\mathrm{N}, \mathrm{O}$
(2) $\mathrm{Q}, \mathrm{M}$
(3) Q, O
(4) N, M
(5) N, S
100. How many persons have an anniversary between the months in which Q and M have an anniversary?
(1) None
(2) One
(3) Three
(4) Two
(5) More than three

1．（1）Here，verb should agree according to the number of problems．
Hence，How serious are the country＇s economic problems． $\qquad$ should be used here．

2．（4）Here，Gerund i．e．in establishing its roots in the country $\qquad$ should be used．It is not proper to use an infinitive here．
3．（4）Want something from $=$ to hope to get something．Hence，they would want as neighbours ．．．．．．．．．．should be used here．
4．（3）Here，subject（The pace and scale）is singular．Hence，singular verb i．e，has no ．．．．．．should be used here．

5．（4）Here，Relative pronoun＇which＇i．e．，those which export raw materials $\qquad$ should be used．

6．（3）
7．（5）
8．（3）
9．（3）
10．（2）
11．（3）Tricks up your sleevs $=$ to have an idea， some plans etc．that you keep ready to use．
12．（3）Reflect $=$ to show or be a sign of the attitude or nature of something．
13．（5）Response $=$ a reaction to something that has happened．
Abysmal＝extremely bad or of a very low standard；terrible．
14．（4）Come across＝to meet／find somebody by change．
15．（4）Awareness＝knowing something．

## Look at the sentence ：

There seems to be a general awareness that this is not the solution．

16．（2）
17．（3）
18．（1）Subdued（Adjective）$=$ unusually quiet and possibly unhappy；not very busy；with not much activity．

## Look at the sentence ：

During economic slowdown there is subdued trading．

19．（2）Broadly（Adverb）＝generally，without considering details．
Barely（Adverb）＝in a way that is just possible but only with difficulty．
20．（4）
21．（1）
22．（4）
23．（1）Materisalise（Verb）＝to take place or start to exist as expected or planned．
Disappear（Verb）＝to become impossible； stop existing；vanish．
24．（5）
25．（4）Grip（Noun）＝control；power over something；grasp．

## Look at the sentence ：

The home team took a firm grip on the game．
26．（2）
27．（5）
28．（1）
29．（4）
30．（3）
31．（3）Let the investment in Scheme A be Rs．$x$ $\therefore$ Investement in Scheme B $=$ Rs． $2 x$

S．I．$=\frac{\text { Principal } \times \text { Time } \times \text { Rate }}{100}$
According to the question，
$\Rightarrow \frac{x \times 3 \times 8}{100}+\frac{2 x \times 2 \times 9}{100}=1800$
$\Rightarrow \frac{24 x}{100}+\frac{36 x}{100}=1800$
$\Rightarrow 24 x+36 x=1800 \times 100$
$\Rightarrow 60 x=180000$
$\Rightarrow x=\frac{180000}{60}=$ Rs. 3000
32. (5) Total number of balls in the bag
$=5+7+3=15$
$\therefore$ Probability of the first ball of being red
colour
$=\frac{{ }^{5} \mathrm{C}_{1}}{{ }^{15} \mathrm{C}_{1}}=\frac{5}{15}=\frac{1}{3}$
Now, 14 balls remain in the bag.
Probability of the second ball of being yellow colour
$=\frac{7}{14}=\frac{1}{2}$
$\therefore$ Required probability
$=\frac{1}{3} \times \frac{1}{2}=\frac{1}{6}$
33. (5) Ram's speed $=x \mathrm{kmph}$ and

Shyam's speed $=y \mathrm{kmph}$;
Time $=\frac{\text { Distance }}{\text { Speed }}$
Case I
$\frac{60}{x}-\frac{60}{y}=1$

## Case II

$$
\begin{equation*}
\frac{60}{y}-\frac{60}{2 x}=\frac{1}{2} \tag{ii}
\end{equation*}
$$

On adding both equations,

$$
\begin{aligned}
& \frac{60}{x}-\frac{60}{2 x}=1+\frac{1}{2} \\
& \Rightarrow \frac{120-60}{2 x}=\frac{3}{2}
\end{aligned}
$$

