

# CET 2016

Number	Section	Area	Questions	Level
Section 1	Logic	Verbal Reasoning	17	Medium – Difficult
	Logic	LR Arrangement	29	Medium – Difficult
	Logic	LR Traditional	29	Medium – Difficult
Section 2	Quant & DI	DI DS	34	Medium: Calculations
	Quant & DI	Quant	16	Medium – Difficult
Section 3	Verbal	Verbal	50	Easy and Doable
Section 4	Visual Reasoning	Visual Reasoning	25	Easy to Medium
		<b>Grand Total</b>	<b>200</b>	<b>Medium Level but Lengthy</b>

<b>Reasoning</b>		<b>My Prep</b>
<b>Verbal Reasoning</b>		
Critical Reasoning	8	
Syllogisms/ Deductions	7	
Cause & effect	1	
Strong/Weak Arguments	1	
<b>LR Arrangement</b>		
Matrix Arrangement	12	
Linear Arrangement	12	
Circular Arrangement	5	
<b>LR Traditional</b>		
Symbols	7	
Sequential Output	5	
Coding-Decoding	5	
Data Sufficiency LR	5	
Directions	4	
Blood Relations	3	
<b>Total</b>	<b>75</b>	

<b>Visual Reasoning</b>		<b>My Prep</b>
Series	20	
Analogy	5	
<b>Total</b>	<b>25</b>	

<b>Quant and DI</b>		<b>My Prep</b>
<b>DI DS DC</b>		
Caselet	7	
Line Graph	7	
Table and Pie	5	
Quantitative Comparison	5	
Data Sufficiency	5	
Pie Chart	5	
<b>Quant</b>		
Arithmetic	7	
Number series	5	
PnC and Prob	2	
Equations	1	
Geometry	1	
<b>Total</b>	<b>50</b>	

<b>Verbal</b>		<b>My Prep</b>
Cloze Tests	10	
RC - Passages	10	
Possible starters	5	
Synonyms / Antonyms	5	
Sentence Correction	5	
InCoherent sentences	5	
Wrong usage/ spelling	5	
Para Jumble	5	
<b>Total</b>	<b>50</b>	

**Logical Reasoning 75 questions**

Directions: Seven people, namely M, N, O, P, Q, R and S will be attending seven different meetings in seven different cities namely, Mumbai, Delhi, Pune, Surat, Chennai, Baroda and Kolkata, not necessarily in the same order, from Monday to Sunday (of the same week). And also likes different colors red, white, pink, yellow, green, black, and blue color and not necessarily in the same order.

Q will attend a meeting on Thursday and like yellow color. Only two people will attend a meeting between Q and the one who will attend a meeting in Chennai. P will attend a meeting immediately before N. P will attend a meeting on one of the days before Q. P will neither attend a meeting in Chennai or black color. S like green color. Only two people will attend a meeting between P and the one who will attend a meeting in Pune. Only one person will attend a meeting between Q and the one who will attend the meeting in Kolkata. Neither P nor N will attend a meeting in Kolkata or pink. M will attend the meeting immediately before the one who will attend the meeting in Baroda. One who attend the meeting Baroda not like red color. P does not like red color. The who attend the meeting Kolkata likes pink color. Only three people will attend a meeting between S and O. S will attend a meeting before O and O like's blue color. P will neither attend a meeting in Mumbai nor in Surat. Q will not attend a meeting in Mumbai.

1. In which of the following Cities will N attend a meeting?

- 1) Baroda 2) Mumbai 3) Chennai 4) Delhi 5) None

2. On which of the following days will S attend a meeting?

- 1) Wednesday 2) Friday 3) Tuesday 4) Monday 5) Saturday

3. Which of the following pairs represent those who will participate immediately before and immediately after Q?

- 1) S, R 2) None 3) S, M 4) N, O 5) N, R

4. As per the given arrangement P is related to Friday and Q is related to Sunday in a certain way. To which of the following is S related to in the same Way?

- 1) Tuesday 2) Wednesday 3) Saturday 4) Monday 5) None

5. In which of the following colors will R like?

- 1) Black 2) Pink . 3) Yellow 4) Green 5) None

Directions: In each question below are two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. Give answer

- 1) If only conclusion I follows.  
2) If only conclusion II follows.  
3) If either conclusion I or conclusion II follows.  
4) If neither conclusion I nor conclusion II follows.  
5) If both conclusion I and conclusion II follow.

Statements:

All buildings are houses.

No house is an apartment.

All apartments are flats.

- I. No flat is a house.  
II. No building is an apartment.

6. Conclusions:

- I. All buildings being flats is a possibility.  
II. All apartments being building is a possibility.

Statements:

Some oceans are seas.  
All oceans are rivers.  
No river is a canal.

7. Conclusions:

- I. All rivers can never be oceans.  
II. All canals being oceans is a possibility.

8. Conclusions:

- I. No ocean is a canal.  
II. At least some seas are rivers.

9. Statements:

All beans are pulses.  
All pulses are crops.  
No crop is seed.

Conclusions:

- I. All crops are pulses.  
II. All beans are crops.  
1) Only conclusion II follows.  
2) Neither conclusion I nor conclusion II follows  
3) Either conclusion I or conclusion II follows  
4) Only conclusion I follow.  
5) Both conclusion I and conclusion II follows.

10. Statements:

No fruit is vegetable.  
All potatoes are vegetables.  
Some fruits are apples.

Conclusions:

- I. Some apples are potatoes.  
II. Some potatoes being fruits is a possibility.  
1) Both conclusion I and conclusion II follows.  
2) Only conclusion II follows.  
3) Either conclusion I or conclusion II follows.  
4) Only conclusion I follow.  
5) Neither conclusion I nor conclusion II follows.

11. Statements:

All books are journals.  
All diaries are journals.

**Conclusions:**

- I. All journals are books.
  - II. Some diaries being books is a possibility.
- 1) Either conclusion I or conclusion II follows.
  - 2) Only conclusion I follow.
  - 3) Both conclusion I and conclusion II follows.
  - 4) Neither conclusion I nor conclusion II follows.
  - 5) Only conclusion II follows

Directions: Read the following statements carefully and answer the given question.

12. Cocoa and chocolate products have been used as medicine in many cultures for centuries. Chocolate is made from plants, which means it contains many of the health benefits of leafy vegetables.

Which of the following statements weakens the above argument?

- (A) Dark chocolate contains a large number of antioxidants which slow down the ageing process.
- (B) A small study revealed that regular intake of chocolate increases insulin sensitivity, thus lowering the chances of diabetes.
- (C) Green leafy vegetables have substances which protect skin from UV rays.
- (D) Chocolates have three types of fats, one of which increases the cholesterol level.
- (E) Cocoa increases blood flow to the retina, thus giving a boost to vision.

