

# SBI PO Mains 2016

## REASONING ABILITY

**Direction (1-5):** Study the following information to answer the given questions:

Ten persons are sitting in twelve seats in two parallel rows containing five people each in such a way that there is an equal distance between adjacent persons. In row 1, A, B, C, D and E are seated and all of them are facing south, and in row 2, P, Q, R, S and T are sitting and all of them are facing north. One seat is vacant in each row. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. All of them like a different colour i.e. Red, Green, Pink, Blue, Purple, White, Black, Grey, Violet and Yellow.

- S sits third to the right of R and likes Blue colour.
- Only two people sit between Q and Vacant seat.
- Q does not like Purple and Pink colour.
- E is not an immediate neighbour of C.
- B likes yellow colour. The one who likes Pink colour faces the one who likes Grey colour.
- The one who likes Pink colour sits opposite to the one, who sits third right of the one, who sits opposite to S.
- C is not an immediate neighbour of D.
- T, who likes neither Purple nor White colour, does not face vacant seat.
- Neither S nor R sits at an extreme end. D faces R.
- Vacant seats are not opposite to each other.
- Two persons sit between C and B, who sits third right of the one, who likes Black colour.
- The one who likes Violet colour faces the one, who likes Blue colour.
- The person who likes Red colour and Grey colour are adjacent to each other.
- Vacant seat of row-1 is not an immediate neighbour of D.
- Q sits at one of the extreme ends.
- R does not like Red and Grey colour.
- Vacant seat of row-1 does not face S also does not sit at any of the extreme ends.

1. Who sits second to right of the one, who faces vacant seat of Row-2?

- (a) S (b) B (c) T  
(d) E (e) None of these

2. Which of the following colour does T like?

- (a) Yellow (b) Green (c) Pink  
(d) Grey (e) Red

3. E is related to vacant seat of row-1 in the same way as T is related to P. So, following the same pattern vacant seat of row-2 is related to which of the following?

- (a) Q (b) D (c) R  
(d) P (e) None of these

4. Who sits diagonally opposite to the one, who likes White colour?

- (a) C (b) B (c) T  
(d) E (e) None of these

5. Which of the following is true regarding P?

- (a) P sits second to right of T.  
(b) P is not an immediate neighbour of S.  
(c) P sits third to left of R.  
(d) P sits at one of the extreme ends of the line.  
(e) P faces vacant seat of row-1.

6. **Statement:** A record of sort was created after the UP government, which advertised for 368 posts of peon in secretariat, got 23 lakh responses. The minimum qualification for the post of peon is that the applicant should be a class five pass out and know how to ride a bicycle. Grabbing the opportunity, opposition parties in unison attacked the SP-led state government over its promise of providing employment to youths in the state. Of the total 368 posts, 268 are for general category and the rest are for SC, ST and other reserved categories in the age group of 18 to 40 years. "When we categorized the applications viz. a viz. a qualification, we were surprised to find that 255 doctorates have applied for the job," a senior secretariat administration official said.

**Arguments:**

- I. I No, It will further aggravate the problem of educated unemployment.  
II. II Yes, It creates complexes among employees and affects the work adversely.  
III. III No, This goes against the basic rights of the individuals.  
IV. IV. Yes, This will increase productivity.  
V. Should people with educational qualification higher than the optimum requirements be debarred from seeking jobs?
- (a) Only I and III are strong  
(b) All are strong  
(c) Only II and IV are strong  
(d) Only III is strong  
(e) None of these

7. **Statement:** There is little that is surprising about India's recent refusal to allow Google to launch its street view service, which gives users a 360-degree view of public spaces. The proposal was rejected following objections raised by the Defense Minister. Which of the following objection(s) may not be a probable reason(s) for the above step taken by the government?

- I The decision is said to have come in the backdrop of the terror attack on the Pathankot airbase, with investigators suspecting that terrorists used Google maps to study the topography of the targeted area.
  - II The concerns of the defense organizations should be taken into consideration.
  - III India's security and stability should be given prime importance.
  - IV We in India are not mature enough to permit such exploratory things threatening national security. We have more enemies inside than outside.
- (a) Only II and III (b) All except III  
(c) Only IV (d) Only I and IV  
(e) None of these

**Direction (8-12):** 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.

8. Six persons namely A, B, C, D, E and F teach one subject each, one after another viz. Reasoning, Quant, Banking Computer, General awareness and English but not necessarily in the same order. Quant is not taught before Banking nor it is the last subject taught. Which subject is taught just after English?

- I The first subject to teach is English which is not taught by either C or E. A, C and E are not available to teach the last subject.
  - II Reasoning is taught by B just after Banking and just before Computer which is taught by D.
- (a) If both the statements I and II taken together are not sufficient to answer the questions.  
(b) If statement either I or II is sufficient to answer the question.  
(c) If both the statements I and II taken together are sufficient to answer the questions.  
(d) If statement I is sufficient to answer the question but statement II by itself is not sufficient to answer the question.  
(e) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.

9. Eight friends Sunil, Ravi, Jayant, Kapil, Naren, Shivam, Paresh and Lakshya are seated in a straight line facing north but not necessarily in the same order. Ravi sits second to right of Shivam. Shivam sits at one of the extreme ends of the line, then what is the position of Kapil?

- I Paresh is not an immediate neighbor of Naren or Jayant, and sits third to the left of Kapil.
  - II Only two persons sit between Kapil and Sunil.
- (a) If both the statements I and II taken together are not sufficient to answer the questions.  
(b) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.  
(c) If statement either I or II is sufficient to answer the question.  
(d) If statement I is sufficient to answer the question but statement II by itself is not sufficient to answer the question.  
(e) If both the statements I and II taken together are sufficient to answer the questions.

10. Eight friends A, B, C, D, E, F, G and H are sitting in a circle, but not necessarily in the same order. Four of them are facing outside and four of them are facing the centre. E faces outside. Both the immediate neighbours of E face the centre. H sits second to the right of E. B sits third to the left of E. How many people are seated between A and C (counting clockwise from A)?

- I G sits second to the left of A. B sits third to the right of H and D is not an immediate neighbor of B.
  - II F is an immediate neighbor of D. C is an immediate neighbor of G.
- (a) If both the statements I and II taken together are not sufficient to answer the questions.  
(b) If statement either I or II is sufficient to answer the question.  
(c) If both the statements I and II taken together are sufficient to answer the questions.  
(d) If statement I is sufficient to answer the question but statement II by itself is not sufficient to answer the question.  
(e) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.

11. Ten persons are sitting in two parallel rows containing five persons each in such a way that there is an equal distance between adjacent persons. In the first row, P, Q, R, S and T are seated and all of them are facing south. In the 2<sup>nd</sup> row, A, B, C, D and E are seated and all of them are facing north. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row. Who amongst the following are sitting exactly in the middle of the rows?

- I D sits third to the left of A. P faces an immediate neighbor of D. R sits second to the right of P and E sits immediate right of D.
  - II Only one person sits between Q and S. B and E are immediate neighbours.
- (a) If statement either I or II is sufficient to answer the question.

- (b) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
- (c) If both the statements I and II taken together are not sufficient to answer the questions.
- (d) If statement I is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
- (e) If both the statements I and II taken together are sufficient to answer the questions.

12. Six students P, Q, R, S, T and V are the top six rankers of the class. No two persons got the same rank. The student who got the highest marks is given rank 1 and the student who got the least marks is given rank 6 who got the 6th rank?

- I. Q got less marks than both R and U. P got more marks than T but less than S.
- II. Q got the second least rank and U got the second highest rank, R got less marks than P.

- (a) If both the statements I and II taken together are not sufficient to answer the questions.
- (b) If statement either I or II is sufficient to answer the question.
- (c) If both the statements I and II taken together are sufficient to answer the questions.
- (d) If statement I is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.
- (e) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.

13. **Statement:** There are two construction companies namely X and Y for the construction of the central mall. Construction Company X has offering 24x7 Wi-Fi service, 24x7 power and water service, guarantee of each room for one year in the mall and even an insurance scheme. But the owner has provided sponsorship to Company Y.

What is/are the reason(s) behind this decision of the owner?

- (i) Company has provided an insurance scheme of 10 years.
- (ii) Company has provided guarantee of one and half year for each room.
- (iii) Company Y has provided 24x7 power and water service at the same cost.
- (a) All of the above
- (b) Only (i) and (iii)
- (c) Only (i) and (ii)
- (d) Only (ii)
- (e) None of these

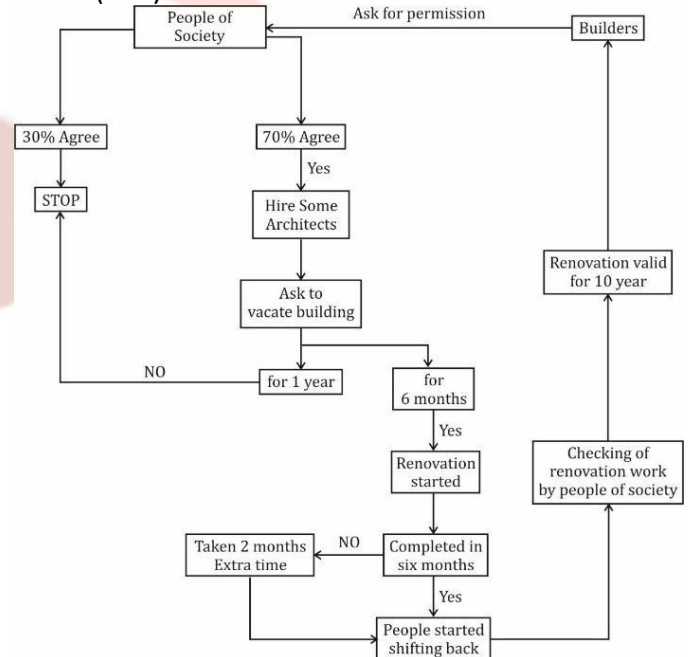
14. **Statement:** However, the market participants are eagerly waiting for a possible change in GDP growth forecast, inflation target for FY 17, along with the RBI's commentary on foreign exchange reserves as around \$30 billion of foreign currency non-resident bank deposits are maturing in September.

In its April review, the RBI had slashed the repo rate, the rate at which banks borrow from the central bank, by 0.25 percent to 6.50 percent, to a more than five-year low. Since January 2015, the RBI has cut its repo rate by 150 basis points or 1.5 percent.

Which of the following negates the above steps taken by the RBI?

- (a) The Consumer Price Index (CPI), which is closely watched by the RBI in order to set interest rate policy, jumped to 5.39 percent in April vs 4.83 percent in March.
- (b) Global Crude Prices hitting a 12-year low of below \$27 dollars a barrel in January 2016 made a strong case for rate cuts for RBI.
- (c) Loans and EMI will become cheaper for retail loans.
- (d) Rupee will strengthen against other currencies.
- (e) None of these.

**Direction (15-17):**



Builder X has decided to renovate sundervan society. So, different conditions are given in Data flow diagram. So after analyzing above DFD diagram you have to answer the given questions.

15. After /Before which step Builder should have taken legal permission from concerned authority for renovation work?
- (a) After hiring required architects.
- (b) Before asking people of society to vacate their house.
- (c) After taking permission from people of society.
- (d) After asking people of society to vacate their house.
- (e) cannot be determined.

16. Which condition is sufficient to make sure that renovation work will be completed in 6 months?

- Concerned authority are regularly visiting to renovation site for cross check of work.
- Builders are planning to make renovation make valid for 15 years.
- Data insufficient.
- People of society have given ultimatum to builders to complete renovation in six months otherwise they will go on hunger strike.
- None of these.

17. Which step of renovation is logically missing in Data flow diagram?

- If only 30% people gets agree for renovation then Builders should again try to convince people.
- Builders should take legal permission from concerned authority for renovation.
- To complete renovation Builder should take 3-4 time duration slot.
- Before vacating house people should take suggestions from their relatives.
- None of these.