$\Rightarrow \frac{60}{x}=3 \Rightarrow 3 x=60$
$\Rightarrow x=\frac{60}{3}=20 \mathrm{kmph}$
34. (5) Radius of cylinder $=r$ metre (let)

Height $=h$ metre (let)
According to the question,
$h+r=18$ metre
Again, total surface area
$=2 \pi r h+2 \pi r^{2}$
$=2 \pi r(h+r)$
$\therefore 2 \pi(h+r)=792$
$\Rightarrow 2 \times \frac{22}{7} \times r \times 18=792$
$\Rightarrow r=\frac{792 \times 7}{2 \times 22 \times 18}=7$
$\therefore h=18-7=11$ metre
$\therefore$ Volume of cylinder $=\pi r^{2} h$
$=\left(\frac{22}{7} \times 7 \times 7 \times 11\right)$ cu.metre
$=1694$ cu.metre
35. (4) Required percentage increase
$=\frac{320-120}{120} \times 100$
$=\frac{2000}{12}=\frac{500}{3}=166 \frac{2}{3} \%$
36. (1) Required difference

$$
\begin{aligned}
& =(270+300)-(190+100) \\
& =570-290=280
\end{aligned}
$$

37. (4) Required percentage

$$
=\left(\frac{260-200}{200}\right) \times 100=\frac{60}{2}=30 \%
$$

38. (4) Required average

$$
=\frac{150+260+350+80}{4}=\frac{840}{4}=210
$$

39. (5) Number of gloves sold in September in
town $\mathrm{B}=\frac{80}{100} \times 120=96$
$\therefore$ Required ratio $=96: 320=3: 10$
40. (4) I. $x^{2}+x-12=0$

$$
\begin{aligned}
& \Rightarrow x^{2}+4 x-3 x-12=0 \\
& \Rightarrow x(x+4)-3(x+4)=0 \\
& \Rightarrow(x-3)(x+4)=0 \\
& \Rightarrow x=3 \text { or },-4
\end{aligned}
$$

II. $y^{2}+2 y-8=0$

$$
\begin{aligned}
& \Rightarrow y^{2}+4 y-2 y-8=0 \\
& \Rightarrow y(y+4)-2(y+4)=0 \\
& \Rightarrow(y-2)(y+4)=0 \\
& \Rightarrow y=2 \text { or, }-4
\end{aligned}
$$

Clearly, $x \geq y$
41. (1) I. $4 x^{2}-13 x+9=0$

$$
\begin{aligned}
& \Rightarrow 4 x^{2}-4 x-9 x+9=0 \\
& \Rightarrow 4 x(x-1)-9(x-1)=0
\end{aligned}
$$

$$
\Rightarrow(4 x-9)(x-1)=0
$$

II. $\quad 3 y^{2}-14 y+16=0$

$$
\Rightarrow 3 y^{2}-6 y-8 y+16=0
$$

$$
\Rightarrow 3 y(y-2)-8(y-2)=0
$$

$$
\Rightarrow(y-2)(3 y-8)=0
$$

$$
\Rightarrow y=2 \text { or, } \frac{8}{3}
$$

Clearly, $x<y$
42. (2) I. $8 x^{2}+18 x+9=0$

$$
\begin{aligned}
& \Rightarrow 8 x^{2}+12 x+6 x+9=0 \\
& \Rightarrow 4 x(2 x+3)+3(2 x+3)=0
\end{aligned}
$$

