

SYMBIOSIS NATIONAL APTITUDE TEST (SNAP)

SOLVED PAPER - 2017

(HELD ON 17-12-2017)

(Based on Memory)

QUANTITATIVE APTITUDE & DATA INTERPRETATION

- There are two integers 34041 and 32506, when divided by a three-digit integer n , leave the same remainder. What is the value of n ?
(a) 298 (b) 307
(c) 461 (d) can't be determined
- What is the remainder when $1! + 2! + 3! + \dots + 100!$ is divided by 7?
(a) 0 (b) 5
(c) 6 (d) 3
- If $(67^{67} + 67)$ is dividing by 68, the remainder is :
(a) 61 (b) 67
(c) 63 (d) 66
- Find the value of $1(1!) + 2(2!) + 3(3!) + \dots + 20(20!)$
(a) $20! - 1$ (b) $21! - 1$
(c) $22! - 2$ (d) $21!$
- Find the remainder when $6^{6^{6^{\dots^6}}}$ (100 times) divided by 10?
(a) 6 (b) 2
(c) 4 (d) 8

DIRECTIONS (Qs. 6-10): In the paragraph given below some informations are given about the selling of some items. Two values are coded as x and y . Study the given information for the value of x and y and answer as:

- If $X > Y$
- If $X < Y$
- If $X \geq Y$
- If $X \leq Y$ or can't be determined

A shopkeeper has some electronic goods in his shop. Cost price of T.V is 40% less than the selling price of A.C. which is sold at 20% profit after a discount of 20%. Selling price of cooler is 50% less than the cost price of T.V and it is sold at 10% profit with a discount of 20%. T.V is sold at 20% profit with a discount of 40% and amount of discount on T.V is 24000. Laptop is sold at 30% discount and its cost price is two times to selling price of Mobile which is sold at 50% gain and 25% discount. Selling price of Laptop is 50% more than the selling price of A. C., and person got 20% profit on it.

- X = Average cost price of A.C and Mobile
 Y = Cost price of Laptop
- X = Average profit amount of all items
 Y = Average discount amount of all items.
- X = Cost price of Cooler
 Y = Profit amount of Laptop

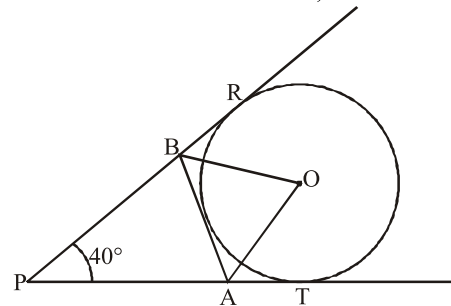
- X = Profit amount of Mobile
 Y = Discount amount of Mobile
- X = Marked price of Laptop
 Y = Marked price of A. C.

DIRECTIONS (Qs. 11-15): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read the question and both the statements and give answer

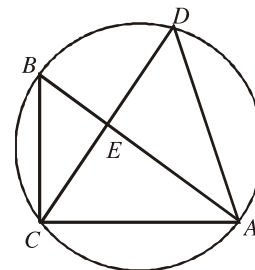
- If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
 - If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
 - If the data either in statement I alone or in statement II alone are sufficient to answer the question.
 - If the data even in both the statements I and II together are not sufficient to answer the question.
 - If the data in both the statements I and II together are necessary to answer the question.
- A train running at a certain speed crosses a platform in 30 secs. What is the speed of the train?
 - Length of the train is 240 m.
 - The train crosses a man who is on the platform in 12 seconds.
 - The weights of A, B and C are in the ratio of 8 : 7 : 5. A's weight is 60% more than C's. Find the weight of B.
 - Total weight of A, B and C is 300 kg.
 - Difference between A's and C's weight is 45 kg.
 - A shopkeeper sells some articles, taking profit of 20% on the cost price. Find the amount of profit.
 - Cost price of the article is Rs. 2400.
 - Selling price of the article is Rs. 480 more than the cost price.
 - A 540m-long plot of rectangular land is to be fenced. Find the cost of fencing per square metre.
 - Breadth of the rectangular plot is 60 m.
 - Length of the rectangular plot is 120 m.
 - The difference between the simple interest and the compound interest on a sum of money at the end of four years is ₹ 1282. Find the sum.
 - Amount of simple interest accrued after four years is ₹ 4000.
 - Rate of interest is 10% per annum

16. If $\log x - 5 \log 3 = -2$, then x equals
 (a) 1.25 (b) 0.81
 (c) 2.43 (d) 0.8
17. Find the value of
 $\log_{20} 100 + \log_{20} 1000 + \log_{20} 10000$
 [Assume that $\log 2 = 0.3$]
 (a) $90/13$ (b) $80/13$
 (c) $110/13$ (d) $70/13$
18. Find the remainder when 1234 ... 41 digits is divided by 8.
 (a) 1 (b) 2
 (c) 3 (d) 4
19. A and B entered into a partnership, investing ₹ 16000 and ₹ 12000 respectively. After 3 months, 'A' withdraw ₹ 5000, while B invested ₹ 5000 more. After 3 more months, C joins the business with a capital of ₹ 21000. After a year, they obtained a profit of ₹ 26,400. By what value does the share of B exceed the share of C?
 (a) 3600 (b) 2100
 (c) 3000 (d) 2300
20. A survey of 500 television viewers produced the following information, 285 watch football, 195 watch hockey, 115 watch basket-ball, 45 watch football and basket ball, 70 watch football and hockey, 50 watch hockey and basket ball, 50 do not watch any of the three games. The number of viewers, who watch exactly one of the three games are
 (a) 325 (b) 310
 (c) 405 (d) 372
21. Nine squares are chosen at random on a chessboard. What is the probability that they form a square of size 3×3 ?
 (a) $\frac{9}{{}^{64}C_9}$ (b) $\frac{36}{{}^{64}C_9}$
 (c) $\frac{6}{{}^{64}C_9}$ (d) None of these
22. A, B, C and D are four towns any three of which are non-collinear. Then the number of ways to construct three roads each joining a pair of towns so that the roads do not form a triangle is
 (a) 7 (b) 8
 (c) 9 (d) More than 9
23. If $x^2 - ax - 21 = 0$ and $x^2 - 3ax + 35 = 0$; $a > 0$ have a common root, then a is equal to :
 (a) 1 (b) 2
 (c) 4 (d) 5
24. If a, b and c are distinct positive real numbers and $a^2 + b^2 + c^2 = 1$, then $ab + bc + ca$ is
 (a) less than 1 (b) equal to 1
 (c) greater than 1 (d) any real number
25. The work done by a man, a woman and a child is in the ratio of 3 : 2 : 1. There are 20 men, 30 women and 36 children in a factory. Their weekly wages amount to ₹ 780, which is divided in the ratio of work done by the men, women and children. What will be the wages of 15 men, 21 women and 30 children for 2 weeks?
 (a) ₹ 585 (b) ₹ 292.5
 (c) ₹ 1170 (d) ₹ 900

26. David invested certain amount in three different Schemes A, B and C with the rate of interest 10% p.a., 12% p.a. and 15% p.a. respectively. If the total interest accrued in one year was ₹ 3200 and the amount invested in Scheme C was 150% of the amount invested in Scheme A and 240% of the amount invested in Scheme B, what was the amount invested in Scheme B?
 (a) ₹ 5000 (b) ₹ 6500
 (c) ₹ 8000 (d) cannot be determined
27. There are two shopkeepers selling the same article at the same price for same quantity. One day, first shopkeeper offers a price discount of 25% for the same quantity whereas second shopkeeper offers 25% more quantity for the same price. From a customer's point of view, which deal is better?
 (a) 1st shopkeeper's deal (b) 2nd shopkeeper's deal
 (c) both are equal (d) cannot be determined
28. Surdeep bought a machinery for ₹800 after getting a discount of 20% from the company. He fixed up the selling price of garments in such a way that he earned a profit of 10% on the original company price. Find the selling price of machinery for Surdeep?
 (a) ₹900 (b) ₹1000
 (c) ₹1100 (d) ₹1200
29. In the figure, $\triangle APB$ is formed by three tangents to the circle with centre O. If $\angle APB = 40^\circ$, then the measure of $\angle BOA$ is

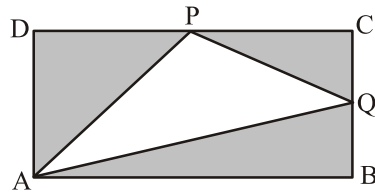


- (a) 50° (b) 55°
 (c) 60° (d) 70°
30. In $\triangle ABC$, D is a point on BC such that $3BD = BC$. If each side of the triangle is 12 cm, then AD equals
 (a) $4\sqrt{5}$ (b) $4\sqrt{6}$
 (c) $4\sqrt{7}$ (d) $4\sqrt{11}$
31. In the adjoining figure, points A, B, C and D lie on the circle. $AD = 24$ and $BC = 12$. What is the ratio of the area of the triangle CBE to that of the triangle ADE



- (a) 1 : 4 (b) 1 : 2
 (c) 1 : 3 (d) Insufficient data

32. In the given figure, ABCD is a rectangle. P and Q are the mid-points of sides CD and BC respectively. Then the ratio of area of shaded portion to the area of unshaded portion is :



- (a) 5 : 4 (b) 3 : 5
(c) 5 : 3 (d) 5 : 8
33. If $2 \sin \alpha + 15 \cos^2 \alpha = 7$, ($0^\circ < \alpha < 90^\circ$), find the value of $\cot \alpha$
- (a) $\frac{3}{4}$ (b) $\frac{5}{4}$
(c) $\frac{1}{2}$ (d) $\frac{1}{4}$
34. If $1 + \sin^2 A = 3 \sin A \cos A$, then what are the possible values of $\tan A$?
- (a) 1/4, 2 (b) 1/6, 3
(c) 1/2, 1 (d) 1/8, 4
35. Avinash covered 150 km distance in 10 hours. The first part of his journey he covered by car, then he hired a rickshaw. The speed of car and rickshaw is 20 km/hr and 12 km/hr respectively. The ratio of distances covered by car and the rickshaw respectively are :
- (a) 2 : 3 (b) 4 : 5
(c) 1 : 1 (d) None of these
36. A jar full of whiskey contains 40% alcohol. A part of this whiskey is replaced by another containing 19% alcohol and now the percentage of alcohol was found to be 26%. The quantity of whisky replaced is
- (a) 4/3 (b) 3/4
(c) 3/2 (d) 2/3
37. In a market survey, 20% opted for product A whereas 60% opted for product B. The remaining individuals were not certain. If the difference between those who opted for product B and those who were uncertain was 720, how many individuals were covered in the survey?
- (a) 1440 (b) 1800
(c) 3600 (d) Data inadequate
38. The captain of a cricket team of 11 members is 26 years old and the wicket keeper is 3 years older. If the ages of these two are excluded, the average age of the remaining players is one year less than the average age of the whole team. Find out the average age of the team.
- (a) 23 years (b) 26 years
(c) 50 years (d) None of these
39. On dividing $x^3 - 3x^2 + x + 2$ by a polynomial $g(x)$, the quotient and remainder were $x - 2$ and $-2x + 4$ respectively. Find $g(x)$.
- (a) $x^2 + 2x + 1$ (b) $x^2 - 2x + 1$
(c) $x + x + 1$ (d) $x^2 - x + 1$