18. Study the following information carefully and answer the questions which follow

A person X given an exam for the post of Branch manager in a Bank. Candidates must possess the following criteria. The candidate must—

- Not less than 35 years and not exceed 40 years as on 01.11.2015.
  - Have a Bachelors Degree in any discipline with 65 per cent marks.
  - Have a MBA in Banking and finance.
  - Have experience of at least 4 years in a reputed bank as on 01.12.2016.
  - Relaxation in age of 3 year if candidate is a female.
- Study the following information and give the correct sequence from which we can find the exact answer with minimum number of conditions?
- As on 01.11.2016, X's age is 38 year old.
  - X has a degree in Engineering and Technology with 72 per cent marks.
  - Its definite information that X is a Female.
  - X have Post graduation in MBA with Banking and finance stream.
  - X is currently working in Axis bank from 15.07.2012.
- BE CAD
  - ABCDE
  - ABDEC
  - ABECD
  - None of these.

**Direction (19-21):** Study the following information carefully and answer the questions which follow—

In a certain code language some statements are coded as follow:

'Visual effects of colour' is coded as 'C11 F73 T86 K93'

'Visual for one's eye' is coded as 'T86 L23 N27 M18' 'Retinal detachment curtain effects' is coded as 'B15 K93 G14 S21'

'Areas for vision development' is coded as 'A10 H32 Y16 L23'

19. Which among the following option can be used for getting the code of 'eye'?

- L23 T86 Y16 H32
  - N27 M18 L23 A10
  - F73 M18 L23 G14
  - S21 B15 T86 N27
  - None of these
- Only (i) and (ii)
  - Only (ii) and (iii)
  - Only (iii) and (iv)
  - Only (iv) and (v)
  - Only (ii) and (iv)

20. Which among the following option cannot be used for getting the code of 'development'?

- H32 F73 G14 S21
- K93 H32 Y16 B15
- C11 G14 Y16 S21
- A10 B15 T86 S21
- None of these

21. If 'Retinal' can be coded as B15, then which among the following option can be used for getting the code of 'detachment'?

- B15 G14 S21 H32
- L23 S21 B15 G14
- C11 G14 Y16 S21
- Y16 G14 N27 B15
- None of these

**Direction (22-26):** Study the following information to answer the given questions:

Seven persons namely P, Q, R, S, T, U, V not in the same order in a organization working as a AM( Assistant Manager), MG(Manager), DGM(Deputy General Manager), GM (General Manager), CGM (Chief General Manager), ED(Executive Director), CEO(Chief Executive Officer). And likes different cities namely Mumbai, Jaipur, Ranchi, Chandigarh, Agra, Patna, Bhopal not in same order. **NOTE:** position has been increasing order of their experience. CEO is most experienced person and Assistant manager least experienced.

- R is junior to only two persons. S does not like Ranchi.
- Person who likes Chandigarh is junior to T but not a least junior.
- Person who likes Patna is senior to ED.
- Person who likes Ranchi senior to U but junior to T.
- T is junior to CGM but senior to V.
- U junior to V and likes Agra.
- Q is senior to T but not a most senior.
- CGM does not like Bhopal.
- V is junior to P but not to S.
- CGM is senior to one who likes Jaipur.

22. Which of the following post is preferred by T?

- CEO
- GM
- AM
- ED
- DGM



23. How many person sit between R and CEO?

- (a) Three (b) Five (c) Two  
(d) One (e) None of these

24. If Q related to GM in the same way as T related to MG. Which of the following is P related to, following the same pattern?

- (a) CGM (b) DGM (c) AM  
(d) CEO (e) None of these

25. ED is going which of the following city?

- (a) Mumbai (b) Agra (c) Ranchi  
(d) Bhopal (e) Patna

26. 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) CEO (b) CGM (c) DGM  
(d) ED (e) AM

**Direction (27-31):** In every question two rows are given and to find out the resultant of a particular row you need to follow the following steps:-

**Step 1:** If an even number is followed by an odd (prime) number then the resultant will be the addition of both the numbers.

**Step 2:** If an odd number is followed by a perfect square then the resultant will be the subtraction of the square number from the odd number.

**Step 3:** If an odd number is followed by another odd number then the resultant will be the addition of both the numbers.

**Step 4:** If an even number is followed by an odd (non-prime) number then the resultant will be the subtraction of the odd number from the even number.

**Step 5:** If an odd number is followed by an even number then the resultant comes by multiplying the numbers.

27. 

4	5	2
13	9	3

Find the sum of two rows

- (a) 18 (b) 25 (c) 11  
(d) 14 (e) None of the above

28. Find the resultant of second row if X is the resultant of first row.

11	9	7
17	X	3

- (a) 11 (b) 13 (c) 10  
(d) 9 (e) None of the above

29. If the sum of the resultants of two rows is 20. Then find the value of X.

18	15	6
8	3	X

- (a) 3 (b) 9 (c) 2  
(d) 5 (e) None of the above

30. Find the difference between the resultant of first and second row.

5	4	15
21	16	4

- (a) 25 (b) 20 (c) 10  
(d) 15 (e) None of the above

31. Find the sum of the resultant of two rows. If X is the resultant of second row.

X	5	16
43	36	2

- (a) 11 (b) 17 (c) 13  
(d) 15 (e) None of the above

32. Mohit is going in a company for the interview. For passing the interview, he has to clear three round i.e. written test, Group discussion and Physiological test, then only he will be eligible for the Job. In the first round of written test if he got 85% then only he will be eligible for the second and third round, otherwise he will not be selected. After passing in the first round, he can eligible for Group discussion and Physiological test rounds. It is compulsory to get 30 percent as mean percentage in the other two rounds. If he does not get that percentage, then he will be disqualified. Some other conditions are given for clearing all rounds.

- (A) Mohit is 25 year old on 01-02-2016 and he got 82% in written test.  
(B) Mohit has completed his graduation at the age of 22 years.  
(C) Mohit got 90% in written test and got 40 mean percent in both other rounds.  
(D) After completing his graduation, in the interview Mohit got 95% in written test also got 28 mean percent of Group discussion and Physiological test rounds.

If Mohit fulfills all these criteria then from which of the following point it can be concluded that he is not selected for the Job?

- (a) Only A (b) Only B (c) Only A and D  
(d) Only C (e) Only A, B and D

**Direction (33-35):** Study the following information carefully and answer the questions given below it:

Five family members P, Q, R, S and T are sitting in a row facing north. P is sitting third to the right of his daughter. Q is sitting next to R whose husband is the brother of Q. P is sitting next to T. S is not sitting with P's son. S is sitting on the left end and the mother of S is R, who is the wife of P. Q is sitting on the right of R and S, Q and P are sitting together.

33. What is the position of son of R with respect to the father of S in the given seating arrangement?

- (a) Immediate left (b) immediate right  
(c) third to the right (d) Second to the left  
(e) none of these

34. How is the daughter of P related to Q among the family members?  
 (a) Niece (b) Sister-in-law (c) Wife  
 (d) Sister (e) none of these
35. If the position of Q and T are interchanged, then who among the following does sit immediate right of S's mother?  
 (a) Brother of P (b) P (c) Son of P  
 (d) R (e) Wife of P

**Direction (36-37):** In the following questions, the symbols

\$, %, @, ♥ and □ are used with the following meaning illustrated below.

'P%Q' means 'P is neither greater than nor smaller than Q' 'P\$Q' means 'P is neither smaller than nor equal to Q'

'P♥Q' means 'P is neither greater than nor equal to Q' 'P□Q' means 'P is not greater than Q'

'P@Q' means 'P is not smaller than Q'

36. In which of the following expression does not lead to, 'P @ Q' and 'M © L' being definitely true?  
 (a) P @ R @ Q © M \* N \$ L  
 (b) P @ R @ Q % M © N © L  
 (c) P © R @ Q % M \* N \* L  
 (d) P @ R % Q \* M % N © L  
 (e) P % R @ Q % M © N © L
37. Which of the following symbols should be placed in the blank spaces respectively (in the same order from left to right) in order to complete the given expression in such a manner that makes the expression H © J \$ G and E @ F True?  
 F % G \* E \_ J \$ I % H  
 (a)\* (b)© (c) @  
 (d)\$ (e) %

38. The question given below consists of a statement, followed by three arguments numbered I, II and III. You have to decide which of the arguments is/are strong (arguments) and which is/are weak (arguments) and accordingly choose your answer from the alternatives given below each question. **Statement:** Sociologists and political observers are of the opinion that making education qualification mandatory for election candidates would be discriminatory since that would naturally deprive citizens of India the right to represent their people. Institutional qualification, as they say, is different from political acumen and wisdom. In a country like India where about a quarter of 815 million eligible voters are illiterate, it would not be prudent to deny a politically aware and socially conscious individual the election ticket just because he/she doesn't have a minimum qualification. Should "literacy" be the minimum criterion for becoming a voter in India?

### Arguments:

- I. No, Mere literacy is no guarantee of political maturity of an individual.  
 II. Yes, Illiterate people are less likely to make politically wiser decisions of voting for a right candidate or party.  
 III. No, Voting is the constitutional right of every citizen.  
 (a) None is strong  
 (b) Only I and II are strong  
 (c) Only III is strong  
 (d) Only II and III are strong  
 (e) All are strong

39. **Statement:** Reinforcing its commitment to green initiatives, railways will explore its future course of action to prevent pollution. Issues related to environment like solid waste management, pollution control, water management and energy management will be discussed at a workshop on 'Environmental challenges before Indian Railways and solutions'.

- I. Introduction of bio-fuel and solar energy in train operation.  
 II. Installation of rain water harvesting facilities at major stations.  
 III. Waste water recycling plant is also being planned in which recycled water will be used for washing and horticulture purpose.  
 IV. Initiatives such as LED light fittings to reduce power consumption and use of five percent bio-diesel in diesel locos.  
 V. Introduction of water audit to assess consumption and wastage at major stations.

Which of the following points will strengthen the decision taken by the Railways?

- (a) All of the above (b) All except I  
 (c) All except I and V (d) All except V  
 (e) None of these

**Direction (40-42):** 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:** 23 56 price 59 terrific 72 unit situation 86 information

**Step I:** 88 informatioish 23 56 price 59 terrific 72 unit situation

**Step II:** pricish 74 88 informatioish 23 56 59 terrific unit situation

**Step III:** 57 situatioish pricish 74 88 informatioish 23 56 terrifish unit

**Step IV:** terrifish 58 57 situatioish pricish 74 88 informatioish 23 unit

**Step V :** 21 unish terrish 58 57 situatish prish 74 88 informatioish

**Step V** is the last step of the above **arrangement**.

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

**Input :** 22 39 since 12 growth sector 76 future demand  
25

40. Which step number would be the following output? futurish 37 78 demanish 22 since 12 sector growth 25  
(a) Step IV (b) Step V (c) Step VI  
(d) Step VII (e) There will be no such step
41. How many elements (words or numbers) are there between 'futurish' and '24' as they appear in the last step of the output?  
(a) One (b) Three (c) Four  
(d) Five (e) None of these
42. What is sum of the numbers which is second from the right and fourth from the left in the third step?  
(a) 37 (b) 39 (c) 33  
(d) 49 (e) None of these
43. **Statement:** The government is set to overhaul annual targets for public sector lenders, ending a focus on size that has long encouraged banks to inflate their loans and deposits at the year-end to hit growth objectives. Banking and government sources said that the new targets, to be discussed at meeting with top state bank officials, would focus on efficiency, with objectives set around return on assets, or return on equity, and controlling bad debts.  
Which of the following points can be **inferred** from the given information?  
(a) Loans and deposits of the banks will go up  
(b) Some short term loans will be discouraged by the banks.  
(c) Credit ratings of the banks will be boosted up  
(d) Financial stability of the banks will be lost  
(e) All can be inferred
44. **Statement:** Google, which dominates much of life on the Internet, has been trying to expand beyond computers and telephones to living rooms, cars and bodies. It made its way a bit further into people's homes when it agreed to pay \$3.2 billion in cash for Nest Labs, which makes Internet-connected devices like thermostats and smoke alarms. But it has agreed that Nest's privacy policies are going to be well-respected. For Google, gaining visibility into people's habits beyond computers and phones — whether watching television using Chrome cast, taking a walk wearing Google Glass or managing their homes using Nest products — will provide a fuller picture of users. Which of the following arguments would most **weaken** Nest's beliefs?