$\Rightarrow(2 x+3)(4 x+3)=0$
$\Rightarrow x=\frac{-3}{2}$ or, $\frac{-3}{4}$
II. $4 y^{2}+19 y+21=0$
$\Rightarrow 4 y^{2}+12 y+7 y+21=0$
$\Rightarrow 4 y(y+3)+7(y+3)=0$
$\Rightarrow(4 y+7)(y+3)=0$
$\Rightarrow y=\frac{-7}{4}$ or, -3
Clearly, $x>y$
43. (1) I. $3 x^{2}+16 x+21=0$
$\Rightarrow 3 x^{2}+9 x+7 x+21=0$
$\Rightarrow 3 x(x+3)+7(x+3)=0$
$\Rightarrow(3 x+7)(x+3)=0$
$\Rightarrow x=\frac{-7}{3}$ or, -3
II. $6 y^{2}+17 y+12=0$
$\Rightarrow 6 y^{2}+9 y+8 y+12=0$
$\Rightarrow 3 y(2 y+3)+4(2 y+3)=0$
$\Rightarrow(2 y+3)(3 y+4)=0$
$\Rightarrow y=\frac{-3}{2}$ or, $\frac{-4}{3}$
Clearly, $x<y$
44. (3) I. $x^{2}=49 \Rightarrow x= \pm 7$
II. $y^{2}-4 y-21=0$
$\Rightarrow y^{2}-7 y+3 y-21=0$
$\Rightarrow y(y-7)+3(y-7)=0$
$\Rightarrow(y-7)(y+3)=0$
$\Rightarrow y=7 \mathrm{or},-3$
Clearly, $x \leq y$
45. (1) Ratio of investments of $A$ and $B$
$=5: 3=10: 6$
Ratio of investments of $B$ and
$C=2: 3=6: 9$
$\therefore \mathrm{A}: \mathrm{B}: \mathrm{C}=10: 6: 9$
Ratio of equivalent capitals of $\mathrm{A}, \mathrm{B}$ and C for 1 month
$=10 x \times 12: 6 x \times 12: 9 x \times 6=20: 12: 9$
Sum of the terms of ratio
$=20+12+9=41$
$\therefore$ Difference between the shares of $B$ and
$\mathrm{C}=\left(\frac{12-9}{41}\right) \times 12600$
$=3 \times 300=$ Rs. 900
46. (5) Total number of students in College $B$
$=8 x$
Number of boys
$=\frac{5}{8} \times 8 x=5 x$
$\therefore$ Boys studying Commerce
$=\frac{5 x \times 60}{100}=3 x$
Boys in other streams
$=5 x-3 x=2 x$
$\therefore 2 x=800$
$\therefore 8 x=4 \times 800=3200$
Total number of students in College
$A=\frac{5}{8} \times 3200=2000$
47. (4) Rate downstream of boat $=4 x \mathrm{kmph}$