40. A, B, C and D purchase a gift worth ₹ 60. A pays 1/2 of what others are paying B pays 1/3rd of what others are paying and C pays 1/4th of what others are paying. What is the amount paid by D?
- (a) ₹ 14 (b) ₹ 15
(c) ₹ 16 (d) ₹ 13

ANALYTICAL & LOGICAL REASONING

41. If it is possible to make a meaningful word with the third, the fifth, the sixth and the eleventh letters of the word MERCHANDISE, using each letter only once, which of the following will be the third letter of that word? If no such word can be formed, give 'X' as answer and if more than one such word can be formed, mark 'T' as answer.
- (a) H (b) E
(c) R (d) T

DIRECTIONS (Qs. 42 -43): Read the following information carefully and answer the questions given below:

First 12 even numbers are written from top to bottom. The letters of word 'SACRED' are written in alphabetical order against each multiple of 4 (One letter against one number). There are 2 letters between N and S. There are as many letters between E and N as between P and D. P is not against number 14. There are 5 letters between U and T. U is above T. I is written against number 6. (No letter is repeated against any number)

42. Which is the second letter in word formed by letters against numbers 6, 12, 14, and 20?
- (a) T (b) D
(c) N (d) I
43. If there are 3 alphabets in English alphabetical series between alphabets written against numbers 10 and 22. Then how many alphabets in English alphabetical series are there between the alphabets written against numbers 18 and 22?
- (a) Three (b) Five
(c) One (d) Four

DIRECTIONS (Qs. 44-46): Study the information and answer the following questions:

In a certain code language 'mark is not money' is written as '35%T,72@Y, 98&K, 76#S', 'door and source earn' is written as '67@E, 56*N, 34@D, 97&R', 'max nic joof high' is written as '34@H, 34%C, 54&F, 74#X' and 'maa calm hi vizag' is written as '34%G, 73&M,23@I,55*A,.

44. What is the code for 'mob like' in the given code language?
- (a) 23%B, 56#K (b) 55%O, 76*E
(c) 45%B, 34&E (d) 67%D, 37@E
45. What is the code for 'sight' in the given code language?
- (a) 56#S (b) 87*G
(c) 98@T (d) 12@I7
46. What may be the possible code for 'disk only made' in the given code language?
- (a) 23#D, 36%E, 29*A (b) 36%E, 45@K, 76*Y
(c) 45@K, 23#D, 45@A (d) 45@I, 67#T, 21*K

DIRECTIONS (Qs. 47-48): Answer the questions on the basis of the information given below.

Ankit and Rahman are at a point T. Ankit walks 2 km north, takes a right turn walks 3 km. He takes a left turn, walks 3 km and takes a right turn, he further walks 7 km, and then takes right turn and walks 5 km to reach point U. Rahman walks 6 km south, takes a left turn and walks 7 km. He takes a left turn, walks 4 km and takes a right turn, he further walks 3 km and then takes left turn and walks 2 km to reach point U.

47. If U is exactly to the east of T, Ankit and Rahman take equal time to reach point U from point T, what is the ratio of their speeds?
- (a) 17:18 (b) 18:17
(c) 10:11 (d) 11:10
48. What is the position of T with respect to point U if both are in straight line?
- (a) 10 km to the south (b) 7 km to the west
(c) 10 km to the west (d) 10 km to the east

DIRECTIONS (Qs. 49-52): Read the following information carefully to answer the questions given below:

- (i) There are six different books on different subjects *P, Q, R, S, T* and *U*. These books are kept one above the other on a shelf. These books belong to six different persons - *A, B, C, D, E* and *F*. It is not necessary that the orders of these books and persons are the same.
- (ii) Only book of subject *Q* is kept between the books of subject *P* and *T* and only book of subject *S* is kept between books of subject *P* and *U*. The book of subject *R* is immediately above the book of subject *T*.
- (iii) *C*'s book is kept on the top. *A* does not have books on subjects *T* and *S*. The book on subject *P* belongs to *F*. The book on subject *U* belongs neither to *B* nor to *A*. *D*'s book is kept at the bottom.
49. The book on which of the following subjects belongs to *A*?
- (a) Q (b) S
(c) P (d) T
50. Who among the following possesses the book on subject *T*?
- (a) B (b) E
(c) C or E (d) B or E
51. Who owns the book on subject *U*?
- (a) B (b) E
(c) D (d) C
52. The book on which of the following subjects is kept on the top?
- (a) T (b) R
(c) U (d) Data inadequate

DIRECTIONS (Qs. 53-57): Read the following information and answer the questions that follow:

Seven animals Tiger, Lion, Elephant, Fox, Horse, Panda and Cheetah have been collected from different forest to Indian museum for 1 week show. These animals belongs to different dangerous forest i.e. Crooked Forest, Black Forest, Rata Forest,

Goblin Forest, Otzarreta Forest, Hallerbos Forest and Tsingy Forest. And all seven animals have show on a different days of the week from Monday to Sunday and all these animals are national animal of different countries- America, China, India, Africa, Spain, France and Germany but not necessarily in the same order.

Elephant belongs to crooked forest but do not have show on Tuesday. Cheetah has show on Monday but not belongs to Rata Forest and Tsingy Forest. Panda belongs to Otazarreta Forest. The one who belongs to crooked forest, is national animal of Spain. Lion belongs to Goblin Forest and has show on Wednesday. Two animal have show on the days between the days on which national animal of Spain has show and national animal of France has show. Fox, which is national animal of France and does not belong to Crooked Forest or Rata Forest and has show on the next day on which Horse has show, who belongs to Hallerbos Forest. Animal which is national animal of Africa has show on the day just before the day on which elephant has show and three people have show between the days on which the America's national animal and the Germany's national animal has show. The one who is national animal of China has show just before the day on which the America's national animal has show. The one who is national animal of India has show after the day on which America's national animal has show.

53. Which of the following combinations of animal-forest-day and country is correct?
- (a) Cheetah-Black Forest-Wednesday-India
(b) Tiger-Black Forest-Monday-America
(c) Cheetah-Rata Forest - Monday-Spain
(d) None of these
54. Elephant have shown at Indian Museum on which day?
- (a) Saturday (b) Sunday
(c) Tuesday (d) Thursday
55. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
- (a) Cheetah (b) Lion
(c) Elephant (d) Horse
56. Which of the following animal is national animal of China?
- (a) Horse (b) Fox
(c) Panda (d) Cheetah
57. If Cheetah is related to elephant and lion is related to horse. In the same way, elephant is related to?
- (a) Tiger (b) Cheetah
(c) Panda (d) Fox

DIRECTIONS (Qs. 58-62): Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

- Input:** 93 come home over 32 47 now 26
Step I: over 93 come home 32 47 now 26
Step II: over 26 93 come home 32 47 now
Step III: over 26 now 93 come home 32 47

- Step IV:** over 26 now 32 93 come home 47
Step V: over 26 now 32 home 93 come 47
Step VI: over 26 now 32 home 47 93 come
Step VII: over 26 now 32 home 47 come 93 and Step VII is the last step.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step.

- 58.** Step II of an input is:
sky 20 90 37 begin again 11 home
Which of the following is definitely the input?
(a) 20 90 37 begin again 11 home sky
(b) sky 90 37 20 begin again 11 home
(c) 90 20 37 begin sky again 11 home
(d) Cannot be determined
- 59.** Step III of an input is:
take 17 mind game 29 73 18 loud
How many more steps are required to complete the sequence?
(a) Two (b) Three
(c) Four (d) Five
- 60.** **Input:** by now 51 32 for 91 20 me
Which of the following steps will be the last?
(a) III (b) IV
(c) V (d) VI
- 61.** **Input:** fight for all 39 62 25 today 19
Which of the following will be step IV?
(a) today 25 for 39 fight all 62 19
(b) today 19 for 25 fight all 39 62
(c) today 19 for 25 fight 39 all 62
(d) Cannot be determined
- 62.** **Input:** queen mary 79 62 17 20 green west
Which of the following steps will be the last but one ?
(a) VI (b) VII
(c) V (d) None of these

DIRECTIONS (Qs. 63-64) : In the following questions a paragraph is given. Read the paragraph carefully and answer the questions which follow each of these paragraphs.

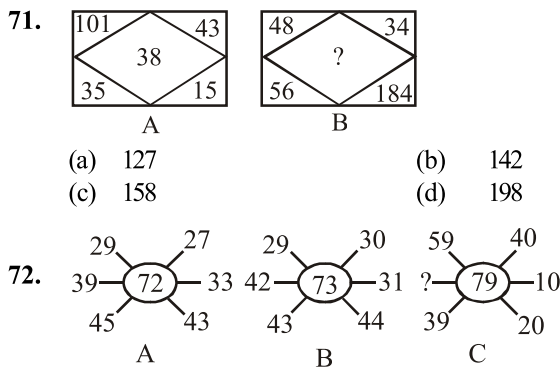
Fashion has become one of the largest fads among the youth. The amount of time wastage and expenditure on fashion is very large. What bothers, however, is the fact that fashion is here to stay despite countless arguments against it. What is required, therefore, is that strong efforts should be made in order to displace the excessive craze of fashion from the minds of today's youth.

- 63.** Which of the following statements finds the least support by the argument made by the author in the given paragraph?
(a) Youngsters should be motivated to do constructive business rather than wasting time on fashion.
(b) The world of fashion being glamorous and glittery attracts people towards itself.
(c) Following the latest fashion increases the self-efficacy of people, thus increasing their overall mental abilities.
(d) Many universities have implemented a dress code to put a check on the increasing fad amongst the youth which was affecting their grades.

- 64.** Which of the following can be inferred from the given paragraph?
(a) The author has made strong efforts to wipe out fashion from the minds of youth.
(b) Steps need to be taken in order to control the growing fad of fashion amongst the youth.
(c) The author is upset with the shift of fashion from the traditional ethnic wear to western outfits.
(d) Fashion world is responsible for lack of creativity among the youth.

DIRECTIONS (Qs. 65 - 66) : In each of the following questions, there are two words / set of letters / numbers to the left of the sign :: which are connected in some way. The same relationship obtains between the third words / set of letters / numbers and one of the four alternatives under it. Find the correct alternative in each question.