- (a) Google products can easily be integrated into Nest.  
(b) Unlike many of Silicon Valley's most popular companies that make software that costs very little to build, Nest is capital-intensive because it builds hardware.  
(c) To follow the terms and condition, Google make some changes in Nest's privacy policies.  
(d) The deal between two companies has not yet closed.  
(e) None of these.

45. **Statement:** By fixing a deadline of one year from the date of framing of charges for the completion of trial involving the members of parliament and legislative assemblies, the Supreme Court has once again intervened effectively to give some credibility to the idea of cleaning the polity. It gave a jolt to the political class by striking down a provision that protected sitting legislators from immediate disqualification on conviction.

Which of the following can be concluded from the above statement?

- (a) To implement the guidelines, the government must set up more speedy trial courts, which will help them deliver justice in time.  
(b) The steps taken by the apex court will help choose the best people from their constituency and make the Indian democratic system free from criminalization.  
(c) This will help in reducing the scourge of criminalization of politics.  
(d) The latest order will help address this problem by empowering the trial court to refuse routine adjournments.  
(e) None of these.

## QUANTITATIVE APTITUDE

**Direction (46-47):** In a bag there are three types of colored balls of red, white and Blue colors.

The probability of

selecting one red ball out of the total balls is  $\frac{1}{2}$  and the

probability of selecting one blue ball out of the total balls is

$\frac{2}{7}$ . The number of white balls in the bag is 6.

46. If all the balls are numbered starting from 1, 2, 3, .....and so on then what is the probability of selecting one ball which is numbered as a multiple of 3 or 7 out of the total balls.

(a)  $\frac{3}{7}$

(b)  $\frac{5}{14}$

(c)  $\frac{1}{12}$

(d)  $\frac{6}{11}$

(e) none of these

47. What are the total number of balls in the bag? (a) 40

(b) 30 (c)

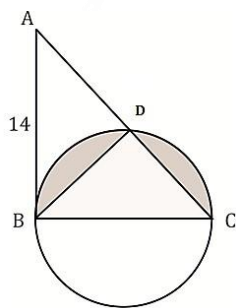
35

(d) 28

(e) none of these

48. Given that D is the midpoint of AC and BC is diameter of circle, and circumference of circle is 44cm. quantity 1- area of shaded region

quantity 2-  $7\pi \text{ cm}^2$



(a) quantity I > quantity II (b) quantity I <

quantity II (c) quantity I ≥

quantity II (d) quantity I ≤

quantity II

(e) quantity I = quantity II or No relation

49. Quantity I =  $18\pi^3 \times 3$ , quantity II =  $12\pi^4 \times 4$ , quantity I > 0 & quantity II < 0

(a) Quantity I > Quantity II

(b) Quantity I < Quantity II

(c) Quantity I ≤ Quantity II

(d) Quantity I = quantity II or No relation

(e) Quantity I ≥ Quantity II

50. Speed of a boat in still water and speed of current is in ratio 6 : 1. If the difference between distance covered by boat in 2 hours upstream and in 2 hours downstream is 8 km.

**Quantity-1-** Speed of boat in still water

**Quantity-2-** speed of cyclist who goes 28 km in 2 hrs. (a) quantity I >

quantity II

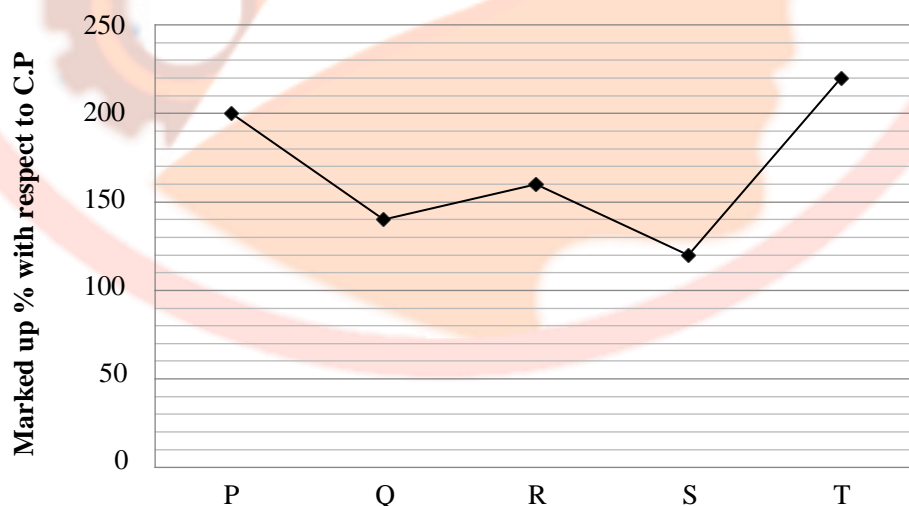
(b) quantity I ≥ quantity II

(c) quantity I < quantity II (d)

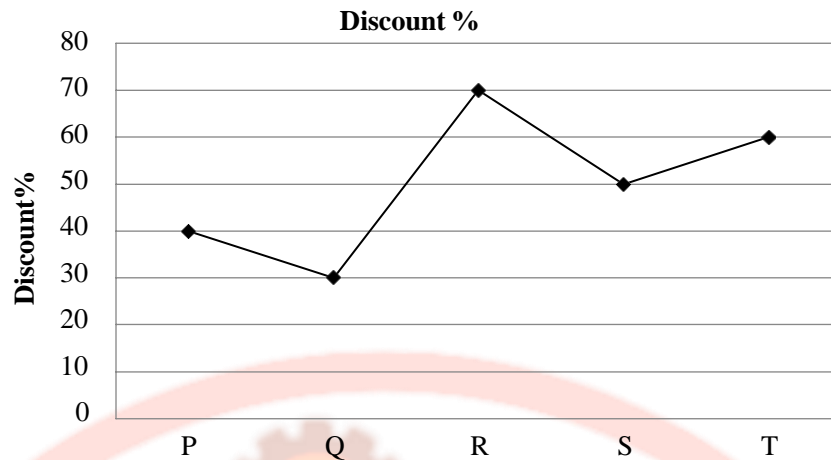
quantity I ≤ quantity II (e)

quantity I = quantity II

**Directions (51-55):** In the following line graphs, first line graph shows the percent marked up price with respect to the cost price of the products and the second line graph shows the discount percentage given on the marked up price with the help of the given information answer the following questions.







51. If the cost price of the product P and R is equal then the selling price of product P is how much % more than the selling price of product R.

- (a) 50% (b) 450% (c) 250%  
(d) 200% (e) 150%

52. If the cost price of product R is increased by 10% and other prices (marked price / S.P) remain same, then how much more percent loss will be there as compared to previous loss? (approximately) (a) 4.36% (b) 7.36% (c) 8.36% (d) 9.36% (e) 10.36%

53. If selling price of Q and T are equal, then find the ratio of cost price of T to the cost price of Q.

- (a) 49:44 (b) 46:49 (c) 39:47  
(d) 47:39 (e) None of these

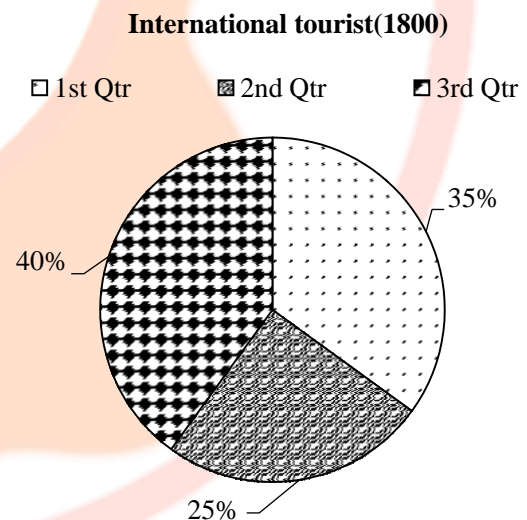
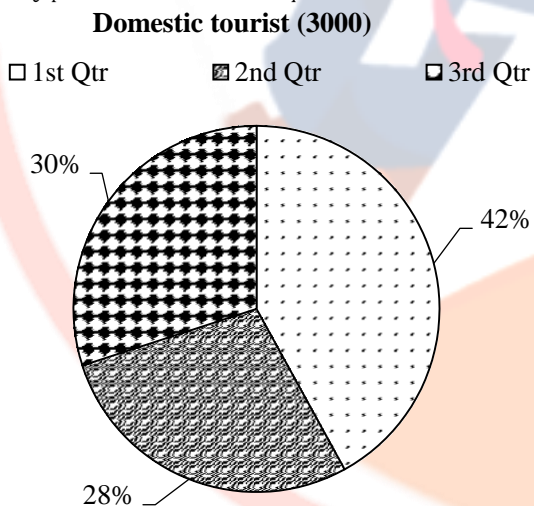
54. Which of the following product have the highest profit or loss percentage?

- (a) P (b) Q (c) R  
(d) S (e) T

55. If marked price of all the items is same, then which of the following item would have second highest cost price?

- (a) P (b) T (c) R  
(d) S (e) Q

**Directions (56-60)-** In the given pie chart, in a state there are two types of tourist Domestic and international tourist. Graph shows the percentage wise breakup of these tourists in a given year. There are 4 quarters in a year and graph shows the information for three quarters.



56. If we include the 4<sup>th</sup> quarter of the year, percentage of domestic tourist in 3<sup>rd</sup> quarter will become 25% of the total domestic tourist of the year. Then what is the number of domestic tourist in 4<sup>th</sup> quarter?

- (a) 1600 (b) 750 (c) 900  
(d) 600 (e) None of these

57. If the international tourists visited in IVth quarter is 150 more than the international tourist visited in IInd quarter. Then international tourists visited in 4<sup>th</sup> quarter is what percent of total number of international tourists.

- (a) 25% (b) 35% (c) 45%  
(d) 50% (e) None of these

58. Total no of domestic tourist who visited in 2<sup>nd</sup> and 3<sup>rd</sup> quarter is what percent of total no. of the international tourist in 2<sup>nd</sup> and 3<sup>rd</sup> quarter? (approximately)

- (a) 139% (b) 159% (c) 149%  
(d) 169% (e) 179%

59. Average number of domestic tourist from 1<sup>st</sup> and 2<sup>nd</sup> quarter is how much percent more than the number of international tourist from 1<sup>st</sup> quarter?

- (a) 6.67% (b) 75% (c) 80%  
(d) 66.67% (e) 90%

60. If the total number of international tourist in next year increases by 25% while the number of international

tourist of 1<sup>st</sup> quarter increase by  $28\frac{4}{7}\%$ . Then find the

new percentage of international tourists of 1<sup>st</sup> quarter over total international tourist in the new year. (Given that no tourist visited in fourth quarter.)

- (a) 30% (b) 35% (c) 36%  
(d) 40% (e) None of these

**Directions (61-62):** Ritu's expense out of her total expenditure in a trip is in between travel expenses, Accommodation expenses and shopping expenses are in the ratio of 5 : 4 : 3. Out of the travel expenses he spent 25% on bus tickets, 60% on air tickets and remaining travel expenses are saved. All of the accommodation expenses are spent on hotels. And out of the total expenses on shopping

expenses 50% spent on tax free products,  $47\frac{2}{9}\%$  spent on

footpath shopping and remaining are saved. The total amount saved is 17500.

61. From the above information, what is the total amount on accommodation expense?

- (a) Rs75000 (b) Rs44000 (c) Rs90000 (d) Rs95000  
(e) Rs84000

62. Ritu's total amount on the trip is.

- (a) Rs242000 (b) Rs252000 (c) Rs262000  
(d) Rs275000 (e) none of these

**Directions (63-67):** Given below is the percentage distribution of number of students from 5 different colleges attended different number of seminars.