Rate upstream of boat $=3 x \mathrm{kmph}$
According to the questions,
$\frac{70}{4 x}=\left(3+\frac{30}{60}\right)$ hours
$\Rightarrow \frac{70}{4 x}=3 \frac{1}{2}=\frac{7}{2}$
$\Rightarrow 7 \times 4 x=70 \times 2$
$\Rightarrow x=\frac{70 \times 2}{7 \times 4}=5$
$\therefore$ Speed of boat in still water $=\frac{1}{2}($ Rate
downstream + Rate upstream)
$=\frac{1}{2} \times 7 x=\frac{7 \times 5}{2}=17.5 \mathrm{kmph}$
48. (1) Total number of employees in Company $\mathrm{A}=x$ (let).
Science graduate employees + Commerce graduate employees $=2 \times 518$
$\Rightarrow \frac{40 x}{100}+\frac{30 x}{100}=1036$
$\Rightarrow 70 x=1036 \times 100$
$\Rightarrow 70 x=103600$
$\Rightarrow x=\frac{103600}{70}=1480$
49. (3) Total number of employees in Company $B=x$ (let)
$\therefore$ Total number of employees in Company $\mathrm{E}=3 \mathrm{x}$
Percentage of Commerce graduate employees in Company E
$=(100-50-30) \%=20 \%$
Percentage of Commerce graduate employees in Company
$B=(100-40-25) \%=35 \%$
According to the question,
$\frac{3 x \times 20}{100}-\frac{x \times 35}{100}=300$
$\Rightarrow 650 x-35 x=30000$
$\Rightarrow 25 x=30000$
$\Rightarrow x=\frac{30000}{25}=1200$
50. (3) Number of Arts and Commerce graduate employees in Company D
$=1300 \times \frac{52}{100}=676$
Arts : Commerce $=4: 9$
$\therefore$ Number of Arts graduate employees
$=\frac{4}{13} \times 676=208$
51. (2) Total number of employees in Company C in April 2014
$=\frac{900 \times 140}{100}=1260$
$\therefore$ Number of Commerce graduate employees
$=\frac{1260 \times 50}{100}=630$
52. (5) Number of Science graduate employees in Company
$\mathrm{C}=(100-44-35) \%=21 \%$
$\therefore$ Required difference
$=(35-21) \%$ of 900
$=\frac{900 \times 14}{100}=126$
53. (3) $\mathrm{A}: \mathrm{B}=3: 4$
$A: C=1: 2=3: 6$
$\therefore \mathrm{A}: \mathrm{B}: \mathrm{C}=3: 4: 6$
According to the question,
After 6 years,
Sum of ages of A, B and C $=96$
$\Rightarrow 3 x+4 x+6 x+18=96$
$\Rightarrow 13 x=96-18=78$
$\Rightarrow x=\frac{78}{13}=6$
$\therefore$ A's present age $=3 x$
$=3 \times 6=18$ years
54. (5) When inlet pipe $A$ is opened, the part of tank emptied by the leak in one hour $=\frac{1}{x}$
$=\frac{1}{2}-\frac{1}{3}=\frac{1}{6}$
$\therefore x=6$ hours
Part of tank filled by inlet B in 1 hour when there is leak
$=\frac{1}{3}-\frac{1}{6}=\frac{2-1}{6}=\frac{1}{6}$
$\therefore$ Required time $=6$ hours
55. (3) Let the loss be Rs. x.
$\therefore$ C.P. of article $=$ Rs. $(8000+x)$
According to the question,
On selling the article for Rs. 9800,
$9800-8000-x=2 x$
$\Rightarrow 1800=3 x$
$\Rightarrow x=\frac{1800}{3}=$ Rs. 600
$\therefore$ C.P. of article
$=$ Rs. $(8000+600)=$ Rs. 8600
For a gain of $20 \%$,
S.P. of article $=\frac{8600 \times 120}{100}$
$=$ Rs. 10320
56. (5) $?^{2}=240 \div 15 \times 288 \div 18$
$=\frac{240}{15} \times \frac{288}{18}=16 \times 16$
$\therefore ?=\sqrt{16 \times 16}=16$
57. (2) $\frac{? \times 1050}{100}+\frac{75 \times 420}{100} \approx 525$
$\Rightarrow \frac{? \times 1050}{100}+315 \approx 525$
$\Rightarrow \frac{? \times 1050}{100} \approx 525-315 \approx 210$
$\Rightarrow ? \times 1050 \approx 210 \times 100$
$\Rightarrow ? \approx \frac{210 \times 100}{1050} \approx 20$
58. (3) ? $\approx 246+2954-450-300 \approx 2450$
59. (1) ? $\approx 300-145+30 \times 12$
$\approx 155+360 \approx 515$
60. (4) ? $\approx \sqrt{324} \times 8+706$
$\approx 18 \times 8+706$
$\approx 144+706 \approx 850$
61. (2) The patterns is
$9 \times 0.5+0.5=4.5+0.5=5$
$5 \times 1+1=5+1=6$
$6 \times 1.5+1.5=9+1.5=10.5$
$10.5 \times 2+2=21+2=23$
$23 \times 2.5+2.5=57.5+2.5=60$
62. (3) The pattern is :
$59+7=66$
$66+2 \times 7=66+14=80$
$80+2 \times 14=80+28=108$
$108+2 \times 28=108+56=164$
$164+2 \times 56=164+112=276$
62. (3) The pattern is :
$\frac{47-1}{2}=\frac{46}{2}=23$
$\frac{23-1}{2}=\frac{22}{2}=11$
$\frac{11-1}{2}=\frac{10}{2}=5$
$\frac{5-1}{2}=\frac{4}{2}=2$
$\frac{2-1}{2}=\frac{1}{2}=0.5$
63. (5) The pattern is :
$\frac{47-1}{2}=\frac{46}{2}=23$
$\frac{23-1}{2}=\frac{22}{2}=11$
$\frac{11-1}{2}=\frac{10}{2}=5$
$\frac{5-1}{2}=\frac{4}{2}=2$
$\frac{2-1}{2}=\frac{1}{2}=0.5$
64. (4) The pattern is :
$1 \times 1+1=1+1=2$
$2 \times 2+2=4+2=6$
$6 \times 3+3=18+3=21$
$21 \times 4+4=84+4=88$
$88 \times 5+5=440+5=445$
65. (2) The pattern is:
$300-\left(1^{3}+1\right)=300-2=298$
$298+\left(2^{3}+1\right)=298+9=307$
$307-\left(3^{3}+1\right)=307-28=279$
$279+\left(4^{3}+1\right)=279+65=344$
$344-\left(5^{3}+1\right)=344-126=218$
(66-70)
(i) All ministers are deans $\rightarrow$ Universal Affirmative (A-type)
(ii) Some jobs are works $\rightarrow$ Particular Affirmative (I-type).
(iii)No solution is a trick $\rightarrow$ Universal Negative (E-type).
(iv) Some solutions are not tricks $\rightarrow$ Particular Negative (O-type).