- 65.** Bank : River :: Coast : ?
(a) Flood (b) Waves
(c) Sea (d) Beach
- 66.** Thunder : Rain :: Night : ...
(a) Day (b) Dusk
(c) Darkness (d) Evening
- 67.** Certain letters are coded as : TODAY-457338 WROTE-10542. DATE-7342 and DIRTH-79046. What does the code number '5' stand for ?
(a) D (b) R
(c) O (d) T
- 68.** There is a family of 6 persons A, B, C, D, E and F. There are two married couples in the family. The family members are lawyer, teacher, salesman, engineer, accountant and doctor. D, the salesman is married to the lady teacher. The doctor is married to the lawyer. F, the accountant is the son of B and brother of E. C, the lawyer is the daughter-in-law of A. E is the unmarried engineer. A is the grandmother of F. How is E related to F?
(a) Brother
(b) Sister
(c) Father
(d) Cannot be established (cannot be determined)
- 69.** Kailash faces towards north. Turnings to his right, he walks 25 metres. He then turns to his left and walks 30 metres. Next, he moves 25 metres to his right. He then turns to the right again and walks 55 metres. Finally, he turns to the right and moves 40 metres. In which direction is he now from his starting point ?
(a) South-West (b) South
(c) North-West (d) South-East
- 70.** A clock is so placed that at 12 noon its minute hand points towards north-east. In which direction does its hour hand point at 1:30 pm ?
(a) North (b) South
(c) East (d) West

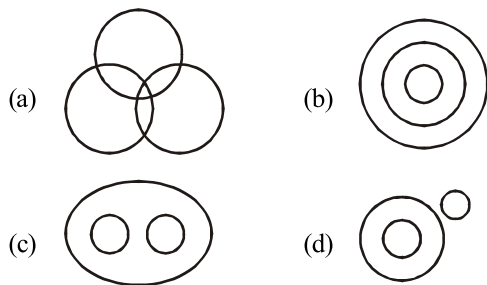


- (a) 127 (b) 142
(c) 158 (d) 198

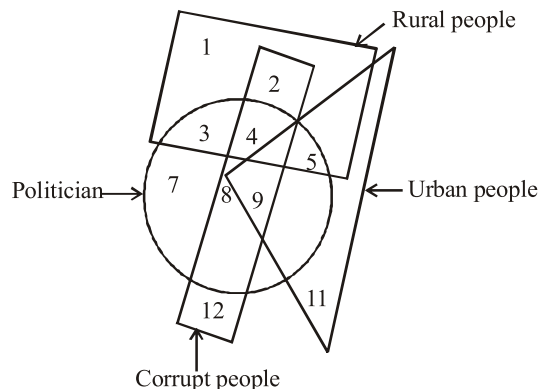
- (a) 49 (b) 50
(c) 60 (d) 69

73. How much does a watch lose per day, if its hands coincide every 64 minutes?
- (a) $32\frac{8}{11}$ min. (b) $36\frac{5}{11}$ min.
(c) 90min. (d) 96min.
74. An accurate clock shows 8 O'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 O'clock in the afternoon?
- (a) 144° (b) 150°
(c) 168° (d) 180°

DIRECTIONS (Qs. 75-76) : In each of these questions, three words are related in some way. The relationship among the words in question can best be represented by one of the five diagrams.



75. Cabinet, Home Minister, Minister.
76. In the following venn diagram, Identify the politicians from urban areas who are corrupt.



- (a) 4 (b) 8
(c) 9 (d) 10

DIRECTION (Q.77): In each of the questions below are given three statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

77. Statements:

- All birds are fruits.
Some fruits are towers.
All towers are windows.

Conclusions:

- I.** Some birds are towers.
II. Some windows are birds.
III. Some windows are fruits.
IV. Some towers are birds.

- (a) None follows (b) Only I and II follow
(c) Only II and III follow (d) Only III follows
78. If \times means $+$, $-$ means \times , \div means $+$ and $+$ means $-$ then $(3 - 15 \div 19) \times 8 + 6 = ?$
- (a) -1 (b) 2
(c) 4 (d) 8
79. At the end of a business conference the ten people present all shake hands with each other once. How many handshakes will there be altogether ?
- (a) 20 (b) 45
(c) 55 (d) 90
80. In a row of 40 children, R is 11th from right and there are 15 children between R and M. What is M's position from the left end of the row?
- (a) 14th (b) 15th
(c) 13th (d) Can't be determined
(e) None of these

GENERAL ENGLISH

DIRECTIONS (Qs. 81-86): Read the passage given below and answer the following questions based on it.

The Supreme Court has cut straight to the heart of the issue in the Aadhaar petitions. On behalf of all Indian citizens, it asks the current government to address the most basic questions in a democracy governed by the law: what are the privacy rights of its citizens; and are they protected equally, with the same justice for the rich and the poor alike?

In the 20th century, governments that recognised no private sphere of thought, expression, and action outside their reach and the ruling party's reach were called "totalitarian". Aware that such governments are **antithetical to** freedom, the world's democracies were willing to sacrifice tens of millions of their citizens' lives in the Second World War to defeat them militarily. The democratic constitutions that rose on the ashes of European totalitarianism explicitly recognised the integrity of a private sphere that governments may not invade, as the U.S. Constitution's Bill of Rights, as interpreted by its Supreme Court, has also done. The post-Independence Indian Constitution does this as well.

In the 21st century, a government that cannot or will not protect its citizens' privacy rights cannot credibly maintain a democratic regime of equal treatment under the rule of law. Freedom of opinion and association; freedom of religion (or irreligion); the ability to make choices and decisions autonomously in a society free of surrounding social pressure, including the right to vote – all of these depend on the preservation of the "private sphere."

Yet, the Government of India (GoI), speaking through its Attorney-General, has repeatedly declared that it is the government's position that Indian citizens have no constitutional right of privacy. Whether GoI is ultimately prepared to restate that position and risk a political loss before the Supreme Court remains to be seen.

The pressure on the government very much increased last week, when the Supreme Court refused simultaneous applications by multiple agencies demanding relief from the Supreme Court's **interim** order limiting the use of Aadhaar pending the Court's final decision. By referring these government applications to a constitutional bench whose composition has been announced last week, the court has assured Indians that a decision on their fundamental rights will not be long delayed. The Attorney-General argued that the poor, whose welfare is at stake in the continuance of subsidy payments and other benefits, must be prepared to surrender their right of privacy, if any, in order to continue receiving benefits. This argument was sharply rejected by the bench, which recognises that the poor have the same rights as the rich, ad interim as well as permanently, in any democratic society.

This is not, as GoI has been claiming, a conflict between the needs of the poor and "1 or 2 or 10 persons" who care about everyone's fundamental right to privacy. The government's most basic obligation is to protect its citizens' rights – both their right to sustenance and their right to the privacy that enables freedom – equally. The ultimate resolution of this present controversy must recognise both the need for Aadhaar – in order to provide efficient and honest government services to citizens – and the need for stringent rules concerning access to and security of citizens' biometric data, in order to preserve their privacy.

GoI cannot adopt the posture that only one aspect of government's protective responsibility matters - that the costs of privacy destruction can be imposed upon the poor in return for LPG subsidies, or any other social benefit on which they absolutely depend. The Supreme Court's action this week ensures that GoI must respond to both halves of the problem.

In particular, the Indian Supreme Court is likely to find itself asking GoI about what in Indian and U.S. law is called the "doctrine of unconstitutional conditions". Both Supreme Courts have held that the government cannot condition receipt of public benefits on waiver of fundamental rights. This is in sharp contradiction to the argument offered in the Supreme Court this week by the counsel for Centre for Civil Society, when he told the bench that "a person who has a right to privacy should be allowed to waive it for greater benefit."

We are about to begin one of the most important constitutional cases of India's post-Independence legal history. The good news is that the Supreme Court has shown it knows exactly

what's at stake. In any democracy, that's a necessary place to start.

81. Which of the following is closest in meaning to the opposite of the phrase **antithetical** to (line 4, para 2)?
(a) connected to (b) in contrast with
(c) adversaries of (d) adherents of
82. Which of the following is correct of 'totalitarian' governments, as per the passage?
(a) They are advocates of individual right to freedom.
(b) They safeguard people's rights at any cost.
(c) They are incompatible with private sphere of thought, expression and action.
(d) They are in consonance with private sphere of thought, expression and action.
83. What conflict of interest is GoI claiming with regard to privacy issue with Aadhaar?
(a) Conflict between the rich businessmen and salaried people.
(b) Conflict between the poor and the rich.
(c) Conflict between beneficiaries of government schemes and some proponents of fundamental right to privacy.
(d) Conflict between GoI and the citizens of India.
84. Which of the following word best replaces the word **interim** (line 4, para 5)?
(a) strict (b) mandatory
(c) conclusive (d) temporary
85. The 'doctrine of unconstitutional conditions' states that
(a) public benefits cannot be made subservient to fundamental rights
(b) fundamental rights can be withdrawn before dispensing government schemes
(c) fundamental rights are not as important as welfare schemes
(d) welfare schemes have to be implemented even at the cost of fundamental rights
86. What does 'relief from the court's interim order'(line 3, para 5) imply?
(a) That the limits on the use of Aadhaar be lifted
(b) That the court should not allow use of Aadhaar
(c) That applications be referred to a constitutional bench
(d) That the court's decision should not be kept pending

DIRECTIONS (Qs. 87-89): *Rearrange the following sentences in the proper sequence to make a meaningful paragraph.*

87. (A) If you are used to having your stimulation come in from outside, your mind never develops its own habits of thinking and reflecting
(B) Marx thought that religion was the opiate, because it soothed people's pain and suffering and prevented them from rising in rebellion
(C) If Karl Marx was alive today, he would say that television is the opiate of the people.
(D) Television and similar entertainments are even more of an opiate because of their addictive tendencies.
(a) BACD (b) ADBC
(c) BDCA (d) CBDA

88. (A) The government should meet that expectation, but not yet.
 (B) And that would be the right moment for the government to show its concern.
 (C) Pump prices would go up again.
 (D) As news of petroleum fuel retail prices hitting new highs every passing day hits the consumer, expectation builds up that the government would cushion the impact by paring the tax component in the final retail price.
 (E) Crude prices are likely to remain range-bound, but the rupee could see some depreciation, if the US Fed proceeds with rate increases or the Donald Trump administration triggers events that lead to a flight to safety of funds from emerging markets to the US.
- (a) ABCDE (b) DAECB
 (c) CAEBD (d) DAECB
89. (A) We even make sure to wash the car every so often.
 (B) It's pretty much a foregone conclusion that you'll brush your teeth tomorrow morning.
 (C) The same is true for showering, going to the bathroom, grooming your nails and facial hair.
 (D) You don't squander precious mental space evaluating whether or not brushing your teeth is worth the opportunity cost of let's say, another five minutes of sleep.
 (E) We clean our homes with a myriad of dust-sucking devices and chemical concoctions, or hire people to do so more thoroughly than we can.
- (a) BDCEA (b) DBECA
 (c) BDACE (d) BDCAE

DIRECTIONS (Qs. 90-91): Select the word that fits the question mark to express a relationship similar to the first pair.

90. Eccrinology : Secretions : : Selenography : ?
 (a) Sun (b) Moon
 (c) Crust (d) Mantle
91. Hilt : Sword : : Outwork : ?
 (a) Hippodrome (b) Field
 (c) Rink (d) Fortress

DIRECTIONS (Qs. 92-94): Choose the word opposite in meaning to the given word.

92. QUIESCENT
 (a) Active (b) Dormant
 (c) Weak (d) Unconcerned
93. CAPACIOUS
 (a) Caring (b) Limited
 (c) Foolish (d) Changeable
94. SACROSANCT
 (a) Irreligious (b) Unethical
 (c) Irreverent (d) Unholy

DIRECTIONS (Qs. 95-97): Choose the word most similar in meaning to the given word.