- (1) Only D
- (2) Only A and E
- (3) Only C
- (4) None of the given statements
- (5) Both C and D

Directions: Study the following information to answer the given questions:

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

Input: age road own wire tire ink pen uni dice eat

Step I: uni age road own wire tire ink pen eat dice

Step II: uni own age road wire tire ink eat pen dice

Step III: uni own ink age wire tire eat road pen dice

Step IV: uni own ink eat age wire tire road pen dice

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

**Input for the questions: gem stat ace cast omit fan rate uncut era input**

13. Which of the following would be the final arrangement?

- 1) cast gem fan rate stat uncut omit input era ace
- 2) uncut omit input era ace cast fan gem rate stat
- 3) uncut omit input era ace stat rate gem fan cast
- 4) uncut omit input era ace stat fan gem rate cast
- 5) None of these

14. In step III, which of the following words would be at 6th position from the left?

- 1) rate 2) ace 3) stat 4) gem 5) None of these

15. Which step number would be the following output?

uncut omit gem stat ace rate era input fan cast

- 1) II 2) III 3) V 4) IV 5) None of these

16. In step IV of the rearrangement, if omit is related to era and rate is related to fan in a certain way, which of the following would ace be related to, following the same pattern?

- 1) rate 2) input 3) stat 4) gem 5) None of these

17. Which of the following would be step VII?

1) uncut omit input era ace stat rate gem fan cast

2) uncut omit input era ace rate stat fan gem cast

3) uncut omit input era ace cast fan gem rate stat

4) uncut omit input era stat ace rate gem fan cast

5) There will be no such step as the input gets rearranged before step VII.

Direction: Study the following information carefully and answer the questions given below:

A, B, C, D, E, F, G and H are eight friends travelling in three different cars, viz X, Y and Z, with at least two in one car to three different places, viz. Delhi, Chandigarh and Agra.

There is at least one female member in each car. D is travelling with G to Delhi but not in car Y. A is travelling with only H in car Z but not to Chandigarh. C is not travelling with either D or E. F and D are studying in the same only girls' college. H, B and G are studying in the same only boys' college.

18. Which of the following represents the group of females?

- 1) F, C, A                  2) F, G, A                  3) D, C, A                  4) Data inadequate 5) None of these

19. Which of the following combinations is correct?

- 1) Delhi – X – C                  2) Chandigarh – X – F                  3) Agra – Z – E 4) Delhi – Y – E 5) None of these

20. Which of the following cars is carrying four people?

- 1) Either X or Z                  2) Y                  3) Either X or Y 4) Z                  5) None of these

21. In which of the following cars is C travelling?

- 1) X                  2) Y                  3) Z                  4) Either X or Y 5) Data inadequate

22. Which of the following cars is carrying people to Chandigarh?

- 1) Y                  2) X                  3) Either X or Y 4) Data inadequate 5) None of these

Read the given information carefully and answer the question:

"People do not prefer working in private organisations today as private organisations do not provide any kind of job security." -Statement by a citizen of Country A.

23. Which of the following negates the statement made by the citizen?

(1) Some private companies in country A are very good paymasters and pay their employees well as long as their employees have good performance.

(2) Many private organisations expect employees to work for them in order to ensure that the work is compared with others.

(3) Private companies can take the liberty of firing employees based on their performance.

(4) It has been noticed recently that private organisations take a lot of effort to retain their employees to get benefit from their experience.

(5) Some private organisations prefer recruiting fresh graduates to extract more work in comparatively lesser pay.

24. During peak hours the local trains of city M are chaotic. Generally, peak hours are a specific time period in the morning when everyone goes to work and in the evening when people return. Some people feel that the state government has not taken any measures in the past two years to deal with the situation.

Which of the following weakens the perceptions of the people?

- (1) In the past one year the state government has increased the frequency of trains in peak hours and has also increased the number of passengers per train.
- (2) In the past two years the state government has received many petitions signed by the locals of city M travelling by trains, suggesting that much improvement is required in the current condition of the trains.
- (3) The first-class passengers of the local trains feel that their plight is worse than that of the second-class passengers in the trains.
- (4) As the population of the city is ever increasing due to high rate of migration and better job opportunity, there is a surge in the number of people travelling by trains.
- (5) A passenger has given a statement that 20 years ago it was possible to get inside the train.

Directions: Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and

Give answer 1) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

Give answer 2) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.

Give answer 3) if the data either in statement I alone or in statement II alone are sufficient to answer the question.

Give answer 4) if the data even in both the statements I and II together are not sufficient to answer the question.

Give answer 5) if the data in both the statements I and II together are necessary to answer the question.

25. How many students are there between Suresh and Mohan in a row of 50 students?

- I. Suresh is twelfth from the left end and Mohan is seventeenth from the right end.
- II. Suresh is six places away from Jayesh, who is twentieth from the left end.

26. What does ‘\$’ mean in a code language?

- I. ‘5\$#3’ means ‘flowers are really good’.
- II. ‘7#35’ means ‘good flowers are available’.

27. How is P related to J?

- I. M is the brother of P and T is the sister of P.
- II. P’s mother is married to J’s husband, who has one son and two daughters.

28. How is ‘never’ written in code language?

- I. ‘never ever go there’ is written as ‘na ja ni ho’ in that code language.
- II. ‘go there and come back’ is written as ‘ma ho sa ni da’ in that code language.

29. Among M, P, K, J, T and W, who is lighter than only the heaviest?

- I. P is heavier than M and T.
- II. W is heavier than P but lighter than J, who is not the heaviest.

Directions: Read the given information and answer the question.

30. Recently a youth was shifted to another hospital from hospital ABC due to food poisoning. The patient had been admitted in hospital ABC for Malaria. "Because no outside food is allowed in the hospital premises, we are very sure that it was the food provided by the hospital staff that led to the food poisoning." - A statement by the parents of the youth.

Which of the following can be a course of action to avoid such a mishap?

- (1) The parent of the patients should be given a compensation to ensure that the hospital is not criticised in any way.
- (2) The reason for the food poisoning should be identified and the food provided in the hospital should be inspected regularly.
- (3) Local vendors which provide fruits, vegetables and other eatables to the hospital must be questioned.
- (4) CCTV cameras should be installed in the hospital cafeteria to ensure that spoilt food is not provided to the patients.
- (5) Patients should be asked to bring food from their houses rather than provide it at the hospital so that if such a case occurs again the hospital will not be responsible.

31. In a certain code, 'BASKET' is written as '5\$3%#1' and TRIED' is written as, '14\*#2'. How is 'SKIRT' written in that code?

- 1) 3%\*41
- 2) 3\*%41
- 3) 3%#41
- 4) 3#4%1
- 5) None of these

32. The positions of the first and the fifth digits of the number 81943275 are interchanged. Similarly, the positions of the second and the sixth digits are interchanged and so on till the fourth and the eighth digits. Which of the following will be the third digit from the right end after the rearrangement?

- 1) 1
- 2) 9
- 3) 2
- 4) 4
- 5) None of these.

Directions: In each question below a statement is given followed by two courses of action numbered I and II. A course of action is a practicable and feasible step or administrative decision to be taken for follow-up, improvement, or further action in regard to the problem, policy; etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true; and decide which of the suggested courses of action logically follow(s) for pursuing,

Give answer 1) if only I follow.

Give answer 2) if only II follows.

Give answer 3) if either I or II follows.

Give answer 4) if neither I nor II follows.

Give answer 5) if both I and II follow.

33. Statement: An increasing number of farmers prefer to avail loans from local moneylenders instead of the banks owing to complicated paperwork involved in banks.

Courses of action:

- I. Local moneylenders who charge interest rates lower than the banks should be punished.
- II. Banks should simplify the procedure to avail of loans so as to suit the farmers.