## (66-67)

Some tasks are hurdles.
All hurdles are jobs.
$\mathrm{I}+\mathrm{A} \Rightarrow$ I-type of Conclusion
"Some tasks are jobs." (P)
66. (3)


Venn diagrams of "Some jobs are works":


After combining the Venn diagrams II and IV, we get

67. (3) Conclusion I is the Converse of the Conclusion (P).
68. (4) All rules are tricks.

No trick is a solution.
$A+E \Rightarrow E$ - type of Conclusion
"No rule is a solution."
This is the Conclusion I.
Some problems are solutions.

No solution is a trick.
$\mathrm{I}+\mathrm{E} \Rightarrow$ O-type of Conclusion
"Some problems are not tricks."
This is the Conclusion II.
69. (5) All ministers are deans.

Some deans are heads.
A $+\mathrm{I} \Rightarrow$ No Conclusion
Venn diagrams of "All ministers are deans":


Venn diagrams of "Some deans are heads":

or


After combining the Venn diagrams II and IV, we get :

70. (2) Some rows are queues.

No queus is a line.
$\mathrm{I}+\mathrm{E} \Rightarrow \mathrm{O}$ - type of Conclusion
"Some rows are not lines."
Conclusions I and II form Complementary Pair. Therefore, either Conclusion I or Conclusion II follows.
(71-75) :

71. (1) $U$ is facing $M$.
72. (3) Except in the pair $M$ and $L$, in all other pairs the first person sits to the immediate left of the second person.
$M$ sits second to the left of $L$.
73. (4) $U$ sits third to the right of $S$.
74. (2) N sits second from the right end.

Only two persons-J and L-sit between N and $M$.
N faces immediate neighbour of T or V . L sits to the immediate left of N .
75. (5) L is facing T .
(76-77) :
$\mathrm{P}<\mathrm{L} \leq \mathrm{A}=\mathrm{N} \geq \mathrm{E} \geq \mathrm{D}$
$\mathrm{Q} \geq \mathrm{N}<\mathrm{O}$
$\mathrm{P}<\mathrm{L} \leq \mathrm{A}=\mathrm{N} \leq \mathrm{Q}$
$\mathrm{Q} \geq \mathrm{A}=\mathrm{N} \geq \mathrm{E} \geq \mathrm{D}$
76. (5) Conclusions :
I. L $\leq \mathrm{E}:$ Not True
II. $\mathrm{P}<\mathrm{Q}$ : True
77. (3) Conclusions :
I. $\mathrm{Q} \geq \mathrm{D}:$ True
II. A < D : Not True
(78-79) :
$\mathrm{P} \leq \mathrm{U}=\mathrm{N} \leq \mathrm{C} \geq \mathrm{H}>\mathrm{S}$
$\mathrm{K} \geq \mathrm{C}$
$\mathrm{P} \leq \mathrm{U}=\mathrm{N} \leq \mathrm{C} \leq \mathrm{K}$
78. (3) Conclusions :
I. $\mathrm{P} \leq \mathrm{C}:$ True
II. $\mathrm{U}>\mathrm{H}$ : Not True
79. (2) Conclusions :
I. K > U : Not True
II. $\mathrm{K}=\mathrm{U}$ : Not True