95. UNCOUTH
 (a) Ungraceful (b) Rough
 (c) Slovenly (d) Unkempt

96. DECREE
 (a) request (b) appeal
 (c) compel (d) command
97. RETRENCH
 (a) attach (b) curtail
 (c) diversify (d) multiply

DIRECTIONS (Qs. 98-100): Select the most appropriate set of words from the given choices to fill in the blanks.

98. Exhaustion of natural resources, destruction of individual initiative by governments, control over men's minds by central _____ of education and propaganda are some of the major evils which appear to be on the increase as a result of the impact of science upon minds suited by _____ to an earlier kind of world.
 (a) tenets; fixation
 (b) aspects; inhibitions
 (c) institutions; inhibitions
 (d) organs; tradition
99. Their achievement in the field of literature is described as _____; sometimes, it is even called _____.
 (a) magnificent, irresponsible
 (b) insignificant, influential
 (c) significant, paltry
 (d) unimportant, trivial
100. The Internet is a medium where users have nearly _____ choices and _____ constraints about where to go and what to do.
 (a) unbalanced, nonexistent
 (b) embarrassing, no
 (c) unlimited, minimal
 (d) choking, shocking

DIRECTIONS (Qs. 101-106): Read the passage given below and answer the following questions based on it.

About 200-300 million years ago, it is believed that all the land on earth was joined together as one big mass of land. This one single continent was called the Pangea (which means "all lands" in Greek) supercontinent. From Pangea, two smaller land masses began to split off, and these were Laurasia and Gondwana. Today's continents that were a part of Gondwana include Australia, Antarctica, South America, Africa, and the regions of the Arabian Peninsula and the Indian subcontinent which have now moved entirely into the Northern Hemisphere.

The breakup of Gondwana occurred in the early Jurassic period (about 184 million years ago) with massive eruptions of lava. The region of East Gondwana began to separate away. These were the land masses of Antarctica, Madagascar, India, and Australia, which separated from Africa. South America began to drift slowly west away from Africa as the South Atlantic Ocean formed, occurring about 130 million years ago during the Early Cretaceous.

There are many techniques that scientists use to determine that these lands were once joined. One way is through identifying the same or similar plants/land animals that exist in different continents. These give us some proof that the continents were

joined. Another method is to study rocks which when formed at any given time, freeze at the local magnetic field. The earth has a magnetic field with the North and South poles, and when rocks form as the continents drift apart, the distances from the magnetic poles can provide information.

Australia separated from Gondwana 100 million years ago, and initially remained warm and humid with rainforest vegetation. Inland Australia had systems of rivers and lakes with abundant wildlife. Fossil birds, platypus, frogs and snakes are present from this period.

Australia became an independent nation on 1 January 1901 when the British Parliament passed legislation allowing the six Australian colonies to govern in their own right as part of the Commonwealth of Australia. The Commonwealth of Australia was established as a constitutional monarchy. 'Constitutional' because the Commonwealth of Australia was established with a written constitution, and 'monarchy' because Australia's head of state was Queen Victoria. The Australian Constitution was written by representatives of the six colonies during a series of conventions in the 1890s, and accepted by a **referendum** in each colony.

Under the Constitution, the reigning British monarch is also the Australian monarch, and therefore Australia's head of state. The Constitution grants the monarch certain governing powers that place them above all other levels of the government. Because of the large distance between Australia and Britain, the monarch is permitted to appoint a Governor-General who can exercise the monarch's powers in their absence. The Constitution created a **federal** system of government where power was divided between the federal government and the governments of the six colonies, which were renamed 'states' by the Constitution.

101. Which one of the following statements is not true?
- (a) Rocks froze at the local magnetic field when continents drifted apart.
 - (b) While South America drifted west, breaking away from Africa, Australia drifted east.
 - (c) India was part of Laurasia which later broke away from Gondwanaland.
 - (d) Some species of Australian wildlife from the Jurassic period have survived to this day.
102. Which one of the following is true about the federation of Australia?
- (a) The constitution of Australia declares the British monarch as its Head of State.
 - (b) The constitution of Australia came into force only after all the six colonies passed it in a referendum.
 - (c) The British monarch is represented by a Governor in Australia.
 - (d) Power of governance resides with the states which are headed by the British monarch.
103. Choose the word which gives an appropriate meaning of **referendum** (last line, para 5)
- (a) election
 - (b) nomination
 - (c) plebiscite
 - (d) survey
104. According to the passage, the constitution of Australia does not state any of the following EXCEPT

- (a) The Commonwealth of Australia will have six states with their own governments.
- (b) The six states of Australia are to be directly governed by the monarch of Britain.
- (c) Queen Victoria will always be the Head of state.
- (d) The Governor-General of Australia will exercise the British monarch's power in their absence.

105. Which of the following would be an apt title of the passage?

- (a) The coming of age of Australia
- (b) The foundation of Australia
- (c) The genesis of Australia
- (d) The launch of Australia

106. Which of the following words is not at variance with the meaning of **federal** (line 8, para 6)

- (a) local
- (b) confederate
- (c) legislative
- (d) parliamentary

DIRECTIONS (Qs. 107-108) : Choose the alternative which will replace the underlined part of the sentence to make the sentence correct.

107. **It is highly desirable that you furnished evidence of your expenses** before you submit your final accounts.

- (a) It is highly desirable that you furnish evidence of your expenses.
- (b) It is highly desirable that you should furnish evidence of your expenses.
- (c) It is highly to be desired that you furnish evidences of your expenses.
- (d) You should have to supply evidence of your expenses.

108. All had betrayed him in his hour of need, **but there he was, full of hope** that the truth will prevail.

- (a) still, he was there, full of hope
- (b) although, he was there, full of hope
- (c) yet, there he was, full of hope
- (d) and there he was, full of hope

DIRECTIONS (Qs 109-112): Choose the correct phrase that will replace the phrase given in boldface in these sentences.

109. The two friends do not **match eye to eye** when it comes to their business rivalry.

- (a) meet eye to eye
- (b) see into each other's eyes
- (c) look into each other's eyes
- (d) see eye to eye

110. If he is expecting his colleague's cooperation in these sensitive matters, he is **raking up the wrong tree**.

- (a) climbing up the wrong tree
- (b) cutting down the wrong tree
- (c) planting the wrong tree
- (d) barking up the wrong tree

111. Leaders, across various fields, consolidate their positions putting their **gift of oration** to good use.

- (a) art of speech
- (b) art of the word
- (c) gift of the gab
- (d) gift of the gait

-
112. The company **joined the bandwagon** when it began to get isolated in the race to upgrade technology.
- (a) jumped on the bandwagon
 - (b) climbed the bandwagon
 - (c) joined the crowd
 - (d) boarded the bus

DIRECTIONS (Qs. 113-116): *In each of these sentences, a group of words has been given in boldface. Pick out the best option that will replace it to make the sentence meaningful.*

113. The sooner he comes to terms with it, **the best it will be** for him.
- (a) the better
 - (b) the best
 - (c) it will be best
 - (d) it will be good
114. You need not tutor him anymore; he **knows the ropes** now.
- (a) ties the ropes well
 - (b) can make the ropes himself
 - (c) knows how to make the ropes
 - (d) no correction required
115. Life has its share of problems; one should **take them on the face** rather than shying away from them.
- (a) take them on hand
 - (b) take them on the head
 - (c) take them on the chin
 - (d) take them on the heart
116. His manners have undergone **a huge change** since his association with his new partners.
- (a) a sea change
 - (b) a big change
 - (c) a vast change
 - (d) an oceanic change

DIRECTIONS (Qs. 117-118): *Each of these sentences is followed by four alternative sentences. Pick out the best option that will substitute it without altering the meaning.*

117. They initiated the process without delay.
- (a) They planned the project without wasting any time.
 - (b) The process was initiated by them without delay.
 - (c) They carried out the process without delay.
 - (d) They did the project without delay.
118. As soon as the doors were opened, a flurry of activity ensued.
- (a) As soon as they opened the doors, a flurry of activity ensued.
 - (b) When the doors were opened, it was followed by a flurry of activity.
 - (c) No sooner were the doors open, when a flurry of activity ensued.
 - (d) Hardly had the doors opened, than a flurry of activity ensued.

DIRECTIONS (Qs. 119-120): *For each of these sentences, choose the best option that completes it to make it meaningful.*

119. They ----- for such an outcome; it indeed ----- them by surprise.
- (a) had not bargained, took
 - (b) will not bargain, will take

- (c) have not bargained, takes
 - (d) had bargained, took
120. Selecting the head is a tough decision to make, -----, it ----- ends in a fiasco.
- (a) therefore, rarely
 - (b) nonetheless, usually
 - (c) yet, seldom
 - (d) surprisingly, always

GENERAL AWARENESS

121. The Supreme Court has recently asked to re-introduce the VVPAT in Electronic Voting Machines (EVMs) for 100% transparency in electronics. The VVPAT in EVM would ensure free and fair poll besides sorting out dispute. What does VVPAT stand for?
- (a) Voter's Verification through Paper and Audit Trail
 - (b) Vote Verifier Paper Audit Trail
 - (c) Voter's Verified Paper Audit Trail
 - (d) Voter's Validation and Proper Authentication Technology
122. What is the symbol of Jammu & Kashmir People's Democratic Party which was founded by Mufti Mohammed Sayeed?
- (a) Ink pot and pen
 - (b) Two leaves
 - (c) Kite
 - (d) Elephant
123. Who has been awarded as the Indian of the year award by Brands Academy in New Delhi this year?
- (a) Virat Kohli
 - (b) Shashi Tharoor
 - (c) Chetan Bhagat
 - (d) Preeti Shenoy
124. Which bank has announced to acquire mobile payment wallet provider FreeCharge from e-commerce company Snapdeal for Rs. 385 crore?
- (a) HDFC Bank
 - (b) Axis Bank
 - (c) Kotak Mahindra Bank
 - (d) Citi Bank
125. What is the nick-name of famous Indian Personalities 'Sayeed Bandhu'?
- (a) Father of Indian Sports
 - (b) King maker of Indian History
 - (c) Pride of Motherland
 - (d) Rising sun
126. 'Salvex' is a military exercise between which two countries?
- (a) China and india
 - (b) Japan and USA
 - (c) France and USA
 - (d) USA and India
127. With which company has Industrial Infrastructure Development Corporation launched a joint venture to set up an aluminium park at Angul, Odisha?
- (a) SAIL
 - (b) GAIL
 - (c) NALCO
 - (d) BHEL
128. Where is Padmaja Naidu Zoological Park located?
- (a) Chennai, Tamil Nadu
 - (b) Darjeeling, West Bengal
 - (c) Hyderabad, Andhra Pradesh
 - (d) Gir, Gujarat