Directions: Study the following information carefully and answer the given questions. Seven friends A, B, C, D, E, F and G studied in colleges X, Y and Z and are currently in different professions, namely Medicines, Fashion Designing, Engineering, Business, Acting, Teaching and Architecture (not

necessarily in the same order). At least two and not more than three friends had studied in the same college.

C is an architect and studied in college Y. E is not a businessman. Only G amongst the seven friends studied in college X along with E. F is an engineer and did not study in college Y. B is an actor and did not study in the same college as F. A did not study in college Z. Those who studied in college X are neither Fashion Designers nor teachers. None of those who studied in college Y is a teacher.

34. Who amongst the following have studied in college Z?

- 1) B, A      2) C, F      3) B, D, F      4) A, D      5) D, F

35. Which of the following groups represents the students of college Y?

- 1) C, E, G      2) A, C, D      3) A, B, C      4) D, B, C      5) None of these

36. What is the profession of F?

- 1) Engineering    2) Business    3) Medicines    4) Acting    5) None of these

37. Who amongst the following is in the profession of Medicine?

- 1) E      2) G      3) A      4) D      5) None of these

38. What is the profession of A?

- 1) Teaching    2) Medicine    3) Business    4) Fashion Designing    5) None of these

39. Which of the following combinations of person, college and profession is definitely correct?

- 1) E-X-Fashion Designing    2) F-X-Engineering    3) A-Y-Businessman  
4) D-Z-Teaching    5) None of these

40. Who amongst the following is a teacher?

- 1) A      2) D      3) E      4) G      5) None of these

41. How many such pairs of letters are there in the word RECRUIT each of which has as many letters between them in the word as they have in the English alphabet series?

- 1) None    2) One    3) Two    4) Three    5) More than three

42. The positions of the first and the sixth letters in the word CONTAGIOUS are interchanged. Similarly, the positions of the second and the seventh letters are interchanged, and so on. Which letter will be the second to the right of the fifth letter from the right end?

- 1) O    2) N    3) I    4) T    5) None of these

43. Shyam walked 6 m facing towards East, then took a right turn and walked a distance of 9 m. He then took a left turn and walked a distance of 6 m. How far is he from the starting point?

- 1) 15m    2) 21m    3) 18m    4) Cannot be determined    5) None of these

44. D said, 'A's father is the only brother of my sister's son.' How is A's father related to D?

- 1) Cousin    2) Nephew    3) Aunt    4) Data inadequate determined    5) None of these

Direction: Read the following information and the sentences (A), (B), (C), (D), (E) and (F) given below it carefully and answer the questions.

Scientists are worried that using very high concentration of repellents, a fogging agent is rendering mosquitoes more and more resistant. This is making the repellent ineffective overtime. (A)

Resistance development among mosquitoes is higher than all other insects. This shows that mosquitoes are more adaptive than other insects.

- (B) If the increase in concentration of repellent does not stop, it would end up becoming so toxic that it would endanger the health of humans as well as the ecosystem as a whole.
- (C) In places where increased concentration of mosquito repellents is used, mosquito control is more effective than in other areas.
- (D) While regular-concentration mosquito repellent must be sold at a subsidised price on government orders, the one with high concentration only helps make good profits.
- (E) The government should make a policy regarding the limits to concentration of mosquito repellents and ensure its strict implementation.
- (F) Development of resistance against repellent drugs is naturally present in mosquitoes and does not depend on the amount of repellent used.

45. Which of the given statements weakens the given information?

- (1) A
- (2) D
- (3) E
- (4) B
- (5) F

46. The development of resistance amongst mosquitoes may be purposefully done by the mosquito-repellent-producing companies. - An industry expert which of the given statements substantiates the expert's comment?

- (1) Both C and D
- (2) Only C
- (3) Only B
- (4) Only D
- (5) Only A

47. Which of the following represents a consequence of the increased concentration of repellents?

- (1) F
- (2) D
- (3) A
- (4) B
- (5) C

Directions: Study the following information carefully and answer the questions given below.

Eight Professors A, B, C, D, E, F, G and H are sitting around a circle with 5 of them facing at the centre. Professors are engaged in evaluation of answer papers in three different subjects English, Mathematics and History. At least two persons evaluate the papers in each subject except one professor who is not evaluating any paper. Each of the evaluators stay in different buildings P, Q, R, S, T, V, W & Z not necessarily in the same order.

C is to the immediate right of A who is 4th to the right of D.

E is 2nd to the left of A and is 4th to the right of G.

F is 2nd to the right of B who is 2nd to the right of H.

A evaluates English papers only with E and stays in building R.

D stays in building W and does not evaluate Maths papers.

The one who stays in building V evaluates History papers.

B and C do not evaluate the papers in the same subject.

Those who evaluate English papers do not stay in building Q.

F stays in building P but does not evaluate History papers.

G evaluates same papers as F. C stays in building T.  
 H stays in building Z.

48.Q1. Who is 3rd to the right of A?

- a) G      b) C      c) D      d) H      e) None of these

49. Which of the following represents the immediate neighbours of D?

- a) E and F      b) D and H      c) E and H      d) D and F      e) E and D

50. Who is 3rd to the right of G?

- a) E      b) B      c) D      d) F      e) Data inadequate

51. Who is 2nd to the left of E?

- a) B      b) H      c) D      d) Data inadeq e) None of these

52. Who is to the immediate left of A?

- a) F      b) E      c) G      d) Data inadeq e) None of these

53. Who stays in building V?

- (a) E      (b) F      (c) G      (d) B      (e) None of these

54. Which of the following combinations of subject, person and buildings is definitely correct?

- (a) Maths- F-Q (b) Maths -G-Q (c) History- D-T (d) History -E-S (e) None of these

55. Which of the following groups of persons evaluate the Mathematics paper ?

- (a) CF      (b) EFG      (c) CFG      (d) FG      (e) None of these

56. Papers in which subject are evaluated by D ?

- (a) History      (b) Maths      (c) English      (d) English or Maths (e) History or Maths

57. E stays in which building?

- (a) P      (b) Q      (c) T      (d) Cannot be determined      (e) None of these

In these questions, relationships between different elements are shown in the statements. These statements are followed by two conclusions. Give answer:

- (1) If only conclusion I follows
- (2) If only conclusion II follows
- (3) If either conclusion I or conclusion II follows
- (4) If neither conclusion I nor conclusion II follows
- (5) If both conclusions I and II follow

58. Statements:  $N \geq O$ ;  $O \geq P$ ;  $P = Q$  and  $Q > R$

Conclusions: I.  $N > R$       II.  $R = N$

59. Statements:  $W \leq X < Y$ ;  $Y = Z > A$ ;  $W < B$

Conclusions: I.  $B > Z$       II.  $W < A$

60. Statements:  $H > I$ ;  $J < I$ ;  $J > K$ ;  $L < M$ ;  $K > M$

Conclusions: I.  $I > M$       II.  $L < H$

61. Statements:  $C < D < E$ ;  $D > F \geq G$

Conclusions: I.  $C \geq G$  II.  $F > E$

62. Statements:  $S < R$ ;  $S \geq T \geq U$ ;  $V < T$

Conclusions: I.  $V \geq U$     II.  $V < R$

#### Directions to Solve

In each of the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer as

- (1) If statement I is the cause and statement II is its effect;
- (2) If statement II is the cause and statement I is its effect;
- (3) If both the statements I and II are independent causes;
- (4) If both the statements I and II are effects of independent causes; and
- (5) If both the statements I and II are effects of some common cause.