	No. of seminars Attended - 1	No. of seminars Attended - 2	No. of seminars Attended - 3	No. of seminars Attended - 4	No. of seminars Attended - 5	No. of seminars Attended - 6
P	20	15	24	8	—	15
Q	—	16	25	—	—	18
R	12	20	25	—	—	—
S	—	—	25	15	22	12
T	15	—	24	—	32	5

63. If the number of students from college R who attended at most 3 seminars is equal to number of students from college S who attended at least 3 seminars and the total number of students from College S is 11400. Then find the number of students from college R who attended 3 seminars.

- (a) 3700 (b) 4100 (c) 4500  
(d) 4800 (e) None of these

64. Total no. of students from college P who attended at most 2 seminars is equal to the sum of number of students from college T who attended 1 seminar and the number of students from the same college who attended 6 seminars. Then the total number of students from college P is what percent of total no. of student from college T?

- (a)  $17\frac{1}{7}\%$  (b) 45% (c) 49%  
(d)  $57\frac{1}{7}\%$  (e) none of these

65. The number of students from college P who attended more than 2 seminars is approximate what percent less than the number of students from college S who attended at least 3 seminars if the number of student who attended 2 seminars from college P is 48. And the number of students of college S who attended 6 seminars is 14 more than the number of students from college P, who attended 1 seminar?

- (a) 52% (b) 44% (c) 60%  
(d) 48% (e) 57%

66. If the difference between number of students from college T who attended 3 seminars and students who attended 5 seminars is 22, and the total students from college R is 60% of the total students from college T then find the number of students of college R who are attending 2 seminars.

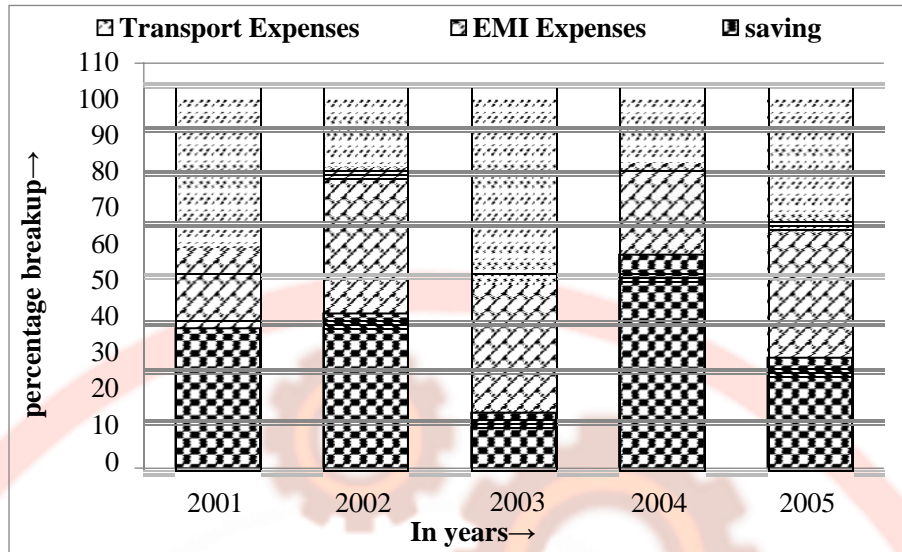
- (a) 32 (b) 35 (c) 33  
(d) 38 (e) none of these

67. If the ratio between the no. of students who attended 1 seminar and the no. of students who attend 2 seminars from college S is 9 : 4, and the difference between the same is 35. Then find the persons from this college who attended at most 4 seminars.

- (a) 237 (b) 234 (c) 231  
(d) 240 (e) None of these

**Directions (68-72):** The following bar graph shows the percentage break-up of a person's salary from year 2001 to 2005.

With the given information, answer the following questions.



68. If the ratio on saving in the year 2002 and 2005 are in the ratio 7 : 5. Then what is the ratio of EMI expenses in the year 2002 and 2005.  
 (a) 6:7 (b) 8:9 (c) 9:8  
 (d) can't determined (e) 8:7

69. If the saving in 2002 is  $\frac{3}{5}$ th of the saving in 2004. Then what is the total expenditure spent on transport in 2002 (Given that total salary in 2004 is Rs. 1,75,000 Rs.)  
 (a) 31100 Rs. (b) 26100 Rs. (c) 21100 Rs.  
 (d) 15100 Rs. (e) none of these

70. In every year there is an increase of 100% in monthly salary as compared to previous year's monthly salary then what is the ratio of monthly salary in 2005 to the expenses on transport in 2003.  
 (a) 8:1 (b) 1:8 (c) 4:1  
 (d) 1:4 (e) none of these

71. In which year the ratio of EMI expenses to saving is 3<sup>rd</sup> highest?  
 (a) 2001 (b) 2004 (c) 2003  
 (d) 2002 (e) Can't be determined

72. Find the average percentage of transport expenses over the years.  
 (a) 32% (b) 34% (c) 35%  
 (d) 36% (e) None of these

**Direction (73-75)** 24 men can do a work in X days and 32 women can do the same work in (X + 8) days. The ratio of work done by 15 men and 12 women in the same time is 3 : 1.

73. Find the value of X ?  
 (a) 8 (b) 9 (c) 12  
 (d) 11 (e) 10

74. 10 men and 24 women works for 6 days on the same work and the remaining work is done by 18 boys in 18 days. Then find the number of days in which 12 boys completed the whole work.  
 (a) 45 (b) 48 (c) 54  
 (d) 58 (e) None of the above

75. The no. of days taken by 1 man to complete the same work is less than by the no. of days taken by 1 woman to do this work, by :-  
 (a) 340 days (b) 325 days (c) 324 days  
 (d) 320 days (e) None of these

**Directions (76-80):** The following questions are accompanied by three statements A, B and C or I, II and III. You have to determine which statement(s) is/are necessary/sufficient to answer the question.

76. In how many days men and women can do the work when working together?  
 A. The ratio between the efficiency of men and women is 3 : 1.  
 B. Men and child can do  $\frac{1}{3}$ rd work in 9 days.  
 C. Women can do  $\frac{2}{3}$ rd of the work in 14 days.  
 (a) Only A and C together  
 (b) any 2 of the three statements  
 (c) C and either A or B.  
 (d) Question can't be answered even after using all the statements  
 (e) All statements are required

77. What will be the share of R in the profit earned by V, R and A together?  
 I They together earned a profit of Rs. 54000 for a period of 1 yr.  
 II R's investment was 25% less than V's and 50% more than A's.  
 III The profit of V is Rs. 4000 more than that of A.

- (a) Only I and II together
- (b) II and either I or III only
- (c) Only II
- (d) Only II and III together
- (e) None of these

78. A boat takes 2 hours to travel from point A to B in still water. To find out the speed upstream, which of the following information is/are required?

- I Distance between point A and B.
- II Time taken to travel downstream from B to A.
- III Speed of the stream of water.
- (a) All are required
- (b) Any one pair of A and B, B and C or C and A is sufficient.
- (c) Only A and B
- (d) Only A and C
- (e) None of these

79. What is the cost of flooring a rectangular hall?

- I The length and the breadth of the hall are in the ratio 3 : 2

- II The length of the hall is 48 m and the cost of flooring is Rs. 850 per sq m.
- III The perimeter of the hall is 160 m and the cost of flooring is Rs. 850 per sq m.
- (a) Only I and II
- (b) Only I and III
- (c) Only III
- (d) Any two of the three
- (e) None of these

80. Find the two-digit number.

- I The sum of the squares of the two digits is 26
- II The ratio between the two-digit number and the sum of the digit of that number is 5:2
- III The digit in ten's place is 4 less than the digit in unit place.
- (a) Any one of them
- (b) Only I and II together are sufficient
- (c) Only I and III are sufficient
- (d) Any two of the three together are sufficient
- (e) None of the above

## ENGLISH LANGUAGE

**Directions (81-88):** Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

Until recently, scientists did not know of a close vertebrate analogue to the extreme form of generosity observed in eusocial insects like ants and bees, whereby individuals cooperate, sometimes even sacrificing their own opportunities to survive and reproduce, for the good of others. However, such a vertebrate society may exist among underground colonies of the highly social rodent *Heterocephalus glaber*, the naked mole rat.

A naked mole rat colony, like a beehive, wasp's nest or termite mound, is ruled by its queen, or reproducing female. Other adult female mole rats neither ovulate nor breed. The queen is the largest member of the colony, and she maintains her breeding status through a mixture of behavioral and, presumably, chemical control. Queens have been long-lived in captivity, and when they die or are removed from a colony one sees violent fighting for breeding status among the larger remaining females, leading to a takeover by a new queen.

Eusocial insect societies have rigid caste systems, each insect's role being defined by its behavior, body shape, and physiology. In naked mole rat societies, on the other hand, differences in behavior are related primarily to reproductive status (reproduction being limited to the queen and a few males), body size, and perhaps age. Smaller non-breeding members, both male and female, seem to participate primarily in gathering food, transporting nest material, and tunneling. Larger non-

breeders are active in defending the colony and perhaps in removing dirt from the tunnels. Jarvis' work has suggested that differences in growth rates may influence the length of time that an individual performs a task, regardless of its age.

Cooperative breeding has evolved many times in vertebrates, but unlike naked mole rats, most cooperatively breeding vertebrates (except the wild dog, *Lycan pictus*) are dominated by a pair of breeders rather than by a single breeding female. The division of labor within social groups is less pronounced among other vertebrates than among naked mole rats, colony size is much smaller, and mating by subordinate females may not be totally suppressed, whereas in naked mole rat colonies subordinate females are not sexually active, and many never breed.

81. Which of the following most accurately states the main idea of the passage?

- (a) Naked mole rat colonies are the only known examples of cooperatively breeding vertebrate societies.
- (b) Naked mole rat colonies exhibit social organization based on a rigid caste system.
- (c) Behavior in naked mole rat colonies may well be a close vertebrate analogue to behavior in eusocial insect societies.
- (d) The mating habits of naked mole rats differ from those of any other vertebrate species.
- (e) The basis for the division of labor among naked mole rats is the same as that among eusocial insects.



82. The passage suggests that Jarvis's work has called into question which of the following explanatory variables for naked mole rat behavior?
- (a) Size (b) Age  
(c) Reproductive status (d) Rate of growth  
(e) Previously exhibited behavior
83. It can be inferred from the passage that the performance of tasks in naked mole rat colonies differs from task performance in eusocial insect societies in which of the following ways?
- (a) In naked mole rat colonies, all tasks are performed cooperatively.  
(b) In naked mole rat colonies, the performance of tasks is less rigidly determined by body shape.  
(c) In naked mole rat colonies, breeding is limited to the largest animals.  
(d) In eusocial insect societies, reproduction is limited to a single female.  
(e) In eusocial insect societies, the distribution of tasks is based on body size.
84. The passage supports which of the following inferences about breeding among *Lycaon pictus*?
- (a) The largest female in the social group does not maintain reproductive status by means of behavioral control.  
(b) An individual's ability to breed is related primarily to its rate of growth.  
(c) Breeding is the only task performed by the breeding female.  
(d) Breeding in the social group is not cooperative.  
(e) Breeding is not dominated by a single pair of dogs.
85. According to the passage, naked mole rat colonies may differ from all other known vertebrate groups in which of the following ways?
- (a) Naked mole rats exhibit an extreme form of altruism.  
(b) Naked mole rats are cooperative breeders.  
(c) Among naked mole rats, many males are permitted to breed with a single dominant female.  
(d) Among naked mole rats, different tasks are performed at different times in an individual's life.  
(e) Among naked mole rats, fighting results in the selection of a breeding female.

**Directions (86-87):** Choose the word/group of words which is **most similar** in meaning to the word/group of words printed in bold as used in the passage.