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129. The 2017 G20 Summit was the 12th meeting of the Group of Twenty (G20), which was held on 7th and 8th July, in Hamburg, Germany. What was the theme of this Summit?
- (a) Shaping and Inter-connected World
(b) Towards a Better World
(c) Mutual Cooperation for Growth and Development
(d) Hand-in-Hand for a Better Future
130. Where is 'Regional Museum of Natural History' located?
- (a) New Delhi (b) Lucknow
(c) Mysuru (d) Gwalior
131. At which place has President Pranab Muherjee launched the digital initiatives Swayam, Swayam Prabha, National Academic Depository and National Digital Library to push e-education in the country?
- (a) New Delhi (b) Mumbai
(c) Bangaluru (d) Lucknow
132. Which Indian state has introduced boat ambulance service in its four districts where people face difficulties in getting health service?
- (a) Uttar Pradesh (b) Bihar
(c) Odisha (d) Uttarakhand
133. What is the capital of Nigeria?
- (a) Abuja (b) Tirana
(c) Baku (d) Monaco
134. Who was the last king of Satavahana dynasty?
- (a) Samudragupta (b) Vikramaditya Maurya
(c) Yajna Sri Satakarni (d) Simuka
135. Who was the winner in Men's Single in the Miami Open 2017 held in Florida, USA?
- (a) Rafael Nadal (b) Lukasz Kubot
(c) Roger Federer (d) Andy Murray
136. Google has recently launched a new food delivery and home service App which allows users to order food or schedule appointments with a local beautician, plumber, cleaner and painter etc. What is the name of this App?
- (a) Areo (b) G-Service
(c) Swiggy (d) Easy
137. In which year did the government of India decide to make the Peacock as the national bird of India?
- (a) 15th August, 1947 (b) 26th January, 1950
(c) 1st February, 1963 (d) 15th August, 1965
138. Which cricket legend has authored the book 'Straight from the Heart'?
- (a) Sachin Tendulkar (b) Kapil Dev
(c) Sunil Gavaskar (d) Rickey Ponting
139. Which two companies have agreed to merge to form India's largest telecom company?
- (a) Vodafone and Aircel
(b) Vodafone and Idea
(c) Airtel and Idea
(d) Reliance and Idea
140. Where is the National Atmospheric Research Laboratory located?
- (a) New Delhi (b) Karnataka
(c) Madhya Pradesh (d) Andhra Pradesh
141. Which of the following dignitaries was the Chief Guest of the official ceremony in the Republic Day held this year?
- (a) President of France
(b) King of Saudi Arabia
(c) King of Qatar
(d) Crown Prince of Abu Dhabi
142. Rangaswami cup is related to which sports?
- (a) Badminton (b) Chess
(c) Wrestling (d) Hockey
143. Durand line divides _____ and _____.
- (a) India, Pakistan
(b) China, India
(c) Pakistan, Afghanistan
(d) China, Tibet
144. Which Indian-American is appointed as the US Ambassador to the United Nations?
- (a) Bobby Jindal (b) Nikki Haley
(c) Kumar P Barve (d) Kamala Harris
145. The Rail Minister has launched an integrated mobile application SAARTHI to cater to various passenger requirements, including ticket booking, inquiry, on-board cleaning and ordering meal on a single platform. What does 'I' in SAARTHI stand for?
- (a) India (b) Information
(c) Initiative (d) Interface
146. What is the Classical Dance form of Gujarat?
- (a) Chhau (b) Garba
(c) Kathak (d) Kathakali
147. The bull-taming sports 'Jallikattu' is typically practiced in the Indian state of _____.
- (a) Kerala (b) Tamil Nadu
(c) Andhra Pradesh (d) Karnataka
148. World Earth Day which is annually observed worldwide wherein various events are held to demonstrate support for environmental protection is celebrated on _____.
- (a) 22nd April (b) 11th May
(c) 3rd June (d) 17th July
149. Which football superstar has been named as the World's Best Player for 2016 by FIFA?
- (a) Lionel Messi (b) Neymar
(c) Cristiano Ronaldo (d) Luis Suarez
150. Which mobile telecom company has launched the Asia-Africa-Europe (AAE-1) submarine cable system which is the longest 100Gbps technology based submarine system stretching over 25, 000 Km from Marseille, France to Hong Kong with 21 cable landing across Asia and Europe?
- (a) Vodafone (b) AT&T
(c) Airtel (d) Reliance Jio Infocomm

ANSWERS WITH EXPLANATIONS

1. (b) Let the common remainder be x . Then numbers $(34041 - x)$ and $(32506 - x)$ would be completely divisible by n .
Hence the difference of the numbers $(34041 - x)$ and $(32506 - x)$ will also be divisible by n
or $(34041 - x - 32506 + x) = 1535$ will also be divisible by n .
Now, using options we find that 1535 is divisible by 307.
2. (b) $7! + 8! + 9! + 10! + \dots + 100! = 7.6! + 8.7.6! + 9.8.7.6! + \dots + 100!$ is completely divisible by 7 as each of the terms contain at least one 7 in it.
Now, $1! + 2! + 3! + 4! + 5! + 6!$
 $= 1 + 2 + 6 + 24 + 120 + 720 = 873$
which leaves a remainder of 5 when divided by 7.
3. (d) When 'n' is odd then $R = 0$, for this identity
$$\frac{67^{67} + 67}{67 + 1} = \frac{67^{67} + 1 + 66}{67 + 1}$$
$$= \frac{67^{67} + 1^{67}}{67 + 1} + \frac{66}{67 + 1}$$

$\therefore \frac{a^n + b^n}{a + b} \rightarrow R = 0$

 $R = 66$
4. (b) $1(1!) = (2 - 1)! = 2! - 1!$
 $2(2!) = (3 - 1)2! = 3! - 2!$
 $3(3!) = (4 - 1)3! = 4! - 3!$
 $20(20!) = (21 - 1)20! = 21! - 20!$
Hence sum = $21! - 1$
5. (a) 6^n (where n is a natural number) will always leaves the remainder 6 when divide by 10.

Sol. (6-10) :

	C.P.	S.P.	M.P.	Profit	Discount
T.V.	$36000 \times \frac{100}{120} = 30000$	36000	$24000 \times \frac{100}{40} = 60000$	6000	24000
A.C.	$50000 \times \frac{100}{120} = \frac{125000}{3}$	$30000 \times \frac{100}{60} = 50000$	$50000 \times \frac{100}{80} = 62500$	$\frac{25000}{3}$	12500
COOLER	$15000 \times \frac{100}{110} = \frac{150000}{11}$	$30000 \times \frac{50}{100} = 15000$	$15000 \times \frac{100}{80} = 18750$	$\frac{15000}{11}$	3750
LAPTOP	$75000 \times \frac{100}{120} = 62500$	$50000 \times \frac{150}{100} = 75000$	$75000 \times \frac{100}{70} = \frac{750000}{7}$	12500	$\frac{225000}{7}$
MOBILE	$31250 \times \frac{100}{150} = \frac{62500}{3}$	$\frac{62500}{2} = 31250$	$31250 \times \frac{100}{75} = \frac{125000}{3}$	$\frac{31250}{3}$	$\frac{31250}{3}$

6. (b) $X = \left(\frac{125000}{3} + \frac{62500}{3} \right) \div 2 = 31250$
 $Y = 62500$
Hence, $X < Y$
7. (b) $X = \frac{6000 + \frac{25000}{3} + \frac{15000}{11} + 12500 + \frac{31250}{3}}{5}$
 $= \frac{38613.6}{5}$
 $y = \frac{24000 + 12500 + 3750 + \frac{22500}{7} + \frac{31250}{3}}{5}$
 $= \frac{82809.5}{5}$
Hence, $X < Y$
8. (b) $X = \frac{150000}{11}$
 $Y = \frac{225000}{7}$
Hence, $X < Y$
9. (c) $X = \frac{31250}{3}$
 $Y = \frac{31250}{3}$
Hence, $X = Y$
10. (a) $X = \frac{750000}{7}$
 $Y = 62500$
Hence, $X > Y$
11. (e) Combining data of both the statements the speed of the train can be determined.

12. (c) From -(I)
Weight of B = $(300 \times 7) / 20 = 105$
From -(II)
Weight of B = $(45 \times 7) / 3 = 105$
13. (c) From -(I)
Amount of profit = 20% of 2400 = 480
From -(II)
SP - CP = 480 = Amount of profit
14. (d) Cost of fencing per square meter is not given. So, even combined both the statements together, total cost of fencing can't be determined.

15. (b) From II alone,
Let the sum be P

$$\Rightarrow \left[p \left(1 + \frac{10}{100} \right)^4 - p \right] - \frac{p \times 10 \times 4}{100} = 1282$$

$$\Rightarrow p = 2000$$

16. (c) Given equation is $\log x - 5 \log 3 = -2$
or, $\log x = 5 \log 3 - 2$
or, $\log x = \log (3)^5 - \log 100$
or, $\log x = \log 243 - \log 100$
or, $\log x = \log 243/100$
or, $\log x = \log 2.43$
 $\Rightarrow x = 2.43$

17. (a) Since $\log 2 = 0.3$ hence $\log 20 = 1.3$

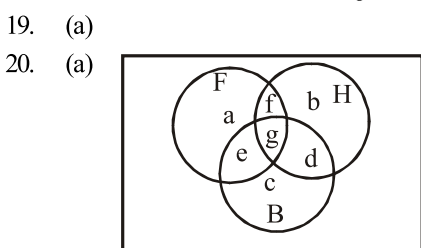
$$\log_{20} 100 + \log_{20} 1000 + \log_{20} 10000$$

$$= [(\log 100)/(\log 20) + (\log 1000)/(\log 20) + (\log 10000)/(\log 20)]$$

$$= (2 + 3 + 4) / 1.3 = 90/13$$

18. (a) For the divisibility of 8, the last three digits of the number should be divisible by 8.
1234 (41 digits)
1 - 9 \rightarrow 9 digits

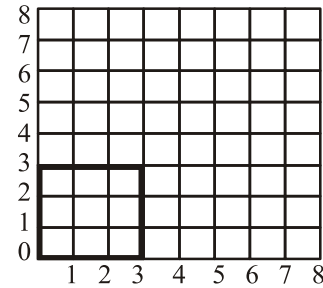
$$10 - 25 \rightarrow \frac{16 \times 2 \text{ 32 digits}}{\text{Total} \Rightarrow 32 + 9 = 41 \text{ digits}}$$
 Last '3' digits are 425.
 Hence, remainder = $\frac{425}{8} = 1$.



$a + e + f + g = 285, \quad b + d + f + g = 195$
 $c + d + e + g = 115, \quad e + g = 45, \quad f + g = 70,$
 $d + g = 50$
 $a + b + c + d + e + f + g = 500 - 50 = 450$
 As in previous question, we obtain
 $a + f = 240, \quad b + d = 125, \quad c + e = 65$
 $a + e = 215, \quad b + f = 145; \quad b + c + d = 165$

$a + c + e = 255; \quad a + b + f = 335$
 On solving we get, On $b = 95, c = 40, a = 190, d = 30, e = 25, f = 50$ and $g = 20$
 Desired quantity = $a + b + c = 325$

21. (b) We can choose 9 squares out of 64 squares in ${}^{64}C_9$ ways.
Hence, exhaustive number of cases = ${}^{64}C_9$
From the figure it is clear that the given square of size 3×3



can be formed by using four consecutive horizontal and 4 consecutive vertical lines, which can be done in ${}^6C_1 \times {}^6C_1 = 36$ ways
Basically you can make 6 squares of size 3×3 in vertical direction and 6 squares of the size 3×3 in horizontal direction, Hence total $6 \times 6 = 36$ squares can be chosen.