63. Statements:

I. There has been a high increase in the incidents of atrocities against women in the city during the past few months.

II. The police authority has been unable to nab the culprits who are committing crime against women.

64. Statements:

I. Rural and semi-urban areas in the country have been suffering due to load shedding for quite some time.

II. If the Government is not able to overcome the power crisis, load shedding will be extended even to the urban areas.

Eight people - A, B, C, D, E, F, G and H - are sitting around a circular table. A and B are facing towards the centre while the other six people are facing away from the centre. A is sitting second to the right of H. B sits third to the left of A. D sits second to the right of G. G is immediate neighbour of neither B nor A. E and F are immediate neighbours and are facing outside.

65. What is the position of C with respect to D?

- 1) Third to the right
- 2) Third to the left
- 3) Fourth to the left
- 4) Fourth to the right
- 5) Second to the left

66. Who is sitting on the immediate right of G?

- 1) C 2) D 3) F 4) H 5) None of these

67. Which of the following pairs represents the people who are immediate neighbours of C?

- 1) B and G 2) B and H 3) G and H 4) D and G 5) None of these

68. Who is sitting third to the left of G?

- 1) A 2) D 3) E 4) F 5) Either E or F

69. How many persons are there between B and D?

- 1) Two 2) Four 3) Three 4) One 5) None

The convenience of online shopping is what I like best about it. Where else can you shop even at midnight wearing your night suit? You do not have to wait in a line or wait till the shop assistant is ready to help you with your purchases. It is a much better experience as compared to going to a retail store - A consumer's view.

70. Which of the following can be a strong argument in favour of retail store owners?

- 1) Online shopping portals offer a great deal of discounts which retail stores offer only during the sale season.
- 2) One can compare a variety of products online which cannot be done at retail stores.
- 3) Many online shopping portals offer the 'cash on delivery' feature which is for those who are sceptical about online payments.
- 4) Many consumers prefer shopping at retail stores which are nearer to their houses.
- 5) In online shopping the customer may be deceived as he cannot touch the product he is paying for.

71. Which of the following can be inferred from the given information? (An inference is something that is not directly stated but can be inferred from the given information)

- 1) One can shop online only at night.
- 2) Those who are not comfortable using computers can never enjoy the experience of online shopping.
- 3) All retail stores provide shopping assistants to each and every customer.
- 4) The consumer whose view is presented has shopped at retail stores as well as online.
- 5) The consumer whose view is presented does not have any retail stores in hervicinity.

72. Look at this series: 8, 6, 9, 23, 87, ... What number should come next?

- 1) 128
- 2) 226
- 3) 324
- 4) 429
- 5) 512

73. Look at this series: 14, 28, 20, 40, 32, 64, ... What number should come next?

- 1) 52
- 2) 56
- 3) 24
- 4) 42
- 5) 12

74. Look carefully for the pattern, and then choose which pair of numbers comes next

16 26 56 36 46 68 56 ??

- 1) 80 66
- 2) 64 82
- 3) 66 80
- 4) 78 68
- 5) 66 82

## QUANTITATIVE APTITUDE

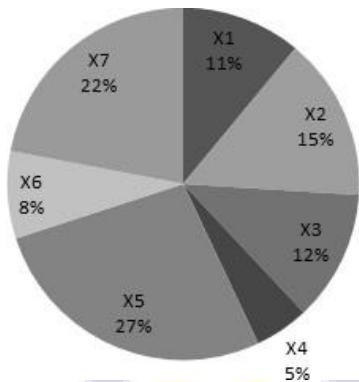
Directions: Today we are sharing Data Interpretation Practice Set. Try to solve the following Questions based on data given in Pie Chart and Table.

Two types of medicines A and B are manufactured by seven different companies X1, X2, X3, X4, X5, X6 and X7. The production of each company (inclusive of both medicines A and B) is expressed as a percentage of total production and represented in the pie-chart given below.

This pie-chart is followed by a table which shows the ratio in which each company produces the two medicines and also the percent profit that each company earns in selling medicines A and B. Study the given information and answer the questions that follow. Ratio of production between medicines A and B and the percent profit earned for the two medicines.

Total cost of production (both medicines together) by seven companies is 75 Cr.

Ratio of production between medicines A and B and the percent profit earned for the two medicines.



COMPANY	RATIO OF PRODUCTION		PERCENT PROFIT EARNED	
	Medicine A	Medicine B	Medicine A	Medicine B
X1	3	2	32	35
X2	2	3	25	20
X3	1	2	30	24
X4	1	4	35	25
X5	5	3	28	30
X6	3	5	15	25
X7	4	1	20	22

- Find the ratio of cost of production of medicine A by Company X2 to that by Company X6?  
 1) 1:2      2) 2:3      3) 2:1      4) 3:5      5) None of these
- The total cost of production of medicine A by company X2 and medicine B by X1?  
 1) Rs. 6.6 Cr    2) Rs. 3.35 Cr    3) Rs. 8.12 Cr    4) Rs. 7.8 Cr    5) None of these
- What is the total cost of production of medicine B by Companies X3 and X4 together?  
 1) Rs. 7.45 Cr    2) Rs. 9 Cr    3) Rs. 8.50 Cr    4) Rs. 11 Cr    5) None of these
- The cost of production of both medicines together by Company X5 is equal to the total cost of production of both medicines together by which of the two companies?  
 1) X1 and X3    2) X6 and X7    3) X4 and X7    4) X2 and X6    5) None of these
- Find the amount of profit earned by Company X6 on medicine B.  
 1) Rs. 9.375 Cr    2) Rs. 13.45 Cr    3) Rs. 75.15 Cr    4) Rs. 93.75 Cr    5) None of these
- In how many ways can 21 books on English and 19 books on Hindu be placed in a row on a shelf so that two books on Hindi may not be together?  
 a) 3990 b) 1540 c) 1995 d) 3672 e) None of these
- A bag contains 2 red, 3 green and 2 blue balls. Two balls are drawn at random. What is the probability that none of the balls drawn is blue?  
 a) 10/21 b) 11/21 c) 2/7 d) 5 / 7 e) None of these
- A father said to his son, "I was as old as you are at present at the time of your birth." If the father's age is 38 years now, the son's age five years back was a) 14 years b) 19 years c) 33 years d)

38 years e) None of these 25) I gain 70 paise on Rs.70. My gain percent is a) 0.1% b) 1% c) 7% d) 10%  
e) None of these

9. A book was sold for Rs.27.50 with a profit of 10%. If it were sold for Rs.25.75, then what would have been the percentage of profit or loss?

a) 2% b) 3% c) 4% d) 5% e) None of these

10. A shopkeeper buys 100 eggs at Rs.1.20 per piece. Unfortunately 4 eggs got spoiled during transportation. The shopkeeper sells the remaining eggs at Rs.15 a dozen. Find his profit or loss?  
a) Rs.120 b) 102 c) 201 d) 121 e) None of these

Directions: Total number of college seats: 1400

College	No.of Graduates	No. of post grad
W	360	30
X	210	72
Y	420	92
Z	120	96
Total	1110	290

Gender	No.of Graduates	No. of post grad
Male	820	200
Female	290	90
Total	1110	290

Subject	No.of Graduates	No. of post grad
Chemistry	620	128
Physics	82	46
Biology	134	70
Zoology	94	46
Total	930	290

City	No.of Graduates	No. of post grad
Kolkota	580	112
Hyderbad	84	52
Bangalore	162	54
Chennai	104	72
Total	930	290

11. What is the percentage of Biology seats in Post Graduation ?

1) 20.13% 2) 26.46% 3) 25.23% 4) 26.12% 5) 24.13%

12. What is percentage of Hyderabad students in the total seats ?

1) 9.71% 2) 15% 3) 16% 4) 25% 5) 27%

13. If 20 males are replaced by 20 females in the Graduates, What would be the ratio of males to females in the total College seats ?