K is either greater than or equal to U . Therefore, either Conclusion I or Conclusion II is true.
80. (1) D $\geq$ I $>$ S $\geq$ M $\leq$ A $<$ L

## Conclusions :

I. $\mathrm{D} \geq \mathrm{A}$ : Not True
II. L > I : Not True
(81-85) :

81. (5) morning $\Rightarrow$ ba
82. (2) $\mathrm{pt} \Rightarrow$ committee/papers
83. (3) review $\Rightarrow \mathrm{fr}$
'lq' may be the code for 'call'
84. (4) to $\Rightarrow$ re
85. (1) appoint $\Rightarrow$ gi
members $\Rightarrow \mathrm{dv}$
new $\Rightarrow$ wz
Therefore,
new $\Rightarrow$ wz
chairman $\Rightarrow \mathrm{yu}$
meeting $\Rightarrow$ ch

## (86-90) :


86. (2) $S$ is the grandson of $R$.
$P$ is the daughter of $D$. $E$ sits third to the left of $P$.
$R$ is an immediate neighbour of both $P$ and S.
87. (4) $C$ is the brother of $D$.
88. (3) $Q$ sits second to the right of $P$.

R sits second to the right of E .
D sits second to the right of Q .
89. (1) $S$ is the son of $D$.

E sits to the immediate left of S.
$E$ is the father of $D$.
90. (5) Q is the sister of D .
$P$ is the daughter of $D$.
Therefore, Q is the aunt of P .
(91-92) :
$D$ is the father of $A$ and $J$.
$P$ is the wife of $D$.
$J$ is the wife of $U$.
$J$ is the sister of A.
$A$ is the son of $D$ and $P$.
$J$ is the daughter-in-law of L .
91. (5) $J$ is the wife of $U$.

U is the son of L .
Therefore, J is the daughter-in-law of L .
92. (2) A is the brother of $J$.
$J$ is the wife of $U$.
Therefore, A is brother-in-law of U .

## (93-95) :

| $\mathrm{V}>\mathrm{T}$ |  |  |
| :---: | :---: | :---: |
| $\mathrm{W}>\mathrm{U}>$ |  | R, S |
| $\mathrm{W}>\mathrm{U}>$ |  | $\mathrm{S}>\mathrm{R}$ |
| $\downarrow$ | $\downarrow$ | $\downarrow$ |
| 64 | 43 | 20 |

93. (2) The bus T has the third lowest number of occupants.
94. (1) The Bus $R$ has less than 20 occupants but more than 7 occupants.
The numbers between 7 and 20, divisible by 3 :
$9,12,15,18$
15 is divisible by 5 also.
9 is an odd number.
Therefore, option (1) is the answer.
95. (3) The Bus $V$ has more than 43 but less than 64 occupants.
(96-100) :

| Month | Person | Flower |
| :---: | :---: | :---: |
| February | Q | Lily |
| March | R | Sunflower |
| April | N | Marigold |
| June | P | Rose |
| September | M | Orchid |
| October | S | Jasmine |
| November | O | Daffodil |

96. (2) $S$ has an anniversary in the month of October.
97. (4) O likes Daffodil.
98. (5) Q likes Lily who has an anniversary in the month of February, But, April is given with Lily. Similarly N likes Marigold who has an anniversary in the month of April. But, September is given with Marigold.

Therefore, Orchid is related to November.
99. (1) N has an anniversary in April.

O has an anniversary in November.
100. (3) Three persons - R, N and $P$ - have an anniversary between Q and M .