\therefore The required probability = $\frac{36}{{}^{64}C_9}$

22. (d) To construct 2 roads, three towns can be selected out of 4 in $4 \times 3 \times 2 = 24$ ways.
Now if the third road goes from the third town to the first town, a triangle is formed, and if it goes to the fourth town, a triangle is not formed. So, there are 24 ways to form a triangle and 24 ways of avoiding a triangle.

23. (c) Let α be a common root of the two given equation, then
 $\alpha^2 - 3a\alpha + 35 = 0$ and $\alpha^2 - a\alpha - 21 = 0$
 On subtracting we get $-2a\alpha + 56 = 0$
 or $\alpha = \frac{28}{a}$
 as α is a root of $x^2 - ax - 21 = 0$
 $\therefore \left(\frac{28}{a} \right)^2 - a \left(\frac{28}{a} \right) - 21 = 0$
 or $a^2 = 4^2$ or $a = \pm 4$

24. (a) Since a and b are unequal, $\frac{a^2 + b^2}{2} > \sqrt{a^2 b^2}$
 (A.M. > G.M. for unequal numbers)
 $\Rightarrow a^2 + b^2 > 2ab$
 Similarly $b^2 + c^2 > 2bc$ and $c^2 + a^2 > 2ca$
 Hence $2(a^2 + b^2 + c^2) > 2(ab + bc + ca)$
 $\Rightarrow ab + bc + ca < 1$

25. (c)
- | | Men | Women | Children |
|--------------|---------|---------|----------|
| Work Numbers | 3
20 | 2
30 | 1
36 |
- Ratio of wages = $(3 \times 20) : (2 \times 30) : (1 \times 36) = 5 : 5 : 3$

$$\text{Total wages of men} = \frac{5}{13} \times 780 = ₹300$$

$$\therefore \text{Wages of a man} = ₹15$$

$$\text{Similarly, wages of woman} = ₹10$$

$$\text{and wages of child} = ₹5$$

Total wages of 15 men, 21 women and 30 children

$$= 15 \times 15 + 21 \times 10 + 30 \times 5 = 585$$

$$\text{Total wages for 2 weeks} = ₹1170$$

26. (a) Let x , y and z be the amounts invested in schemes A, B and C respectively. Then,

$$\left(\frac{x \times 10 \times 1}{100}\right) + \left(\frac{y \times 12 \times 1}{100}\right) + \left(\frac{z \times 15 \times 1}{100}\right) = 3200$$

$$\Rightarrow 10x + 12y + 15z = 320000 \quad \dots (i)$$

$$\text{Now, } z = 240\% \text{ of } y = \frac{12}{5}y \quad \dots (ii)$$

$$\text{And, } z = 150\% \text{ of } x = \frac{3}{2}x$$

$$\Rightarrow x = \frac{2}{3}z = \left(\frac{2}{3} \times \frac{12}{5}\right)y = \frac{8}{5}y \quad \dots (iii)$$

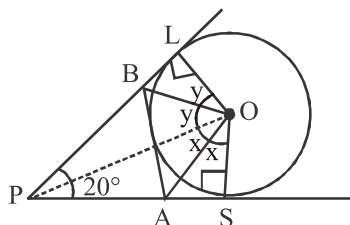
From (i), (ii) and (iii), we have:

$$16y + 12y + 36y = 320000 \Rightarrow 64y = 320000 \Rightarrow y = 5000.$$

\therefore Sum invested in Scheme B = ₹5000.

27. (a) Let SP of 1 kg article = ₹100
For 1st shopkeeper
SP of 1 kg article = ₹75
For 2nd shopkeeper
SP of 1.25 kg article = ₹100
SP of 1 kg article = ₹80

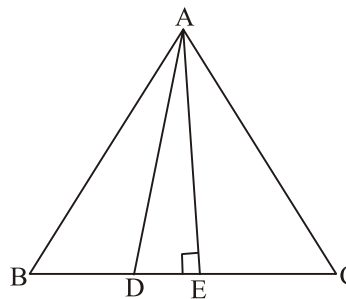
28. (c)
29. (d) We redraw the figure, In ΔOPS , $\angle POS = 70^\circ$
and In ΔPOL , $\angle POL = 70^\circ$



$$\text{From figure } 2x + 2y = 140^\circ$$

$$\angle BOA = x + y = 70^\circ$$

30. (c)



Here $AB = AC = BC = 12$ cm.

Let $AE \perp BC$, then $BE = 6$ cm,

$$AE = \sqrt{(AB)^2 - (BE)^2}$$

$$= \sqrt{144 - 36}$$

$$= \sqrt{108}$$

$BD = 4$ cm, $DE = 6 - 4 = 2$ cm.

$$AD = \sqrt{(AE)^2 + (DE)^2}$$

$$= \sqrt{(\sqrt{108})^2 + (2)^2}$$

$$= \sqrt{108 + 4} = \sqrt{112} = 4\sqrt{7} \text{ cm}$$

31. (a) $AD = 24$, $BC = 12$

In ΔBCE & ΔADE

since $\angle CBA = \angle CDA$ (Angles by same arc)

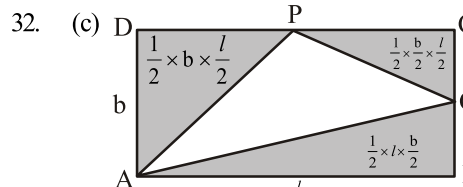
$\angle BCE = \angle DAE$ (Angles by same arc)

$\angle BEC = \angle DEA$ (Opp. angles)

$\therefore \Delta BCE$ & ΔADE are similar Δ s

with sides in the ratio $1 : 2$

Ratio of area = $1 : 4$ (i.e. square of sides)



$$\text{Shaded area} = \frac{lb}{4} + \frac{lb}{4} + \frac{lb}{8} = \frac{5lb}{8}$$

$$\text{Unshaded portion} = lb - \frac{5lb}{8} = \frac{3lb}{8}$$

$$\text{Required ratio} = \frac{5lb}{8} : \frac{3lb}{8} = 5 : 3$$

33. (a) $2 \sin \alpha + 15 \cos^2 \alpha = 7$

$$\Rightarrow 2 \sin \alpha + 15(1 - \sin^2 \alpha) = 7$$

$$\Rightarrow 2 \sin \alpha + 15 - 15 \sin^2 \alpha = 7$$

$$\Rightarrow 15 \sin^2 \alpha - 2 \sin \alpha - 8 = 0$$

$$\Rightarrow (3 \sin \alpha + 2)(5 \sin \alpha - 4) = 0$$

$$\sin \alpha = -2/3 \text{ or } 5 \sin \alpha - 4 = 0$$

$$\sin \alpha = \frac{4}{5}$$

Since, α lies between $0^\circ - 90^\circ$. So, $\sin \alpha$ is positive.

$$\sin \alpha = \frac{4}{5} = \frac{\text{Perpendicular}}{\text{Hypotenuse}}$$

$$\text{Base} = \sqrt{(5)^2 - (4)^2} = 3$$

$$\therefore \cot \alpha = \frac{\text{Base}}{\text{Perpendicular}} = \frac{3}{4}$$

34. (c) In the given equation,
 $1 + \sin^2 A = 3 \sin A \cos A$
 Dividing both sides by $\cos^2 A$,

$$\text{We get } \frac{1}{\cos^2 A} + \frac{\sin^2 A}{\cos^2 A} = 3 \cdot \frac{\sin A}{\cos A}$$

$$\Rightarrow \sec^2 A + \tan^2 A = 3 \tan A$$

$$\Rightarrow 1 + \tan^2 A + \tan^2 A = 3 \tan A$$

$$\Rightarrow 2 \tan^2 A - 3 \tan A + 1 = 0$$

$$\Rightarrow 2 \tan^2 A - 2 \tan A - \tan A + 1 = 0$$

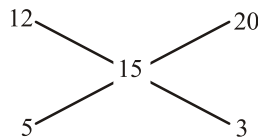
$$\Rightarrow 2 \tan A (\tan A - 1) - 1(\tan A - 1) = 0$$

$$\Rightarrow (2 \tan A - 1)(\tan A - 1) = 0$$

$$\Rightarrow \tan A = \frac{1}{2}, 1$$

35. (c) The average speed of Avinash

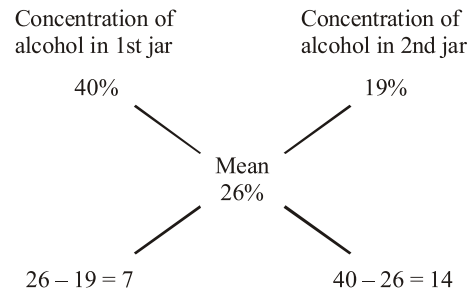
$$= \frac{150}{10} = 15 \text{ km/hr}$$



It means the rickshaw took $5/8$ and car took $3/8$ of the total time i.e., the ratio of time taken by rickshaw to car is $5 : 3$

So the ratio of distances covered by rickshaw to car is $5 \times 12 : 3 \times 20 \Rightarrow 1 : 1$

36. (d) Concentration of alcohol in 1st jar = 40%
 Concentration of alcohol in 2nd jar = 19%
 After the mixing, concentration of alcohol in the mixture = 26%
 By rule of alligation,



Hence ratio of 1st and 2nd quantities = $7 : 14 = 1 : 2$
 i.e., $2/(1+2) = 2/3$ part of the whisky is replaced.