1) 28:7 2) 27:6 3) 80:31 4) 28:35 5) 50:11

14. Out of Total students of college Z in total seats, What is the percentage of students Post Graduates ?

- 1) 33.33% 2) 44.44% 3) 66.66% 4) 55.55% 5) 77.77%

15. What is the difference between the number of seats in College W and that of College X ?

- 1) 134 2) 108 3) 186 4) 54 5) None of these

Directions: Study the following information carefully and answer the questions that follow: An office consists of 520 employees working in different departments, viz HR, IT, Production and Marketing. The ratio of men to women in the organisation is 5 : 3. 20 per cent of the men work in the IT department. 40 per cent of the women work in the HR department. The total number of employees in the Production department is 135. Two-fifths of the women work in the IT department and the remaining work in the Marketing department. 40 percent of the men work in the Production department. Four percent of the men work in the HR department and the remaining work in the Marketing department.

16. The number of men working in the Marketing department forms what percent of the total number of employees in the organisation?

- 1) 22.5 2) 34.5 3) 19.5 4) 38.5 5) None of these

17. What is the ratio of the number of men working in the HR department to that of the women working in the same?

- 1) 1 : 5 2) 2 : 3 3) 4 : 7 4) 9 : 11 5) None of these

18. What is the number of women working in the Marketing department?

- 1) 41 2) 34 3) 46 4) 39 5) None of these

19. Total number of employees working in the Production department forms approximately what per cent of the total number of employees working in the organisation?

- 1) 12 2) 17 3) 21 4) 26 5) 38

20. What is the total number of employees working in the IT department?

- 1) 130 2) 124 3) 143 4) 101 5) None of these

Directions: In each of three questions, two equations numbered I and II are given.

You have to solve both the equations and

Give answer (1) if  $x < y$

Give answer (2) if  $x \leq y$

Give answer (3) if  $x > y$

Give answer (4) if  $x \geq y$

Give answer (5) if  $x = y$  or the relationship cannot be established.

21.21.

I.  $x$  is area of a circle with radius 8

II.  $y$  is area of a square with side 15

22.22.

I.  $x^2 + 15x + 56 = 0$

II.  $y^2 - 23y = 132$

23.23.

I.  $x^2 + 7x + 12 = 0$

II.  $y^2 + 6y + 8 = 0$

24.24.

I.  $x^2 - 22x + 120 = 0$

II.  $y^2 - 26y + 168 = 0$

25.25.

I.  $x^2 + 12x + 32 = 0$

II.  $y^2 + 17y + 72 = 0$

26. Aman's expense is 30% more than Vimal's and Vimal's expense is 10% less than Raman's. If the sum of their expenses is Rs 6,447, then what would be Aman's expense?

- 1) Rs. 2,200 2) Rs. 2,457 3) Rs. 1,890 4) Rs. 2,100 5) None of these

27. An AC consumes 8 units of electricity in 30 minutes and a bulb consumes 18 units of electricity in 6 hours. How many units of electricity will both AC and bulb consume in 8 days, if they run 10 hours a day?

- 1) 1280 units 2) 1528 units 3) 1248 units 4) 1520 units 5) 1620 units

28. What amount would a man receive on a principal of Rs 4,000 after two years on simple interest @ 5 p.c.p.a.?

- 1) Rs. 4,161 2) Rs. 5,200 3) Rs. 4,410 4) Rs. 4,100 5) None of these

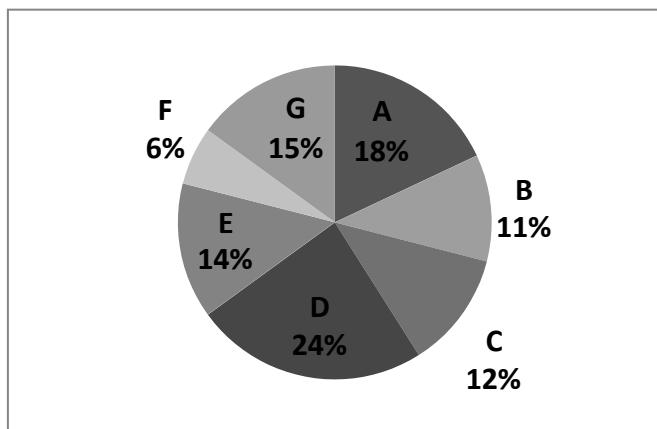
29. A school team has eight volleyball players. A five-member team and a captain will be selected out of these eight players. How many different selections can be made?

- 1) 224 2) 112 3) 56 4) 88 5) None of these

30. A bus started its journey from Ramgarh and reached Devgarh in 44 minutes at its average speed of 50 km/hour. If the average speed of the bus is increased by 5 km/hour, how much time will it take to cover the same distance?

- 1) 40 minutes 2) 38 minutes 3) 36 minutes 4) 31 minutes 5) 49 minutes

Directions: In a City There are 7 schools ,these schools are having 96,000 students. Students are in schools are give below pie chart .



A	8 : 4 : 3
B	5 : 6 : 9
C	5 : 8 : 5
D	11 : 9 : 10
E	5 : 12 : 4
F	6 : 5 : 4
G	3 : 4 : 3

Maths , Chemistry and Physics Students ratios in respectively in give table.

31. Find total number of students are studying physics in school B and chemistry students in school D? 1) 11656 2) 11679 3) 11664 4) 11246 5) 11345

32. What is the percentage (approximately) of School students A,B,E and G ,who are studying in Maths in all 7 schools ?

1) 20.18 2) 34.8 3) 56.76 4) 23.78 5) 67.45

33. What is the ratio between chemistry students school B and C to Maths students school F and B ?

1) 518:403 2) 761:301 3) 518:309 4) 509:343 5) 501:309

34. Difference between physics students in School A,Cand E , and School B,D and G?

1) 6258 2) 6589 3) 6789 4) 6256 5) 5678

35. If total number of students in School B increased 600 ,and in School D 600 students decreased .

Find the total number of students studying Maths in both B and D ?

1) 11089 2) 11090 3) 11018 4) 11789 5) 11345

36. Prabha started a business investing Rs. 32,000. After 5 months, Amit joined her with a capital of Rs. 22,000. At the end of the year the total profit was Rs. 16,409. What is Prabha's share of the profit?