**86. Suppress**

- (a) Retice (b) Proscribe (c) Subdue  
(d) Ostracize (e) Preposterous

**87. Subordinate**

- (a) Appendage (b) Adjunct (c) Patron  
(d) Adjutant (e) Indigent

**Directions (88):** Choose the word/group of words which is **most opposite** in meaning to the word/group of words printed in bold as used in passage.

**88. Pronounce**

- (a) Enunciate (b) Adjudicate (c) Enshroud  
(d) Opine (e) Interpose

**Directions (89-95):** Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

In the summer of 1856, Nathaniel Hawthorne visited a decaying English manor house known as Stanton Harcourt, not far from Oxford. He was struck by the vast kitchen, which occupied the bottom of a 70-foot tower. "Here, no doubt, they were accustomed to roast oxen whole, with as little fuss and ado as a modern cook would roast a fowl," he wrote in an 1863 travelogue, *Our Old Home*.

Hawthorne wrote that as he stood in that kitchen, he was seized by an uncanny feeling: "I was haunted and **perplexed** by an idea that somewhere or other I had seen just this strange spectacle before. The height, the blackness, the dismal void, before my eyes, seemed as familiar as the decorous neatness of my grandmother's kitchen." He was certain that he had never actually seen this room or anything like it. And yet for a moment he was caught in what he described as "that odd state of mind wherein we fitfully and teasingly remember some previous scene or incident, of which the one now passing appears to be but the echo and reduplication."

When Hawthorne wrote that passage there was no common term for such an experience. But by the end of the 19th century, after discarding "false recognition," "paramnesia," and "promnesia," scholars had settled on a French candidate: "déjà vu," or "already seen."

The fleeting melancholy and euphoria associated with déjà vu have attracted the interest of poets, novelists, and occultists of many stripes. St. Augustine, Sir Walter Scott, Dickens, and Tolstoy all wrote detailed accounts of such experiences. (We will politely leave aside a certain woozy song by Crosby, Stills, Nash & Young.)

Most academic psychologists, however, have ignored the topic since around 1890, when there was a brief flurry of interest. The phenomenon seems at once too rare and too **ephemeral** to capture in a laboratory. And even if it were as common as sneezing, déjà vu would still be difficult to study because it produces no measurable external behaviors. Researchers must trust their subjects' personal descriptions of what is going on inside their minds, and few people are as eloquent as Hawthorne. Psychology has generally filed déjà vu away in a drawer marked "Interesting but Insoluble."

During the past two decades, however, a few hardy souls have reopened the scientific study of déjà vu. They hope to nail down a persuasive explanation of the phenomenon, as

well as shed light on some fundamental elements of memory and **cognition**. In the new book *The Déjà Vu Experience: Essays in Cognitive Psychology* (Psychology Press), Alan S. Brown, a professor of psychology at Southern Methodist University, surveys the fledgling subfield. "What we can try to do is zero in on it from a variety of different angles," he says. "It won't be something like, 'Boom! The explanation is there!' But we can get gradual clarity through some hard work."

89. The passage is primarily concerned with
- Examining a concept which is difficult to define
  - Detailing the factors that have contributed to the use of a term among scientists and academicians
  - Evaluating the pro and cons of a new concept
  - Summarizing an old experience
  - Detailing a scientific study
90. Which of the following best describes the organization of the passage?
- A concept is defined and is followed by details of the concept
  - A generalization is stated and is then followed by instances that support the generalization
  - An example of a concept is given and then followed by the explanation of the concept
  - A theory is proposed and then followed by examples
  - A paradox is stated, discussed and left unresolved
91. The author implies that which of the following accounts for the reasons why déjà vu was once difficult to capture in a laboratory.
- The social nature of the term made it uninteresting for academicians and laboratory workers
  - The uninteresting nature of the term made it unattractive to academicians
  - The term déjà vu is embedded in Psychology and therefore cannot be studied in the laboratory
  - The phenomenon seems at once too rare and too ephemeral
  - None of these
92. Which of the following would the author of the passage agree to most
- Déjà vu was invented and first used by academic psychologists
  - The scientific study of déjà vu is now complete with many scientist studying
  - Déjà vu was embraced by poets, novelists, and occultists of many stripes before academic psychologists
  - Déjà vu is an exact science
  - There is not a definite definition of Déjà vu

**Directions (93-94):** Choose the word/group of words which is **most similar** in meaning to the word/group of words printed in bold as used in the passage.

**93. Perplexed**

- Worried
- Elucidate
- Rattled
- Explicate
- Confound

**94. Ephemeral**

- transient
- elusive
- unstable
- wanted
- indiscernible

**Directions (95):** Choose the word/group of words which is **most opposite** in meaning to the word/group of words printed in bold as used in passage.

**95. Cognition**

- Ignorance
- percipience
- imagination
- speculation
- perception

**Directions (96-100):** In each of the following questions a short passage is given with one of the lines in the passage missing and represented by a blank. Select the best out of the five answer choices given to make the passage complete and coherent (coherent means logically complete and sound).

96. The divisions among her followers and detractors are as much ideological as they are intergenerational. A number of Mr. Park's party supporters continue to harbour sympathies for the daughter of South Korea's moderniser, the military dictator Park Chung-hee. But younger generations see the severing of all links with this authoritarian past as a necessary guarantee for the consolidation of democracy, three decades after return to civilian rule. The chaebols — South Korea's highly influential family-owned conglomerates — may have had economic motivations to lean heavily on political patronage during the country's industrial ascendancy and integration into the global market. But such cosy arrangements are proving to be untenable when exceptions of the past are sought to be institutionalised. The task of public cleansing in South Korea is far from over, as is evident from the ongoing criminal proceedings involving tycoons from its best-known corporations. (.....). It would be no surprise, therefore, if South Korea's example becomes a model worthy of emulation elsewhere in the region.
- The removal of a sitting President in South Korea brings to a close one phase in the months-long popular mobilisation to enforce accountability among the high and mighty.
  - The chief accusation is that they solicited contributions to promote dodgy non-profit organisations in return for clearing questionable corporate deals.

- (c) They are seeking to strengthen the country's democratic institutions.
- (d) The recent assertion of the independence of the judiciary from political interference and the capacity of legislators to uphold their authority are notable.
- (e) It has escalated regional tensions and China has retaliated with calls for the boycott of South Korean imports.
97. Ruling on a petition filed by the Congress, the Supreme Court asked the BJP government in Goa to prove its majority within 48 hours, instead of the 15 days' leeway given by Governor Sinha (.....). The court's reluctance to uphold the principle of inviting the single largest party first and therefore, to stay Pamkar's swearing-in on Tuesday, is controversial.
- (a) In Goa the Governor ignored the established principle of inviting the single largest party in the wake of a fractured mandate
- (b) The Justice laid down some guidelines to be followed in the appointment of a chief minister by a governor
- (c) The premise of the decision is questionable
- (d) The gubernatorial decision in Goa reek of partisanship.
- (e) But it was a half-measure.
98. Certain issues that required the government's urgent attention continue to be neglected. (.....). For instance, the strategic sale of public sector undertakings, which Modi reintroduced in the reform lexicon by getting the Union cabinet to approve its broad modalities in October last, is yet to move ahead substantively. The bad loan problem has its origins in the UPA's term when the private sector added huge capacities, built large infrastructure projects and borrowed a lot, hoping the economy would continue to grow rapidly.
- (a) But this affirmation comes with enormous expectations, particularly of the youth
- (b) The private sector continues to be saddled with excess capacity, and is unlikely to consider fresh investments
- (c) Much remains mired in bureaucracy even after the prime minister's promises.
- (d) Huge debt on the large non-performing assets in the balance sheets of state-owned banks have jammed the wheels of the economy
- (e) The government cannot over-spend, given its responsibility towards the fisc.
99. Pakistani atheists — a broad term encompassing agnostics, the irreligious, deists, and humanists alike — have been lazily painted by the Islamists as “liberals and seculars,” despite the fact that many believing and practicing Muslims identify as such as well Muslims openly identifying as atheist in Pakistan would be an open invitation to violence. (.....) coupled with the National Database and Registration Authority's (NADRA) refusal to let citizens officially change Islam as their religion. Hence, the aforementioned “secular liberal” label also provides refuge to the atheists.
- (a) Considering the state's blasphemy laws are interpreted to outlaw apostasy
- (b) as action against jihadist groups becoming inevitable
- (c) with the well-coordinated maneuver accused of being a state-backed operation by many quarters.
- (d) Delineating the ideological divide
- (e) The Islamists at the helm of state institutions have found the filter to sift atheists
100. India is not a signatory of the United Nations Refugee Convention; therefore it is not required to provide safe haven to people seeking asylum from persecution in other countries. No attempts have been made by the government to debate the issue of joining the United Nation Refugee Convention That would have been the natural step to take if the government was indeed interested in formulating a humanitarian refugee policy. Further, the provisions of refugee protection cater to all minorities fleeing countries due to a humanitarian crisis but, in this bill, India is offering citizenship based on religious predilections. The bill, if passed in its current form, seeks to give preference to Hindu refugees over Muslim refugees migrating to India, which is unconstitutional as, the preamble of the Constitution confirms India as a secular state. The refugees who will actually benefit from this policy are living in abject poverty with no sanitation and infrastructure facilities. (.....)
- (a) A closer look at the provisions indicates that the current government is attempting to increase its Hindu voter count.
- (b) The government, instead of using a blanket policy, has made this a communal issue with a veiled political agenda, which would be counterproductive to the seemingly humanitarian goal of the bill.
- (c) The bill at first glance seems like a humanitarian effort to help persecuted minorities but it only seeks to help Hindus, Sikhs, Buddhists, Jains, Parsis, and Christians from the neighboring Muslim countries.

- (d) This policy in the Indian context would be contrary to the ideals of secularism and pluralism and thus unconstitutional.
- (e) If the Citizenship (Amendment) Bill is passed, in its current form, then the border regions would face an influx of Hindu migrants, which would change the voter demographics in the region.

**Directions (101-103):** Five statements are given below, labelled a, b, c, d and e. Among these, four statements are in logical order and form a coherent paragraph/passage. From the given options, choose the option that does not fit into the theme of the passage/paragraph.

- 101.** (a) It is a Chinese diplomatic tradition to celebrate the anniversaries of important events in its relations with foreign nations.  
 (b) Instead of high-level visits or grand ceremonies, however, the anniversary is marred by unprecedented confrontation between the two countries.  
 (c) The dramatic downturn in bilateral relations resulted from President Park Geun-hye's decision in July 2016 to deploy the THAAD (Terminal High Altitude Area Defense) system on South Korean soil.  
 (d) This year marks the 25th anniversary of the establishment of diplomatic ties between China and South Korea.  
 (e) Chinese sacrifices and friendliness apparently have been reciprocated by ingratitude and resentment.
- 102.** (a) In the euphoria of the progress of the global economy or few national economies doing well, we conveniently forget the humongous failure rate of individual organizations.  
 (b) A look at the prevailing organization structures and processes does not give one the confidence that organizations are created with any deep understanding of human behaviour.  
 (c) Very few of them analyse why companies that were deemed icons of excellence are nowhere to be found just a few decades down the line.  
 (d) While a few unicorns are created every now and then, we forget that many more companies (some of them world leaders like Nokia) are biting the dust at an alarming rate.  
 (e) Management experts and analysts are more interested in talking about the few good organizations that have gone on to become great companies.
- 103.** (a) The document opens with a broadside against the World Trade Organization (WTO), arguing that WTO decisions are not binding on American businesses unless Congress chooses to implement them.

- (b) The Trade Policy Agenda lays out a general approach to trade that is, in its own words, aggressive and that in many cases appears to be strongly at odds with India's own position.
- (c) The agenda and the accompanying annual report strongly suggest that India will be navigating an increasingly difficult trade terrain in the next few years.
- (d) This threatens to relegate the WTO to the long list of international agreements that the US has refused to make part of domestic law, gutting the strength of the organization and possibly triggering a round of punitive tariffs by other nations.
- (e) India, by contrast, has made the WTO the primary focus of its trade negotiation efforts and is poised to make a major play towards updating the Trade in Services Agreement.