37. (b) Percentage of uncertain individuals
 $= [100 - (20 + 60)] \% = 20\%$
 $\therefore 60\% \text{ of } x - 20\% \text{ of } x = 720 \Leftrightarrow 40\% \text{ of } x = 720$

$$\Leftrightarrow \frac{40}{100} x = 720 \Leftrightarrow x = \left(\frac{720 \times 100}{40} \right)$$

$$= 1800.$$

38. (a) Number of members in the team = 11
 Let the average age of the team = x
 $\Rightarrow (\text{Sum of the ages of all the 11 members of the team}) / (11) = x$
 $\Rightarrow \text{Sum of the ages of all the 11 members of the team} = 11x$
 Age of the captain = 26
 Age of the wicket keeper = $26 + 3 = 29$
 Sum of the ages of 9 members of the team excluding captain and wicket keeper
 $= 11x - 26 - 29 = 11x - 55$
 Average age of 9 members of the team excluding captain and wicket keeper
 $= (11x - 55) / 9$
 Given that $(11x - 55) / 9 = (x - 1)$
 $\Rightarrow 11x - 55 = 9(x - 1) \Rightarrow x = 46 / 2 = 23 \text{ years}$

39. (d) Here, Dividend, $p(x) = x^3 - 3x^2 + x + 2$
 Divisor = $g(x)$, Quotient = $(x - 2)$ and Remainder = $(-2x + 4)$
 Since, $(\text{Quotient} \times \text{Divisor}) + \text{Remainder} = \text{Dividend}$

$$\therefore [(x - 2) \times g(x)] + [(-2x + 4)] = x^3 - 3x^2 + x + 2$$

$$\Rightarrow (x - 2) \times g(x) = x^3 - 3x^2 + x + 2 - (-2x + 4)$$

$$= x^3 - 3x^2 + x + 2 + 2x - 4$$

$$= x^3 - 3x^2 + 3x - 2$$

$$\therefore g(x) = \frac{x^3 - 3x^2 + 3x - 2}{x - 2}$$

Now, dividing $x^3 - 3x^2 + 3x - 2$ by $x - 2$, we have

$$\begin{array}{r}
 x^2 - x + 1 \\
 x - 2 \overline{) x^3 - 3x^2 + 3x - 2} \\
 \underline{x^3 - 2x^2} \\
 -x^2 + 3x - 2 \\
 \underline{-x^2 + 2x} \\
 x - 2 \\
 \underline{x - 2} \\
 0
 \end{array}$$

$$\therefore g(x) = \frac{x^3 - 3x^2 + 3x - 2}{x - 2} = x^2 - x + 1$$

40. (d) Let A, B, C and D pay ₹ x, ₹ y, ₹ z and ₹ a.
According to the question,

$$x = \frac{1}{2}(y + z + a) \quad \dots(i)$$

$$y = \frac{1}{3}(x + z + a) \quad \dots(ii)$$

$$z = \frac{1}{4}(x + y + a) \quad \dots(iii)$$

Also, $x + y + z + a = 60$

Now, put the value of $x + y + a = 4z$

Then, $4z + z = 60 \Rightarrow 5z = 60 \Rightarrow z = 12$

Similarly, on putting the value of $x + z + a = 3y$, we get

$$3y + y = 60 \Rightarrow 4y = 60 \Rightarrow y = 15$$

Again, on putting the value of

$y + z + a = 2x$, we get

$$2x + x = 60 \Rightarrow 3x = 60 \Rightarrow x = 20$$

Now, $x + y + z + a = 60$

On putting the value of x, y and z, we get

$$12 + 15 + 20 + a = 60 \Rightarrow a = ₹ 13$$

41. (d) Selected letters of the given word are R, H, A and E. By using each letter only once we can make the following words:

1. HEAR 2. HARE

This is more than one.

Sol. (42-43):

2- U, 4 - A, 6 - I, 8 - C, 10 - P, 12 - D, 14 - T, 16 - E, 18 - N
20 - R, 22 - -, 24 - S

42. (d) Here, 6, 12, 14, 20 - I, D, T, R Word formed is DIRT.
So second letter - I

43. (c) Here, 10 is P.
So, 3 letters between 10 and 22. $P + 3 = T$, but T is already written. We cannot repeat any letter. So P - 3

= L So against 22 is L Now 18 is N. 22 is L. So between them is only 1 letter in English alphabetical series i.e. M

Sol. (44-46):

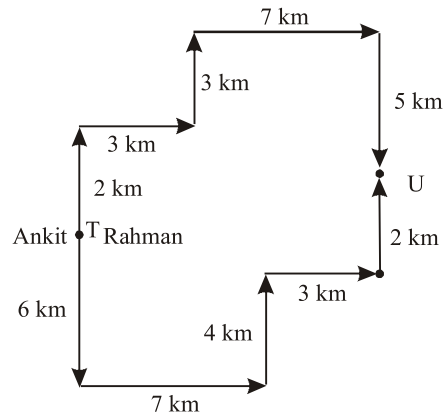
The logic for all the above code is: The last letter of the code is same as the last letter of the word. And rest three letter in code which contains two numeric value and one symbolic value can be anything.

44. (c) 45%B, 34&E

45. (c) 98@T

46. (b) 36%E, 45@K, 76*Y

Sol. (47-48)



47. (c) Ankit walks total distance = $2 + 3 + 3 + 7 + 5 = 20$ km
Rahman walks total distance = $6 + 7 + 4 + 3 + 2 = 22$ km
Ratio of distance covered by them = 10 : 11
Since time is the same
Ratio of speed is = 10 : 11

48. (c) 10 km west

Sol. (49-52) : From (ii) :

P	T
Q	Q
T	P
P	U
S	S
U	P

From the last sentence of (ii), only one possibility remains:

R
T
Q
P
S
U

Now, using (iii) and the above derived result:

R	C
T	E/B
Q	A
P	F
S	B/E
U	D

49. (a) 50. (d) 51. (c) 52. (b)

Sol. (53-57):

Day	Animals	Forest	Country
Monday	Cheetah	Black Forest	China
Tuesday	Tiger/Panda	Rata Forest /Otzarreta Forest	America
Wednesday	Lion	Goblin Forest	Africa
Thursday	Elephant	Crooked Forest	Spain
Friday	Tiger/Panda	Rata Forest /Otzarreta Forest	India
Saturday	Horse	Hallerbos Forest	Germany
Sunday	Fox	Tsingy Forest	France

53. (d) 54. (d) 55. (c) 56. (d) 57. (d)

Sol. (58-62): An intuitive look at the input and the steps makes it clear that it is a case of arrangement. The input is a combination of words and numbers. Words get arranged according to reverse order of alphabetical arrangement whereas numbers get arranged in ascending order.

In step I, 'over' occupies the first place from the left end and the other elements are pushed one place rightward.

Similarly, in step II, '26' occupies the second place from the left end and the other elements are pushed one place rightward.

Thus, alternate arranging of words and numbers finally gives the last step in which the odd places from the left are occupied by words and the even places are occupied by numbers.

58. (d) Since it is a case of arrangement, therefore previous steps or input can't be determined with certainty.

59. (b) **Step III:** take 17 mind game 29 73 18 loud

Step IV: take 17 mind 18 game 29 73 loud

Step V: take 17 mind 18 loud game 29 73

Step VI: take 17 mind 18 loud 29 game 73

Hence, step VI is the last step. Therefore, three more steps are required to complete the sequence.

60. (d) **Input:** by now 51 32 for 91 20 me

Step I: now by 51 32 for 91 20 me

Step II: now 20 by 51 32 for 91 me

Step III: now 20 me by 51 32 for 91

Step IV: now 20 me 32 by 51 for 91

Step V: now 20 me 32 for by 51 91

Step VI: now 20 me 32 for 51 by 91

Hence, step VI is the last step for the given input.

61. (b) **Input:** fight for all 39 62 25 today 19

Step I: today fight for all 39 62 25 19

Step II: today 19 fight for all 39 62 25

Step III: today 19 for fight all 39 62 25

Step IV: today 19 for 25 fight all 39 62

62. (d) **Input:** queen mary 79 62 17 20 green west

Step I: west queen mary 79 62 17 20 green

Step II: west 17 queen mary 79 62 20 green

Step III: west 17 queen 20 mary 79 62 green

Step IV: west 17 queen 20 mary 62 79 green

Step V: west 17 queen 20 mary 62 green 79

Hence, step V is the last step. Therefore, the penultimate step (last but one) is step IV.

63. (c) 3 goes in the opposite direction: it talks about the utility of fashion whereas the author does not talk of fashion approvingly.

64. (b) Read the last sentence of the paragraph.

65. (c) Bank is the land beside a river.

Similarly, coast is the land beside a sea.

66. (c) As 'Rain' is followed by 'Thunder', similarly 'Darkness' is followed by 'Night'.

67. (c) The manner of coding is

TODAY WROTE DATE DIRTH

45738 10542 7342 79046

The number '5' is common in words TODAY and WROTE, and so is the letter 'O'. Letter 'T' cannot be the answer because it is common in all the four words and so is its number code '4'.

68. (d) '□' → Male, 'O' → Female

'T' → offspring, '=' → couple

'↔' → Sibling

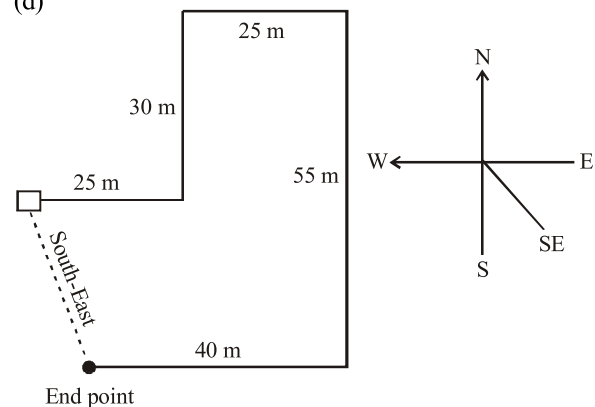
Salesman $\boxed{D} = \boxed{A}$ Lady

Doctor $\boxed{B} = \boxed{C}$ Lawyer

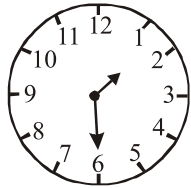
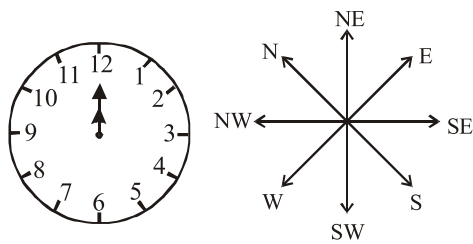
Accountant $\boxed{F} = \leftrightarrow E$ engineer

As, sex of E is not clear, so E can be brother or sister of F. Hence, relation between E and F can't be established.

69. (d)



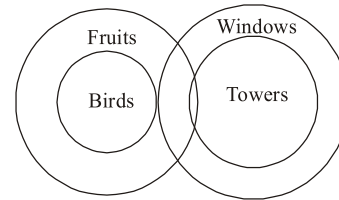
70. (c) The positions of the minute and hour hands at 12 noon and 1:30 p.m. are as shown in the diagram. Comparing with direction figure, we see that the hour hand at 1:30 p.m. points towards the East.



71. (b) In fig. (A),
 $(101 + 15) - (35 + 43) = 116 - 78 = 38$.
 In fig. (B), Missing number
 $= (48 + 184) - (56 + 34) = 232 - 90 = 142$.
72. (d) The sum of numbers at the extremities of the three line segments in each figure is same.
 In fig. (A), $39 + 33 = 29 + 43 = 27 + 45 = 72$
 In fig. (B), $42 + 31 = 29 + 44 = 30 + 43 = 73$
 Let the missing number in fig. (C) be x .
 Then, $x + 10 = 59 + 20 = 40 + 39 = 79$
 or $x = 69$.
73. (a) 55 min spaces are covered in 60 min
 60 min spaces are covered in $\left(\frac{60}{55} \times 60\right)$ min
 $= 65\frac{5}{11}$ min
 Loss in 64 min $= \left(65\frac{5}{11} - 64\right) = \frac{16}{11}$ min.
 Loss in 24 hrs $= \left(\frac{16}{11} \times \frac{1}{64} \times 24 \times 60\right)$ min $= 32\frac{8}{11}$ min.
74. (d) Angle traced by the hour hand in 6 hours
 $= \left(\frac{360}{12} \times 6\right)^\circ = 180^\circ$
75. (b) Home minister is a minister, minister is part of cabinet.
76. (c) Required area common to \triangle , \circ , \square .
77. (d) Some fruits are towers (I) + All towers are windows (A) \Rightarrow Some fruits are windows (I) ($\because I + A = I$). Now, conversion of "Some fruits are windows" gives conclusion III.