1) Rs. 5,284 2) Rs. 11,712 3) Rs. 10,182 4) Rs. 4,697 5) None of these

37. The simple interest secured on an amount of Rs. 16,500 at the end of three years is Rs. 5,940. What would be the compound interest accrued on the same amount at the same rate in the same period? (Rounded off to two digits after decimal)

1) Rs. 6681.31 2) Rs. 6218.27 3) Rs. 6754.82 4) Rs. 6537.47 5) None of these

38. Prerna decided to donate 15% of her salary to an orphanage. On the day of donation she changed her mind and donated Rs. 1,896, which was 80% of what she had decided earlier. How much is Prerna's salary?

1) Rs. 18,500 2) Rs. 10,250 3) Rs. 15,800 4) Cannot be determined 5) None of these

39. If the numerator of a fraction is increased by 200% and the denominator is increased by 200%, the resultant fraction is  $14/5$ . What was the original fraction?

1) 4 / 7      2) 13 / 12      3) 11 / 12      4) 6 / 5      5) None of these

40. The ages of Trisha and Shalini are in the ratio of 7 : 6 respectively. After 8 years the ratio of their ages will be 9 : 8. What is the difference in their ages?

1) 4 years 2) 8 years 3) 10 years 4) 12 years 5) None of these

41. A, B, C enter into a partnership investing Rs.35,000, Rs.45,000 and Rs.55,000 respectively. The respective shares of A, B, C in an annual profit of Rs.40,500 are : a) Rs.10,500, Rs.13,500, Rs.16,500 b) Rs.11,500, Rs.13,000, Rs.16,000 c) Rs.11,000, Rs.14,000, Rs.15,500 d) Rs.11,500, Rs.12,500, Rs.16,500 e) None of these

Directions: Each of these items has a question followed by two statements. As the answer,

Mark (a), If the question can be answered with the help of statement I alone,

Mark (b), If the question can be answered with the help of statement II alone,

Mark (c), If both, statement I and statement II are needed to answer the question, and

Mark (d), If the question cannot be answered even with the help of both the statements.

Mark (e), If each statement alone is sufficient to get the answer.

42. Is the distance from the office to home less than the distance from the cinema hall to home? I. The time taken to travel from home to office is as much as the time taken from home to the cinema hall, both distance being covered without stopping. II. The road from the cinema hall to home is bad and speed reduces, as compared to that on the road from home to the office.

43. If twenty sweets are distributed among some boys and girls such that each girl gets two sweets and each boy gets three sweets, what is the number of boys and girls?

I. The number of girls is not more than five.

II. If each girl gets 3 sweets and each boy gets 2 sweets, the number of sweets required for the children will still be the same.

44. If the selling price were to be increased by 10%, the sales would reduce by 10%. In what ratio would profits change? I. The cost price remains constant. II. The cost price increased 10%.

45. What is the average weight of the 3 new team members who are recently included into the team?

I. The average weight of the team increases by 20 kg.

II. The 3 new men substitute earlier members whose weights are 64 kg, 75 kg and 66 kg.

46. Is segment PQ greater than segment RS?

I. PB > RE, BQ = ES.

II. B is a point on PQ, E is a point on RS.

Study the following information carefully to answer the questions that follow:

There are two trains, Train A and Train B. Both trains have four different types of coaches, viz General, Sleeper, First Class and AC. In Train A, there are total 700 passengers. Train B has thirty per cent more passengers than Train A. Twenty per cent of the passengers of Train A are in General Coach. One-fourth of the total number of passengers of Train A are in AC coach. Twenty-three per cent of the passengers of Train A are in Sleeper Coach. Remaining passengers of Train A are in First Class Coach. The total number of passengers in AC Coach in both the trains together is 480. Thirty per cent of the number of passengers of Train B are in Sleeper Coach. Ten per cent of the total passengers of train B are in First Class Coach. The remaining passengers of Train B are in General Coach.

47. What is the ratio of the number of passengers in First Class Coach of Train A to the number of passengers in Sleeper Coach of Train B?

- 1) 13 : 7      2) 7 : 13      3) 32 : 39      4) Data Inadequate      5) None of these

48. What is the total number of passengers in the General Coach of train A and the AC Coach of Train B together?

- 1) 449      2) 459      3) 435      4) 445      5) None of these

49. What is the difference between the number of passengers in the AC Coach of Train A and the total number of passengers in Sleeper and First Class Coach together of Train B?

- 1) 199      2) 178      3) 187      4) 179      5) None of these

50. The total number of passengers in General Coaches of both the trains together is approximately what percentage of the total number of passengers in Train B?

- 1) 35      2) 42      3) 46      4) 38      5) 3

## ENGLISH LANGUAGE

Directions Read the following passage carefully and answer the questions given below it.

Crude oil has had a long history, and an interesting one, it is probably one single natural resource that has been instrumental in producing maximum conflicts and wars during the last century. With such a track record, it is surprising that in the given environment, wherein oil prices are breaking all records, and has become the biggest cause of concern across the globe, why is it that there is silence from some parts of the world? It is intriguing, especially when some have been paying a much higher price on fuel, as compared to their poorer counterparts. It is surprising, more so, when one realizes that the number of oil-producing nations is only a handful as compared to the number of oil-consuming nations. While a proactive action from the mighty and powerful can bring in a huge respite for the world, why is it that they choose to be silent? Also, keeping in mind the fact that a few nations-both powerful and weak-have some of the largest unused oil reserves, their silence and lack of any serious action look all the more aberrant. Looking at the manner things are shaping up, it just cannot be ruled out that possibly these nations have a definite interest in the increasing prices of oil. The question then is what could their underlying interest be?

In all probability, what we are seeing right now is just a precursor to the larger picture, well laid out by them may be for the good. With rising prices, the OPEC might be delighted right now, but perhaps they are unable to see what is going to hit them. For, this unprecedented rise in oil is creating a most demanding environment for alternative fuels. As and when the reserves deplete and demand really grows, more than anyone else, it is OPEC that would be badly hit, much to the glee of some nations having unused reserves which have the most to gain by using blackmailing tactics. Eventually: the countries at the receiving end would be forced to create an enabling environment for alternative energy.

This trend is already visible, with India showing the way with its nuclear deal and other countries dangling the carrot of complete conversion to natural gas towards other countries in order to boost their own business. By doing so, they are creating a tactical pressure on countries. As they know that the further the oil prices get pushed, the more the globe would become attracted and ready for alternative and non-conventional fuel. Moreover, for many of the countries, it might become more expensive to invest in newer technologies to conform the emission norms than to shift to alternative sources, making the market even more attractive. And it is then that the organisations which have already invested billions of dollars in alternate fuels would mop up the global energy market completely.

The second possible reason why some nations of the world are not too enthusiastic to mitigate the price of oil is because the rising oil price is perhaps one of the major deterrents to growth of other countries. Perhaps they were hand in glove in the mechanism to raise the oil price and knowing well that this would make these nations feel the pinch. And now, the rising oil prices have put these nations in a fix. As the pressure of inflationary tendencies increases, these countries cannot afford to sit back and remain entrapped in the larger conspiracy. No wonder then that these are frantically looking around the globe - especially Africa for newer reserves! As it is said, oil has a long history and the legacy continues.

1. What, according to the passage, is the step that the nations are likely to take with an intolerable rise in oil prices?
  - 1) Shift to alternate forms of energy
  - 2) Come to a state of war with other nations
  - 3) Put tactical pressure on countries having oil reserves
  - 4) Formulate more stringent emission norms and apply these across the globe

5) None of these

2. Why is the author surprised with the stance which various nations have taken pertaining to the current global oil crisis?