**Directions (104 – 105):** Each question consists of a number of sentences which, when properly sequenced, form a coherent paragraph. Below each question are five options which give the possible sequence of the coherent paragraph. Choose the option which gives the correct sequence of the given coherent paragraph.

- 104.** A. And everywhere—on the palace steps, and the great promenade, around the fountains, among the trees—hundreds and hundreds of people in gay costumes walked or ran or danced, and gave to the fairy picture the life and animation which was all of perfection it could have lacked. Concluding remark; the people complete the picture perfect settings.  
 B. The scene thrills one like military music!  
 C. Versailles is wonderfully beautiful!  
 D. You gaze and stare and try to understand that it is real, that it is on the earth, that it is not the Garden of Eden—but your brain grows giddy, stupefied by the world of beauty around you, and you half-believe you are the dupe of an exquisite dream.  
 E. A noble palace, stretching its ornamented front, block upon block away, till it seemed that it would never end; a grand promenade before it, where on the armies of an empire might parade; broad flights of stone steps leading down from the promenade to lower grounds of the park—stairways that whole regiments might stand to arms upon and have room to spar.
- (a) EBCDA                      (b) CDEBA                      (c) CDBEA  
 (d) DCBEA                      (e) EBDAC
- 105.** A. Her husband was employed outside Rajasthan and she had chosen Barmer to provide a good education to her children.  
 B. In a rare case of migration from a city to a village, Teeja Lakhar shifted to Chokhla from Barmer city along with her two daughters last year.



- C. The British exploration company Cairn Energy PLC promised to pay her Rs 3 lakh per year for three years for rights to her land.
- D. She earns Rs 6,000 per month by selling water drawn by her tubewell to Cairn.
- E. She bought a diesel-run tubewell with the first installment and plans to grow at least one crop on her 40-acre plot.
- F. But Mangla near Barmer, since January last year the site of India's biggest oil discovery in 22 years, changed all that.

(a) CAEBFD (b) BAFECD (c) CABFED  
(d) BAFCEDE (e) BACFDE

**Direction (106-107):** Each statement has a part missing. Choose the best option from the four options given below the statement to make up the missing part.

106. Archaeologists believe that the pieces of red-ware pottery excavated recently near Bhavnagar \_\_\_\_\_ shed light on a hitherto dark 600-year period in the Harappan history of Gujarat.
- (a) estimated with a reasonable certainty as being about 3400 years old
- (b) are estimated reasonably certain to be about 3400 years old
- (c) estimated at about 3400 years old with reasonable certainty.
- (d) estimated with a reasonable certainty to be about 3400 years old
- (e) None of these
107. The ancient Egyptians believed \_\_\_\_\_ so that when these objects were magically reanimated through the correct rituals, they would be able to function effectively.
- (a) that it was essential that things they portrayed must have every relevant feature shown as clearly as possible.
- (b) it was essential for things they portray to have had every relevant feature shown as clearly as possible.
- (c) it was essential that the things they portrayed had every relevant feature shown as clearly as possible.
- (d) that when they portrayed things, it should have every relevant feature shown as clearly as possible.
- (e) None of these

**Direction (108-109):** After reading the passage, choose the best answer to each question. Answer all questions following a passage on the basis of what is stated or implied in that passage. A Marxist sociologist has argued that racism stems from the class struggle that is unique to the capitalist system — that racial prejudice is generated by capitalists as a means of

controlling workers. His thesis works relatively well when applied to discrimination against Blacks in the United States, but his definition of racial prejudice as “radically-based negative prejudgments against a group generally accepted as a race in any given region of ethnic competition,” can be interpreted as also including hostility toward such ethnic groups as the Chinese in California and the Jews in medieval Europe. However, since prejudice against these latter people was not inspired by capitalists, he has no reason that such antagonisms were not really based on race. He disposes thusly (albeit unconvincingly) of both the intolerance faced by Jews before the rise of capitalism and the early twentieth-century discrimination against Oriental people in California which inconveniently was instigated by workers.

108. According to the passage, the Marxist sociologist's chain of reasoning him to assert that prejudice toward Oriental people in California was
- (a) Non racial in character
- (b) Similar in origin to prejudice against the Jews.
- (c) Understood by oriental people as ethnic competition
- (d) Provoked by workers.
- (e) None of these
109. The passage supplies information that would answer which of the following questions.
- (a) What accounts for the prejudice against the Jews in Medieval Europe?
- (b) What conditions caused the discrimination against the oriental people in California in the early twentieth century?
- (c) Which groups are not in ethnic competition with each other in USA
- (d) What explanation did the Marxist sociologist give for the existence of the racial prejudice?
- (e) None of these

**Directions (110–111):** Which of the words/phrases (a), (b),

(c) and (d) given below should replace the words/phrases given in bold in the following sentences to make it meaningful and grammatically correct. If the sentence is correct as it is and 'No correction is required', mark (e) as the answer.

110. India has rarely witnessed a campaign **conformation** of the order witnessed in the last two phases of the poll. Mr. Modi spent three days in and around Varanasi alone, **endeavoring** to both retain the votes that **amassed** to him in his Lok Sabha constituency in 2014, and throw his voice longer in the election's home **empire**.
- (a) Onslaught, opting, emanated, demesne
- (b) Endeavour, eschewing, implored, territory
- (c) exertion, aspiring, beseeched, domain
- (d) blitz, seeking, accrued, stretch
- (e) No improvement

111. A **reassuring** explanation could be that with rising incomes, women have the opportunity to escape harsh labour in farms and on construction sites, and focus on their families. But a more pessimistic and **comprehensible** realistic explanation might be that with declining farm sizes, rising mechanisation, and consequently **inflating** labour demands in agriculture, women are being forced out of the **venture**.

- (a) invigorating, conceivable, aggravating, industries
- (b) pragmatic, perhaps, diminishing, camaraderie
- (c) heartening, possibly, dwindling, workforce
- (d) rational, plausible, plummeting, profession
- (e) No improvement

**Direction (112):** In the following questions, a related pair of words or phrases is followed by the five lettered pair of words or phrases. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

112. PERTINENT: RELEVANCE

- (a) OBSCURE INGENIOUS
- (b) INCOMPETENCE CREDULITY
- (c) PERSECUTION: IMBECILE
- (d) INANE: LUDICROUS
- (e) RENDEZVOUS : ASSIDUOUS

**Directions (113-115):** In each of the following questions, five options are given and you have to choose the one which has some or any grammatical error in it.

113. (a) A 25 basis points rate hike by the US Federal Reserve, which was already priced-in, plus a dovish stance augurs well for risk assets and for emerging markets.
- (b) Since the beginning of this year, as the dollar has weakened against the rupee, the benchmark Sensex has soared.
- (c) With Fed chair Janet Yellen being her usual dovish self, the market is now convinced it has the best of both worlds.
- (d) The key to risk appetite for emerging market assets such as Indian equities, therefore, lies in the strength of the dollar.

- (e) Rameshwaram informed me that he had gone to one of the Minister's residences and stayed there all night.

114. (a) The instances of theft and destruction of distributed renewable energy appliances has been very prevalent in programs especially run by aid agencies as part of corporate social responsibility or where the government provides a subsidy

- (b) When the first solar units were installed in Bhamana in 2010, most houses got a small photovoltaic panel connected to a battery that could power a light for five to six hours.

- (c) If any proof was needed to show that the United Nations have lately become a policy tool in the hands of the USA and that the world's sole might has a subservient international body, it was provided by President Bush's angry comment.

- (d) Before the floor test began, Rane told reporters that the delay caused by the Congress leadership in staking claim to form the government had demoralized the people of Goa.

- (e) Interestingly, while cricket still accounts for much of this, other sports are beginning to make their presence felt.

115. (a) The asset management firm was keen on investing in Sohan Lal and Co. because of its fully integrated and process-driven business model.

- (b) If we had Mohan in our team, we would have won the match against your team.

- (c) These products are expected to help cash-strapped developers get easier access to funds while also creating new investment avenues for institutional investors and high-net-worth individuals.

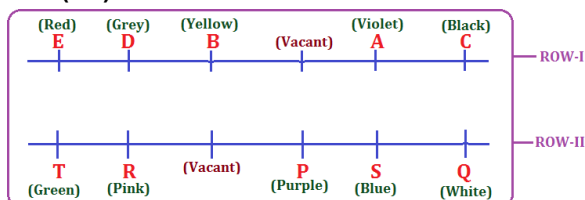
- (d) A broken solar panel is all that the 35-year-old farmer has to remind him of the government's promise to bring electricity to all of India's villages.

- (e) Many of the young people studying abroad agreed that returning home was always an attractive option.

# Solutions

## REASONING ABILITY

### Direction (1-5):



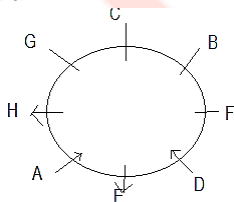
1. (d);
2. (b);
3. (a);
4. (d);
5. (e);
6. (d); The issue discussed in the statement is nowhere related to increase in unemployment, as the number of vacancies filled in will remain the same. Also, in a working place, it is the performance of the individual that matters and that makes him more or less wanted, and not his educational qualifications. So neither I nor II holds strong. Besides, the needs of a job are laid down in the desired qualifications for the job. So, recruitment of more qualified people cannot augment productivity. Thus IV also does not hold strong. However, it is the right of an individual to get the post for which he fulfils the eligibility criteria whatever be his extra merits. Hence, argument III holds strong.
7. (c) All the options may be the probable reasons except option IV because the reason in that option is contradictory to the statement. We Indians are matured enough to permit such exploratory things threatening national security. So, this must not be a probable reason.

### Direction (8-12):

8. (c) Both I and II is required to answer the question

PERSON	SUBJECTS
A	English
E/C	Banking
B	Reasoning
D	Computer
C/E	Quant
F	General Awareness

9. (a) Neither I nor II is sufficient to answer the question.
10. (c) Both the statements are required to answer the question. Two persons are sitting between A and C.



11. (d); Only Statement I is sufficient to answer the question.
12. (c); From I:  $R, U > Q$  and  $S > P > T$  From II:  $U > Q$  and  $Q > P > R$   
By combining both  $S > U > P > R > Q > T$
13. (d); The time period of insurance scheme of Company X has not been mentioned in the statement. It may also be for 10 years and above 10 years. And we cannot compare the cost of Company X and Y because its mentioning is nowhere in the passage. So, (i) and (ii) are not the reasons behind the decision of the owner. But it is quite clear that Company Y has provided guarantee scheme for more period of time than that of Company X. So (iii) is the only reason behind the owner's decision.
14. (e); If repo rate goes down, loan rates will go down. In turn, the value of rupee will strengthen against other currencies. Consumer Price Index (CPI) measures changes in the price level of a market basket of consumer goods and services purchased by households; hence it should be jumped from its previous rates. Reduction in global crude prices also plays an important role for the rate cuts by RBI. So, none of the options negates the above steps taken by the RBI.

### Direction (15-17):

15. (c); After analyzing DFD, we can determine that after taking permission from people of society, Builder should have taken legal permission from concerned authority for renovation work.
16. (c); Data is insufficient to answer.
17. (b); For renovation, Builders should take legal permission from concerned authority for renovation.
18. (c); In option (C) it is mentioned that X is female without which the given information may be completed because relaxation of age doesn't required here (the condition of age is already satisfied in option (A)). So option (C) will be placed at last position.

### Direction (19-21): Visual — T86 For — L23

Effects — K93

19. (c); the code of 'eye' can be M18 or N27. So option (iii) and (iv) can be the correct answer.
20. (b); the code for 'development' can be A10, H32 or Y16 so the (b) can be the correct answer.
21. (d); the code for 'detachment' can be G14 or S21 so (d) option is the correct answer as both code are present in all other options.