OR

Venn-Diagram Representation:



Conclusions:

- I. False
 II. False
 III. True
 IV. False
78. (b) Using the correct symbols, we have
 Given expression $= (3 \times 15 + 19) \div 8 - 6$
 $= 64 \div 8 - 6 = 8 - 6 = 2$.
79. (b) Clearly, total number of handshakes $= (9 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1) = 45$.
80. (a)
81. (d) 'Antithetical to' means 'opposed to'. Option d, i.e. 'adherents of' means 'supporters or followers of' which is the opposite of it.
 Options (b) and (c) are synonymous in meaning. Option a is remotely similar.
82. (c) The passage states that totalitarian governments 'recognize no private sphere'. The words, 'advocates of', 'safeguards', and 'in consonance with' make options a, b and c, respectively, contradictory.
83. (c) The line 'This is not , as GoI has been claiming, a conflict....privacy' establishes that option c is the correct one.
84. (d) The term, 'interim' means 'for the time being', i.e. ,temporary, which is given in option d.
85. (a) Options b, c and d are contradictory to what is stated about the 'doctrine of unconstitutional conditions' in para 9, i.e., the government cannot condition receipt of public benefits on waiver of fundamental rights'.
86. (a) Line 3 in para 5 clearly states that the interim order was of 'limiting the use of Aadhar pending the court's final decision'. Relief from this would mean that these limits would be lifted.
87. (d) 'Opiate' is a narcotic substance that has mood-altering effects. The passage discusses what works as the opiate of the people and why. Statement A sounds conclusive as an explanation of why people need an opiate. So, it must come last. Now, statement C mentions the full name 'Karl Marx'; so, it must be introductory and come before statement B which mentions 'Marx' only. So, the link is C-B.
 Now, 'Marx thought religion was the opiate'(B) but television, etc. are 'even more of an opiate'(D). therefore the sequence is CBDA.

88. (b) The pronoun 'that' in A and B, adverb 'again' (C) and the specifics 'Crude prices' and 'the rupee'(E) hint that none of these can be the introductory sentence. Link D-A is established by the word 'expectation' which first 'builds up' (D) and only then 'the government should meet that' (A). (E) follows after 'not yet'(A) because it answers 'then when'. 'And that would be the right moment'(B) follows after (C) which states what this 'that' refers to. So, the sequence is D-A-E-C-B.
89. (a) The passage discusses how we routinely go about the cleaning and upkeep of ourselves, our homes and other possessions, without sparing any thought about evaluating the worth of the exercise. The words 'even' (A) and 'same' (C) rule them out as opening ones; while (E) is ruled out for its elaboration of how we get our homes cleaned. B states the foregone conclusion that 'you'll brush your teeth tomorrow morning' and is followed by D that takes the topic further. Link B-D is thus established. 'The same is true...' brings C next on board. Elaborate cleaning details in (E) bring it on next as 'We even make sure...' confirms (A) is the concluding sentence. So, the sequence is B-D-C-E-A.
90. (b) The first word is the term referring to the study of the second word. Eccrinology pertains to the study of secretions and secretory organs while selenography pertains to the study of Moon and its features.
91. (d) The first word is the 'front part' of the first word. 'Hilt' is the handle of a sword while 'outwork' is the front portion of fortified defence structure. All of the other three are enclosed area or arena for sports. Hippodrome is a horse-racing stadium, field is for playing football, cricket, etc., and rink is for skating.
92. (a) 'Quiescent' means 'inactive'. Opposite of this is 'active'. 'Dormant' is its synonym. Weak and 'unconcerned' are unrelated to it.
93. (b) 'Capacious' means 'having lot of capacity or space'. Opposite of this is 'limited'. All of the other three options are not related to it.
94. (d) 'Sacrosanct' means 'sacred' or 'holy'. The opposite of this is 'unholy'. Religion, ethics and reverence are concepts not related to holiness. So, the adjectives irreligious, unethical and irreverent are ruled out.
95. (b) 'Uncouth' means uncultured, or rough and coarse in manners. Options a, c and d are ruled out as they give words that pertain to crudity in appearance only. A person who is 'ungraceful' lacks grace or elegance; and, may not be pleasing to the eye, but is not necessarily crude in manners. 'Slovenly' and 'Unkempt' refer to untidy, messy appearance.
96. (d) A 'decree' is an official order with the force of law. Clearly, 'command' is the only synonym.
97. (b) 'Retrench' means 'diminish or shorten in size'. Therefore, 'curtail' is the only synonym here.
98. (d) Options a and b are ruled out because education and propaganda are neither 'tenets' nor 'aspects' of the central government. The second blank needs a word to express that which makes minds 'suited to an earlier world'. Between 'tradition' and 'inhibitions', the former is the apt word.
99. (d) The word 'even' in the second part of the sentence makes it clear that the two words required in the blanks are synonymous with the second being more intense in degree. None of the other options gives a synonymous pair of words.
100. (c) The internet offers endless or 'unlimited' choices rather than unbalanced, embarrassing or choking choices. It provides a user free access to the worldwide web. The curbs and blocks imposed on certain sites are 'minimal' compared to the enormous volume of information available.
101. (c) Option a is stated in Line 6, para 3; option b is mentioned in lines 3-6, para 2; and option d is clear from lines 4-5, para 4.
102. (a) Option b is ruled out as it fails to clarify that each county had held its own separate referendum; option c mentions Governor instead of Governor-General; option d does not state the power-sharing of the federation clearly.
103. (c) A referendum is a general and direct vote of an electorate on a political question. While 'election' refers to selection (of person) for a position; and 'nomination' refers to naming (of person) for a position; 'survey' is way off the mark as it refers to examining people, areas, etc. 'Plebiscite' is a synonym of the given word.
104. (d) Only option d is clearly stated in the constitution of Australia (lines 6-7, para 6). Option a and b are ruled out as they give only half the information. The constitution of Australia declares a federal structure. Option c is incorrect because no monarch can rule forever. Queen Victoria was succeeded by Queen Elizabeth II.
105. (c) 'Coming of age' is a phrase which refers to attaining adulthood or maturity. 'Foundation' means the base or beginning of something. 'Genesis' means the process of formation or coming into being. 'Launch' pertains to inaugurating or setting in motion. The passage charts the course of formation of the continent and country of Australia. Therefore, option d gives the most appropriate title to the passage.
106. (b) 'At variance with' means 'differing with'; so, a synonym of 'federal' is required here. 'Legislative' and 'parliamentary' are different from federal as they pertain to law making systems.

- While 'local ' refers to 'of a small specified area'; 'confederate' refers to 'a union of separate entities'. Clearly, 'confederate' is the only one here, that is not at variance with 'federal'.
107. (a) The phrase, 'desirable that' is followed by the present subjunctive form, i.e., the base form of the verb. So, 'furnish' will be correct here.
Option b is ruled out as it uses the modal 'should'(obligation) which is not needed in this context; c is ruled out as 'it is highly to be desired' is an incorrect expression; d is ruled out as 'should'(obligation) and 'have to'(necessity) are separate modals that give confusing sense if used together.
108. (c) The two coordinate clauses, 'All...need' and 'there he ...prevail' are in relative contrast.
'Yet' means 'nevertheless' which gives the desired meaning here.
'Although' is misplaced; it ought to figure at the beginning of the sentence for the right sense to be conveyed.
'Still' is very similar to 'yet' but 'he was there' is not as effective as 'there he was' in conveying the contrast.
'But' is ruled out as it conveys a stark contrast between two opposite ideas which is not the case, here.
109. (d) The sentence conveys that the two may be friends but are not in agreement in business matters.
'See eye to eye' is the correct phrase which means 'to be in complete agreement'.
110. (d) The sentence conveys that the person is expecting help from the wrong quarters.
'Barking up the wrong tree' is the correct idiom here, which means to 'misdirect one's efforts' or 'pursue the wrong person, thing' etc.'
111. (c) 'Gift of the gab' is an idiom. It means 'the ability to speak with eloquence and fluency' which in this case, is what leaders put to good use.
None of the other options are proper phrases in use.
112. (c) 'To jump on the bandwagon' is an idiom which means 'to join or follow something because it has become popular'. It fits in the sentence to convey that the company was getting isolated as everyone else was upgrading their technology; so, it finally jumped the bandwagon, i.e., it also did what others were doing.
113. (a) Comparison is expressed using the comparative degree of adjectives in parallel clauses. Therefore, 'the sooner' will essentially be followed by 'the better'. The clause, 'it will be ' is redundant, i.e., understood and need not be mentioned.
114. (d) The word 'ropes' here does not refer to the object. Rather, 'know the ropes' is an idiom which means 'to be familiar with or experienced in something'. Therefore, no correction is required.
115. (c) The sentence conveys that one should 'face the problems of life bravely'. This is exactly what the idiom 'take... on the chin' refers to. The others are not proper phrases in use.
116. (a) 'A sea change' is an idiomatic expression that refers to 'a profound transformation' or a 'substantial change'. It is the most suitable phrase to convey that 'his manners have undergone great transformation'.
117. (b) Options a, c and d replace the word 'initiated' with 'planned', 'carried out' and 'did', respectively; hence the meaning is altered. Option b states the given sentence in the passive voice without the slightest alteration of meaning.
118. (a) As soon as...is used in sentences to express two actions taking place in quick succession without any loss of time.
Option b does not convey this immediate succession; c and d show incorrect usage as 'No sooner' is followed by 'than'; and 'hardly' is followed by 'when'. Option a substitutes the given sentence best as it conveys the exact sense, only in passive voice.
119. (a) 'Bargain for' is an idiomatic expression which means 'to expect or anticipate'. The word 'surprise' along with 'indeed' in the second clause is a clear hint that the 'outcome' was 'not expected'.
Option d is ruled out as 'not' is missing there. Options b and c are eliminated as the element of surprise at the outcome shows that the verbs 'bargain' and 'take' can neither be present nor future.
120. (c) The first clause of the sentence declares that the job is tough; so, the likelihood of it ending in a 'fiasco'(second clause) is high.
Hence, the second clause should either say, that 'therefore, it always/ usually/ invariably/ regularly ends in a fiasco'; or, that 'nonetheless/ yet/ surprisingly, it never /seldom /rarely/ hardly ends in a fiasco'. Options c is the only one with the right combination of words that convey the appropriate meaning.
121. (b) 122. (a) 123. (d) 124. (b) 125. (b)
126. (d) 127. (c) 128. (b) 129. (a) 130. (c)
131. (a) 132. (c) 133. (a) 134. (c) 135. (c)
136. (a) 137. (c) 138. (b) 139. (b) 140. (d)
141. (d) 142. (d) 143. (c) 144. (b) 145. (b)
146. (b) 147. (b) 148. (a) 149. (c) 150. (d)