- 1) The stance is leading to war among the nations for control over oil fields.
- 2) Powerful nations have been selling oil at a very inflated rate to underdeveloped nations.
- 3) Many nations have shifted to alternate forms of energy, boycotting the use of oil due to inflated prices.
- 4) Even though oil has been a matter of conflict among the nations earlier, many nations have kept a silence on the current crisis.
- 5) None of these

3. Which nations does the author refer to in the words 'these nations have a definite interest in the increasing prices of oil'?

- 1) The mighty and powerful nations
- 2) The nations having unused oil reserves
- 3) The nations which have exhausted their oil reserves
- 4) The nations which have shifted to non-conventional fuels
- 5) None of these

4. Which of the following is not true in the context of the passage?

- 1) Some nations have kept a silence upon the rising oil price in order to inhibit the growth of other nations.
- 2) It is more cost-effective to shift to alternate forms of energy than to invest in technology for conforming to the emission norms
- 3) Some nations have unused oil reserves which would earn these nations heavy profits once the oil reserves elsewhere deplete.
- 4) India had a nuclear deal for its energy needs.
- 5) All are true

5. What does the author mean by dangling the carrot' in the passage?

- 1) Some countries are stringently opposing the conversion to alternate forms of fuel.
- 2) Some countries have been luring other countries to change over to alternate fuels in order to boost their own business.
- 3) Some countries are making the effort to save environment by using natural gas instead of oil as a fuel.
- 4) Both 1) and 2)
- 5) None of these

Directions: In the following questions, a sentence, split into four parts, has been given. But the parts are in the wrong order. Choose the best order which produces the original sentence out of four alternatives.

6. to dispose off the waste matter (1) / the modernisation would reduce (2) / provide better sanitary facilities (3)/ manual labour considerably and would also (4)

- 1) 1, 2, 3, 4
- 2) 2, 4, 3, 1
- 3) 3, 2, 4, 1
- 4) 4, 2, 1, 3
- 5) None of these

6) None of these

7. Why is the author surprised with the stance which various nations have taken pertaining to the current global oil crisis?

6) The stance is leading to war among the nations for control over oil fields.

7) Powerful nations have been selling oil at a very inflated rate to underdeveloped nations.

8) Many nations have shifted to alternate forms of energy, boycotting the use of oil due to inflated prices.

9) Even though oil has been a matter of conflict among the nations earlier, many nations have kept a silence on the current crisis.

10) None of these

8. Which nations does the author refer to in the words 'these nations have a definite interest in the increasing prices of oil'?

6) The mighty and powerful nations

7) The nations having unused oil reserves

8) The nations which have exhausted their oil reserves

9) The nations which have shifted to non-conventional fuels

10) None of these

9. Which of the following is not true in the context of the passage?

6) Some nations have kept a silence upon the rising oil price in order to inhibit the growth of other nations.

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9) Both 1) and 2)

10) None of these

Directions: In the following questions, a sentence, split into four parts, has been given. But the parts are in the wrong order. Choose the best order which produces the original sentence out of four alternatives.

11. to dispose off the waste matter (1) / the modernisation would reduce (2) / provide better sanitary facilities (3) / manual labour considerably and would also (4)

1) 1, 2, 3, 4

2) 2, 4, 3, 1

3) 3, 2, 4, 1

4) 4, 2, 1, 3

5) None of these

12. With the sole motive (1)/ are engaged in doing home tuitions (2) / of clearing more money (3)/ people cutting across professional lines (4)

- 1) 1, 3, 4, 2
- 2) 2, 4, 1, 3
- 3) 4, 2, 1, 3
- 4) 1, 3, 4, 2
- 5) None of these

Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

- A. The researchers in these companies claim that they could do better by allowing their employees to doze off at work place.
- B. The dreams, while at work, are thus helpful to solve crucial problems.
- C. Would you believe that some UK based companies are arranging for bed at the work place?
- D. The reason, they claim, could be that dreams produce creative solutions.
- E. We only hope that these crucial problems in UK are different from those of ours.
- F. But it is true and is considered as a step to improve quality of their products.

13. Which of the following should be the First sentence after rearrangement?

- a) A b) B c) C d) D e) E

14. Which of the following should be the Third sentence after rearrangement?

- a) A b) B c) C d) D

15. Which of the following should be the Fourth sentence after rearrangement?

- a) A b) B c) C d) D

Directions: Choose the word/group of words which is most similar or is most opposite in meaning to the word given.

16. ABERRANT

- 1) Curious 2) Abnormal 3) Spoilt 4) Inferior 5) Nonfunctional

17. PUSHED

- 1) Dominated 2) Pressed 3) Diverted 4) Thrown 5) Increased

18. PROACTIVE

- 1) Quick 2) Overpowered 3) Dormant 4) Delicate 5) Brittle

19. GLEE

- 1) Disappointed 2) Dishonour 3) Appreciation 4) Disillusion 5) Defeat

20. MITIGATE

- 1) Fright 2) Decline 3) Degeneration 4) Worsen 5) Deprivation

Directions: Read each sentences to find and whether there is any grammatical mistake/error in it. The error, if any, will be in one part of the sentence. Mark the number of that part with error as your answer. If there is 'No error', mark 5).

21. We had extensively discussions (1)/ with the participants and (2)/ obtained their feedback (3)/ regarding out new services. (4)/ No error. (5)
22. The success of the (1)/ government sponsor job guarantee programme (2)/ has resulted in a (3)/ drastic drop in poverty. (4)/ No error (5)
23. The Board's decision has provided (1)/ employees with the opportunity (2)/ to acquire upto 100 (3)/ shares by the company. (4)/ No error (5)
24. Their failure to inspect (1)/ our factories is a (2)/ clear indications that our (3)/ licence will not be renewed. (4)/ No error (5)
25. Arranging such a large amount (1)/ of funds now will be a problem why (2)/ banks are usually not open (3)/ so early in the meaning. (4)/ No error (5)

Directions: In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words/phrases are suggested, one of which fits the blank appropriately. Find out the appropriate word/phrase in each case.

The barter system for getting goods and services (A) back many centuries. In most cultures the barter system was used before money was (B). People who had specific items or services would (C) these with others 'for the things they needed. Good negotiation was the (D) to making good trades. While the barter system (E) based on basic needs, today the barter system continues to thrive. The barter system transcends the monetary system.

26. A. 1) discovered    2) dates    3) began    4) started    5) initiated  
27. B. 1) bought                      2) imagined    3) began    4) emerged    5) invented  
28. C. 1) buy                        2) sell                      3) exchange    4) give    5) return  
29. D. 1) important                    2) essential    3) result    4) key    5) intention  
30. E. 1) originated                    2) stood                    3) generated    4) created    5) produced

Directions: Read the following passage carefully and answer the questions given below it.

A long time ago, on a big tree in the lap of the mountain, lived a bird named Sindhuka. It was a rather special bird because its droppings turned into gold as soon as they hit the ground. One day, a hunter came to the tree in search of prey and he saw Sindhuka's droppings hit the ground and turn into gold. The hunter was struck with wonder. He thought, 'I have been hunting birds and small animals since I was a boy, but in all my 80 years, I have never seen such a miraculous creature. He decided that he had to catch the bird somehow. He climbed the tree and skillfully set a trap for the bird.