**Direction (22-26):**

Person	Post	City
P	CEO	Patna
Q	ED	Bhopal
R	CGM	Mumbai
T	GM	Jaipur
V	DGM	Ranchi
S	MG	Chandigarh
U	AM	Agra

22. (b);

23. (d);

24. (a);

25. (d);

26. (d);

**Direction (27-31):**

27. (b); Even number is followed by an odd prime number so

$$= 4 + 5 = 9$$

Then 1 row - 9 2

Odd number is followed by an even number so  $= 9 \times 2 = 18$  (sum of first row)

In row 2 Odd number is followed by a perfect square so  $= 13 - 9 = 4$

Then 2 row - 4 3

Even number is followed by an odd prime number so

$$= 4 + 3 = 7 \text{ (sum of second row)}$$

So the resultant of both row  $= 18 + 7 = 25$

28. (a); Odd number is followed by a perfect square so  $= 11 - 9 = 2$ , the row is 2 7

Even number is followed by an odd prime number so

$$= 2 + 7 = 9 \text{ (sum of first row)} = X \text{ The second row is}$$

17 9 3

Odd number is followed by a perfect square so  $= 17 - 9 = 8$

$$9 = 8$$

Even number is followed by an odd prime number so

$$= 8 + 3 = 11$$

29. (b); Even number is followed by a nonprime odd number so  $= 18 - 15 = 3$

The row is 3 6

Odd number is followed by an even number so  $= 3 \times 6$

$$= 18 \text{ (sum of 1 row)}$$

Even number is followed by an odd number (prime) so  $= 8 + 3 = 11$

The sum of the rows is 20 so the sum of second row  $= 20 - 18 = 2$

When  $X = 9$ , then the second row is 11 9

Odd number is followed by a perfect square so  $11 - 9 = 2$  so this condition can satisfy only when  $X = 9$ .

30. (d); Odd number is followed by a perfect square so  $= 5 - 4 = 1$

Odd number is followed by an odd number so  $= 1 + 15 = 16 \text{ (sum of row)}$

Odd number is followed by a perfect square so  $= 21 - 16 = 5$

Odd number is followed by a perfect square so  $= 5 - 4$

$$= 1 \text{ (sum of row 2)}$$

So the difference is  $= 16 - 1 = 15$

31. (b); In second row, Odd number is followed by a perfect square so  $= 43 - 36 = 7$

Odd number is followed by an even number so  $= 7 \times 2$

$$= 14 \text{ (sum of second row)} = X \text{ First row is } 14$$

$$5 \quad 16$$

Even number is followed by a prime odd number so

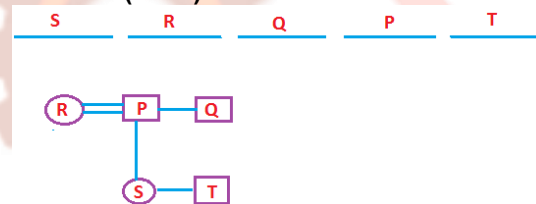
$$= 14 + 5 = 19$$

Odd number is followed by a perfect square so  $= 19 - 16 = 3 \text{ (sum of first row)}$

So the resultant is  $14 + 3 = 17$

32. (c); In option (A) Mohit got only 82% in written test but criteria is 85% in written test and in Option (D) also he got only mean percentage of 28% in Group discussion and Physiological test rounds and criteria is 30% in both rounds. So Only (A) and (D) option are follow.

**Direction (33-35):**



33. (b);

34. (a);

35. (c);

**Direction (36-37):**

36. (c); Only in this case  $P < R \geq Q = M \leq N \leq L$ ,  $P \geq Q$  and  $M < L$  are definitely false. In the other options they are definitely true.

37. (b);  $F = G \leq E < J > I = H$

Conclusion  $H < I > G$  and  $E \geq F$  definitely true only

when the symbol  $\odot$  is placed in the blank.

38. (e); Clearly, illiterate people lack will power and maturity in thoughts. They may easily be misled into false convictions or lured into temptations to vote for a particular group. So, argument II holds. However, a person is literate does not mean that he is conscious of all political movements, which requires practical awareness of everyday events. Thus, I also holds strong. Besides, Constitution has extended the right to vote equally to all its citizens. Hence, III also holds.

39. (d); All the points in the options promote green initiatives except auditing of water consumption as it is an examination of system records and equipment that may be used to identify, quantify and verify how much water passes through the system and where it goes.



**Direction (40-42):** The machine rearranges one number and one word in each step. Words are arranged in an alphabetical order whereas numbers are arranged in an order of decreasing order and there is an addition of two in every even numbers and subtraction of two in every odd numbers. In first step, firstly there is an arrangement of number and then alphabet. In second step, firstly there is an arrangement of alphabet and then number and so on. And there is replacement of last digit of alphabets with 'ish' after rearrangement.

**Input:** 22 39 since 12 growth sector 76 future demand 25

**Step I:** 78 demanish 22 39 since 12 growth sector future 25

**Step II:** futurish 37 78 demanish 22 since 12 growth sector 25

**Step III:** 23 growth futurish 37 78 demanish 22 since 12 sector

**Step IV:** sectoish 24 23 growthish futurish 37 78 demanish since 12

**Step V:** 14 sincish sectoish 24 23 growthish futurish 37 78 demanish

## QUANTITATIVE APTITUDE

**Solutions (46-47):** Let no. of red balls = R No. of blue balls = B

Probability of selecting red ball =  $\frac{R}{R+B} = \frac{1}{7}$

$R = B + 6 \dots (I)$

Probability of selecting blue ball =

$5B = 2R + 12 \dots (II)$

Solving (I) & (II)  $B = 8, R = 14$ , Total number of balls  
 $= 6 + 14 + 8 = 28$  balls

**46. (a);** Favourable numbered balls  
 $= 3, 6, 7, 9, 12, 14, 15, 18, 21, 24, 27, 28$

Required probability =

$$\frac{12}{28} = \frac{3}{7}$$

**47. (d);** Total number of balls =  $6 + 14 + 8 = 28$  balls **Solutions (48-50):**

**48. (a);** Radius of circle =  $\frac{44}{2} = 22$  cm

Quantity I — Area of shaded region =  $\frac{1}{2} \times (7)^2 -$

$$\frac{1}{2} \times \frac{1}{2} \times 14 \times 14 = 28 \text{ cm}^2$$

Quantity II =  $22 \times \frac{1}{2} \times 22$   
 Quantity I > quantity II

**49. (b);** as  $Y < 0$ , so quantity I will always be less than zero.

**50. (c);** Let Speed of boat in still water and speed of current  
 $= 6x$  and  $x$

$$2(6x + x) - 2(6x - x) = 8, x = 2$$

quantity I, speed of boat in still water = 12 km/h Quantity II, speed of cyclist = 14 km/h

Quantity I < quantity II

**40. (e);**

**41. (e);**

**42. (d);**

**43. (b);** 'Short-term loans' refer to the loans scheduled to be repaid in less than a year. When your business does not qualify for a line of credit from a bank, you might still have success in obtaining money from then in the form of a one-time, short-term loan (less than a year) to finance your temporary working capital needs.

**44. (c);** it is clearly mention that Google has agreed that Nest's privacy policies are going to be well- respected instead of any terms and conditions.

**45. (c);** The statement talks about cleaning the Indian politics from criminalization be considered choice (b) can not be considered as nothing related to selection of best people from constituency is mentioned in the statement.

**Solutions (51-55):**

**51. (e);** Let cost price of P =  $\square$   
 And cost price of R =  $\square$

$$SP \text{ of P} = 2 \square \times \frac{6}{10} = 12 \square$$

$$SP \text{ of R} = 16 \times \frac{3}{10} = 048 \square$$

$$\text{Required percent} = \frac{(12 \square - 048 \square)}{048 \square} = 150\%$$

**52. (a);** Let CP of R = 100

$$MP = 160$$

$$SP = \frac{3}{4} \times 160 = 48$$

$$\text{Loss} = \frac{52}{100} \times 100 = 52\%$$

$$\text{If CP} = 100 \times \frac{110}{100} = 110$$

$$\text{Then loss} = \frac{62}{110} \times 100 = 56.36\%$$

$$\text{Increase in loss} = 4.36\%$$

**53. (a);** Let SP of Q =  $x$  = SP of T And CP of Q

$$= a$$

$$CP \text{ of T} = b$$

$$14 Q \times \frac{70}{100} = 22 \square \times \frac{40}{100}$$

$$T : Q = 49 : 44$$

**54. (c);** SP of P =  $\frac{200}{100} \times \square \times \frac{60}{100} = 12 \square$  (P = cost price)

$$\text{Profit percentage of P} = 20\%$$

$$\text{Profit percentage of Q} = -2\% \text{ (loss) Of R} = -52\% \text{ (loss)}$$

$$\text{Of S} = -40\% \text{ (loss) Of T} =$$

$$-12\% \text{ (loss)}$$

So R has the highest loss percentage

55. (e); If MP is some, then the item whose marked up % with respect to CP is lowest, will have highest CP.  
So the item with 2<sup>nd</sup> highest CP is the item with second lowest marked up % with respect to CP i.e. Q

#### Solutions (56-60):

56. (d); Let no. of tourist in 4<sup>th</sup> quarter =  $\square$   
No. of tourist in 3<sup>rd</sup> quarter =  $\frac{30}{100} \times 3000 = 900$   
 $\frac{900}{3000 + \square} \times 100 = 25, \square = 600$
57. (a); International tourist in IInd quarter =  $\frac{25}{100} \times 1800 = 450$   
International tourist in 4<sup>th</sup> quarter = 600  
Required percent =  $\frac{600}{2400} \times 100 = 25\%$
58. (c); required percent =  $\frac{58\% \times 3000}{65\% \times 1800} \times 100 = 148.7 \approx 149\%$
59. (d); Required percent =  $\frac{(1050 - 630)}{630} \times 100 = 66.67\%$
60. (c); total no. of international tourist =  $\frac{125}{100} \times 1800 = 2250$   
No. of international tourist of 1st quarter =  $\frac{9}{7} \times 630 = 810$   
Required percentage =  $\frac{810}{2250} \times 100 = 36\%$

#### Solutions (61-62):

61. (e); Let the expenses are 500, 400 and 300 respectively  
Money saved =  $\frac{15}{100} \times 500 + \frac{25}{100} \times 400 + \frac{30}{100} \times 300 = 250$   
Actual amount saved = Rs 17500  
So total amount =  $17500 + 250 = \text{Rs } 17750$   
Accommodation expense =  $\frac{400}{1200} \times 17750 = \text{Rs } 5916.67$
62. (b); 252000

#### Solutions (63-67):

63. (a); No. of students from college R who attended at most 3 seminars =  $11400 \times \frac{74}{100} = 8436$   
 $\therefore$  Required students =  $\frac{8436}{57} \times 25 = 3700$
64. (d); Let total no. of students from college T = 100  
Total no. of students from college P =  $\frac{20}{100} \times 100 = 20$   
 $\therefore$  Required % =  $\frac{7}{100} \times 100 = 7\%$
65. (e); Total no. of students from college P =  $\frac{15}{100} \times 100 = 15$   
Total no. of students from college S =  $\frac{(64+14)}{12} \times 100 = 650$   
Required % =  $\frac{481-208}{481} \times 100 = 56.75 \approx 57\%$

66. (c); Total no. of students from college T =  $\frac{22}{100} \times 100 = 22$   
Total no. of students from college R =  $\frac{60}{100} \times 275 = 165$   
Required No. of students =  $165 \times 2 = 33$

67. (c); 1 seminar =  $\frac{9x}{5x}$  2 seminar =  $\frac{2x}{4x}$   
 $5x = 35, x = 7$   
So no. of persons attending 1 seminar = 63  
So no. of persons attending 2 seminar = 28  
Required no. of students =  $(63 + 28) \times \frac{66}{26} = 26$

#### Solutions (68-72):

68. (e); Let total salary in 2002 =  $\square$   
Total salary in 2005 =  $\square$   
 $\frac{42\% \square}{30\% \square} = \frac{7}{5}$   
 $\square = \frac{7}{5} \times \frac{30}{42} \times \square$   
Ratio of EMI expenses =  $\frac{0.40 \square}{0.35 \square} = \frac{7}{5} \times \frac{30}{42} \times \frac{8}{5} = 8 : 7$
69. (b); Saving in 2004 =  $\frac{58}{100} \times 175000 = \text{Rs } 101500$   
Saving in 2002 =  $\frac{3}{5} \times 101500 = \text{Rs } 60900$   
Transport expenditure in 2002 =  $\frac{18}{42} \times 60900 = \text{Rs } 26100$
70. (a); Let salary in 2003 = 100  
Salary in 2005 =  $\frac{200}{100} \times \frac{200}{100} \times 100 = 400$   
Expenses on transport in 2003 = 50  
Required ratio =  $\frac{400}{50} = 8 : 1$
71. (d); EMI expenses : saving in 2002 =  $\frac{40}{42}$ , and it is the 3<sup>rd</sup> highest
72. (a); Required average =  $\frac{40+18+50+17+35}{5} = 32\%$

#### Solutions (73-75):

73. (e);  $\square = \frac{3}{1} \times \frac{12}{15} = \frac{12}{5}$   
 $\therefore 24 \times \square \times 12 = 32 \times 5(\square + 8)$   
 $288 \square = 160 \square + 160 \times 8$   
 $128 \square = 160 \times 8 \Rightarrow \square = 10$
74. (c); M  $\rightarrow$  240 days  
W  $\rightarrow 32 \times 18 = 576$  days  
Remaining work after 6 days =  $1 - 6(\frac{10}{24} + \frac{24}{576})$   
 $= 1 - 6(\frac{1}{24} + \frac{1}{24})$   
 $= 1 - \frac{6}{12}$   
 $= 1 - \frac{1}{2}$   
 $\therefore$  Boy  $\frac{1}{2}$   
 $\rightarrow 2 \times 18 \times 18 \rightarrow 648$  days  
 $\therefore$  Required No. of days =  $\frac{648}{12} = 54$  days
75. (e); Required difference =  $576 - 240 = 336$  days

### Solutions (76-80):

76. (a); From A,  $M : W = 3 : 1$

From C,  $W \rightarrow 14 \times \frac{3}{2} = 21\frac{1}{2}$  days,  $M=7$  days, so question can be answered from A and C

77. (b); From I, Total profit = 54000 Time = 1 year

From II, we will get the ratio of their investment = 3 : 4 : 2

From III, profit of V = profit of A + 4000

$$4\Box = 2\Box + 4000$$

$$2\Box = 4000$$

$$\Box = 2000$$

From II and either I or III we can get the share of R.

78. (b); Let distance =  $\Box$

Speed in still water =  $\Box$

Speed of current =  $\Box$

$$\therefore \frac{\Box}{\Box} = 2$$

From A,  $\Box$  given

$$B. \frac{\Box}{\Box + \Box} = \text{given}$$

C,  $\Box =$  given, so upstream speed can be calculated by using any 2 of the 3 statements

79. (d); From I,  $\ell : \Box = 3 : 2$

From II, length = 48 m

Cost of flooring = 850 per sq m

$$\therefore \ell = 48 \text{ m}$$

$$\Box = 32 \text{ m}$$

$$\text{Area} = 48 \times 32$$

Required price =  $48 \times 32 \times 850$  Rs From III, perimeter = 160

$$\text{Length} = 3 \times 16 = 48 \text{ m}$$

$$\text{Breadth} = 16 \times 2 = 32 \text{ m}$$

$$\therefore \text{Required cost} = 48 \times 32 \times 850 \text{ Rs}$$

$\therefore$  we can get the cost of flooring a rectangular hall any of the two statements.

80. (d); Let the required number =  $10\Box + \Box$

$$\text{From I} = \Box^2 + \Box^2 = 26$$

$$\text{From II} (10\Box + \Box)(\Box + \Box) = 5 : 2$$

$$\text{From III} \frac{\Box}{\Box} = \frac{4}{\Box} \quad \Box - 4$$

We can get the value of  $\Box$  and  $\Box$  with the help of any of the two statements.

## ENGLISH LANGUAGE

81. (c); The entire passage simply elaborates the thoughts introduced in the first two sentences of the passage. Hence statement (c) is the main idea of the passage. Option (b) is incorrect which can be inferred from the first few lines of the 3<sup>rd</sup> paragraph of the passage. "Eusocial insect societies exhibit social organization based on rigid caste system. On the other hand, In naked mole rat societies differences in behavior are related to reproductive status, body size and age" Option (d): The mating habits of naked mole rats are similar to wild dog, *Lycaon pictus*. Option (e): In naked mole rat colonies subordinate females are not sexually active and many never breed unlike eusocial insects.

82. (b); The rate of growth depends not on age but length of time spent in work. Refer to the last few lines of the 3<sup>rd</sup> paragraph of the passage "Jarvis' work has suggested its age". Hence statement (b) is true in context of the passage.

83. (b); It is not actually shape but size that creates the difference in performance of tasks in naked mole rat colonies and in eusocial insect societies.  
Option (a): In naked mole rat colonies, all tasks are not performed cooperatively as these vertebrates are dominated by a single breeding female.  
Option (c): In naked mole rat colonies, breeding is limited to its queen (single female).  
Option (d): In eusocial insect societies, reproduction is limited to the largest animals.

Option (e): In eusocial insect societies, the distribution of tasks is based on body shape not body size.

84. (d); The second last sentence suggests a similarity between naked mole rats and *Lycaon pictus* in view of their breeding pattern in which breeding is limited to a single female and not cooperative. Hence option (d) is true in context of the passage.

85. (a); Option (a) is correct as naked mole rats are very altruistic in their nature which can be inferred from the 1<sup>st</sup> paragraph of the passage, "Until recently, scientists did not know of a close vertebrate .....survive and reproduce, for the good of others".

86. (c); Suppress means inhibit or forcibly put an end to. Hence it is most similar in meaning to Subdue. Ostracize means exclude from society. Proscribe means forbid. Relicent means reserved.

87. (d); Subordinate means junior or lower in position and is most similar in meaning to adjutant which means a military officer who acts as an administrative assistant to a senior officer. Indigent means poor/need. Appendage, Adjunct means addition or attachment. Patron means contributor or sponsor.

88. (c); Pronounce means declare or announce in a formal or solemn way which is opposite to enshroud. Enunciate and Adjudicate are synonyms of it. Opine means hold and state as one's opinion. Interpose means place or insert one thing and another.

89. (a); The passage is concerned with the topic 'déjà vu' that is difficult to study as it produces no measurable external behaviors. Hence statement (a) is true. The passage is not concerned with the strengths and weaknesses of any concept as mentioned in option (c).
90. (c); Option (a), (b), (d) and (e) are not true as the definition of the concept theory or paradox is not mentioned, instead an example of the concept (Hawthorne) is given. Here from the passage, it can be stated that Hawthorne's example has been set in the discussion of déjà vu. Hence statement (c) is relevant.
91. (d); Option (a) is not true as social nature of the term attracted the interests. Statement (d) is the correct choice.  
Refer to the lines "The phenomenon seems.....external behaviors". Hence option (d) is true in context of the passage.
92. (c); Refer to the lines "the fleeting melancholy.....occurrences of many strips". Other options are irrelevant to the passage.  
Option (a) is not true as academic psychologists have ignored the topic rather than using it.  
Option (b) is not true as according to the passage, the scientific study of déjà vu is difficult to study.  
Déjà vu have attracted the interest of poets, novelists, hence it is not an exact science as mentioned in option (d).  
option (e) is not true as definite definition is not mentioned in the passage.
93. (e); Perplexed means puzzled or completely baffled. Hence it is similar in meaning to confound which means to cause surprise or confusion in (someone), especially by not according with their expectations. Rattled means making worried, nervous.
94. (a); Ephemeral means lasting for a very short time. Hence it has same meaning as transient. Elusive means difficult to find, remember. Indiscernible means unnoticeable.
95. (a); Cognition means perception. Hence it is most opposite in meaning to incomprehension. Percipience means perception, hence similar to cognition.
96. (d); Option (d) is correct as it is making the argument in the previous sentence even more stronger by giving an evidence of how public cleansing is far from over and the action against the prominent figures is just one of the phase as the sentence talks about the capacity of the judicial authority.
97. (e); Option (e) is correct and is in harmony with the theme of the passage as in the passage/ paragraph we are talking about the court's decision and why it is controversial. Option (e) points out how the decision is only a half-measure and the incompetence of the court in taking a full measure is what that makes it controversial.
98. (c); Option (c) is giving emphasis upon the stagnancy of many issues even after Modi's promises and the sentence after the blank completely justifies it by giving one more examples of one such issue.
99. (a); Option (a) fits the paragraph/ passage most appropriately and is in complete harmony with the theme of the passage. Other options are out of context and are irrelevant.
100. (b); The passage/ paragraph is talking about how ignorant our government has been in catering to the needs of the refugees and how the proposed bill is not secular as it is giving preference to the Hindu refugees. The last line of the question which is not the concluding line is talking about the pathetic condition of the poor and option (b) is continuing with the theme of the passage as it is criticizing the government's effort in making this issue a communal one.
101. (e); The options other than (e) are forming a coherent paragraph with their sequence being adbc. Option (e) is out of context as the theme of the passage is how there has been a sourness in the relationship between China and South Korea lately and what caused it. While other options are in perfect sequence, the idea in option (e) is not resonating with the central theme of the paragraph/ passage.
102. (b); Option (b) is not a part of the coherent paragraph as it explains the unexpectedly high failure rates of organizations while other options with their sequence being adbc are part of one coherent paragraph as they are talking about the issue.
103. (c); Option (c) is correct and is not a part of the coherent paragraph as it puts more emphasis on the suggestions made by report. Other option talks about the comparison of the stances of India and USA toward WTO.
104. (c); As the paragraph describes an incredibly beautiful place, the 3rd sentence is the opener. The 4th sentence compares it with the Garden of Eden. The second sentence describes the 'thrill' and compares it with a military band. The 5th sentence takes the metaphor further to compare the promenade and stone steps with the armies parading. The 1st sentence concludes that people in the area complete the 'perfection' it could have lacked. Therefore CDBEA is the answer.
105. (d); BAFCD is the correct sequence.
106. (d); Option (d) fits into the blank. In option (a) the usage of the indefinite article is erroneous. Options (b) and (c) are erroneous due to the incorrect ordering of words.



107. (d); The tense in options (a) and (b) is not consistent. Moreover, option (a) uses both 'essential' and 'must', thus rendering either one of these words redundant. In option (d) 'things' the plural form cannot take 'it'. Hence option (d) is the answer.
108. (a); In last line of the passage, the tone of author is such that this theory is not able to explain the occurrence of racial discrimination in other communities such as Jews and Chinese, therefore options (b), (c) and (d) are out of the question. Hence the answer is option (a).
109. (d); The answer is option (d), which would answer the information in the passage as the explanation of racism is given in the 1st line of the passage. All other options are sub-parts of the passage which the author has talked about. Hence the answer is option (d).
110. (d); **Blitz** means a sudden concerted effort to deal with something.  
**Seeking** means attempt or desire to obtain or achieve (something).  
**Accrued** means (of a benefit or sum of money) be received by someone in regular or increasing amounts over time.

**Stretch** means to extend or spread over an area or period of time.

111. (c); **Workforce** means the people engaged in or available for work, either in a country or area or in a particular firm or industry.  
**Dwindling** means to diminish gradually in size, amount or strength.  
**heartening** means to make more cheerful or confident.  
**venture** means to undertake a risky or daring journey or course of action.
112. (d); Pertinent means relevant or applicable to a particular matter, apposite hence is the synonym of relevance. Only Inane and ludicrous are the synonyms and have the same relationship hence option (d) is the correct choice for the given question.
113. (e); Use "the residence of one of the ministers" in place of "one of the Minister's residences".
114. (c); Use 'has' in place of 'have'.
115. (b); Use 'we had had mohan'