The bird, quite unaware of the danger it was in, stayed on the tree and sang merrily. But it was soon caught in the hunter's trap. The hunter immediately seized it and shoved it into a cage. The hunter took the bird home joyfully. But as he had time to think over his good fortune later, he suddenly realised, 'If the king comes to know of this wonder, he will certainly take away the bird from me and he might even punish me for keeping such a rare treasure all to myself. So it would be safer and more honourable if I were to go to the king and present the unique bird to him.' The next day, the hunter took the bird to the king and presented it to him in court with great reverence.

The king was delighted to receive such an unusual and rare gift. He told his courtiers to keep the bird safe and feed it with the best bird food available. The king's prime minister though, was reluctant to accept the bird. He said 'O Rajah, how can you believe the word of a foolish hunter accept this bird? Has anyone in our kingdom ever seen a bird dropping gold? The hunter must be either crazy or telling lies. I think it is best that you release the bird from the cage.' After a little thought, the king felt that his prime minister's words were correct. So he ordered the bird to be released. But as soon as the door of the cage was thrown open, the bird flew out, perched itself on a nearby doorway and defecated. To everyone's surprise, the dropping immediately turned into gold. The king mourned his loss.

31. Which of the following is possibly the most appropriate title for the story?

- 1) The Skilled Hunter
- 2) The King's Prime Minister
- 3) The King's Defeat
- 4) The Bird with the Gold Dropping
- 5) The Trials and Tribulations of the Foolish Bird Sindhuka

32. Which of the following emotions made the hunter gift the bird to the king?

- 1) Respect
- 2) Joy
- 3) Pride
- 4) Fear
- 5) Awe

33. Which of the following is true according to the story?

- 1) Birds like Sindhuka were very common in the area near the mountain
- 2) Sindhuka remained caged for the rest of its life
- 3) Sindhuka was unaware of the trap laid by the hunter
- 4) The King, when told to not accept the bird, did not listen to his Prime Minister
- 5) All are true

34. Why was the king's Prime Minister reluctant to accept the bird?

- 1) He believed that the bird would die if caged
- 2) He knew about the hunter's habit of lying
- 3) He believed that the bird would bring bad luck to the king
- 4) His sources had informed him that the hunter was crazy
- 5) None of these

35. How did the hunter find Sindhuka?

- 1) He had read stories about the bird and had set traps at various locations in the city
- 2) He followed the bird's droppings
- 3) He was on the lookout for a prey when he chanced upon it
- 4) People from the city had informed him about the bird's whereabouts
- 5) He was attracted by the bird's calls

Directions: In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningfully complete.

Given the state of (A) life in our country today-where corruption, violence and intolerance are increasingly (B) in day to day interactions-isn't it (C) time that (D) made a concerted effort to teach values? The very first (E) from many is that values cannot be taught, they need to be experienced. Ideally, values must be taught by people who are trying to lead by example.

- 31. A. (A) my                    (B) their                    (C) social                    (D) night                    (E) Public
- 32. B. (A) sordid                (B) practical              (C) evident                (D) theoretical            (E) tense
- 33. C. (A) long                  (B) high                  (C) quantum                (D) quality                (E) depressing
- 34. D. (A) educationists        (B) players                (C) politicians                (D) artists                (E) government

35. E. (A) suggestion (B) objection (C) proclamation (D) temptation (E) emotion

Directions: Each question below has two blanks, each blank indicating that something has been omitted. Choose the set of words for each pair of blanks that best fits the meaning of the sentence as a whole.

36. Healthy scepticism, a vital \_\_\_\_\_ for any journalist, has given \_\_\_\_\_ to credulity, or worse, naiveté.

- (A) factor, up
- (B) role, them
- (C) attribute, way
- (D) thing, away
- (E) task, chance

37. Kejriwal's \_\_\_\_\_ about all kinds of people became more and more \_\_\_\_\_ and even if there was a grain of truth in any of them, there was just no evidence.

- (A) statements, attacking
- (B) ideas, scathing
- (C) pronouncements, outdated
- (D) allegations, outlandish
- (E) defamations, severe

38. Every time Vidya Balan went about repeating "Entertainment, entertainment, entertainment!" audiences at awards nights went into \_\_\_\_\_ as if Voltaire had \_\_\_\_\_ from his grave.

- (A) raptures, quipped
- (B) dark, came
- (C) silence, grown
- (D) hallucination, risen
- (E) enjoy, awaken

39. Whether one believes it or not, there are still some people \_\_\_\_\_ us who could have become powerful \_\_\_\_\_ in strength and in financial means.

- (A) about, either
- (B) surrounding, neither
- (C) above, here
- (D) over, there
- (E) around, both

40. When politicians became \_\_\_\_\_ and the bureaucracy \_\_\_\_\_ it is to the media that people turn for some guidance.

- (A) corrupt, helpful
- (B) venal, unresponsive
- (C) dishonest, strong
- (D) careless, dictator
- (E) powerful, autocrat

Directions: Following are 3 statements taken from a paragraph and jumbled up. One extra incoherent sentence is added. Identify one Incoherent sentence added into the following sentences:

41. Incoherent Passage Question

- A. During September of 1781, the combined land forces of Rochambeau and Washington marched south.
- B. American forces marched over 200 miles in a period of about two weeks. The plan worked perfectly.
- C. Rochambeau forces were always considered to be most powerful forces in America.
- D. The plan was strictly confidential, and the generals kept their final destination secret from even the soldiers.

Incoherent statement is:

- 1. A
- 2. B
- 3. C
- 4. D
- 5. None of these – all statements are coherent.

#### 42. Incoherent Passage Question

- A. Reliance Industries (RIL), India's largest company, saw its earnings before interest and taxes jump 15 per cent from the first quarter to the second, though net profits grew at a far more modest 2.6 per cent.
- B. Part of the reason for this was a sharp, 8 per cent-plus fall in its refining margins, down from \$8.40 per barrel in Q1 to \$7.70 per barrel in Q2.
- C. For RIL, refining and selling oil and making petrochemicals are not new. Investors understand these businesses and value them realistically.
- D. This fall happened because the Asian demand — and, therefore, pricing — of lighter fuels like diesel and petrol was under pressure, possibly because most major emerging economies are growing slower than they were before.

Incoherent statement is:

- 1. A
- 2. B
- 3. C
- 4. D
- 5. None of these – all statements are coherent.

#### 43. Incoherent Passage Question

- A. Banks are places where people can keep their money.
- B. Today, when a person earns money from their job, their paycheck is deposited (put) into their account.
- C. Bank account are used to earn money by making fixed deposits.
- D. Most people use banks to save money in their savings accounts and to pay money from their checking accounts.

Incoherent statement is:

- 1. A
- 2. B
- 3. C
- 4. D
- 5. None of these – all statements are coherent.

#### 44. Incoherent Passage Question

The United States is a large country.

- A. It is the third largest in the whole world!
- B. Parts of the United States touch three different oceans.
- C. United States is largest economy in the whole world!
- D. It is located in a continent called North America.

Incoherent statement is:

- 1. A
- 2. B
- 3. C
- 4. D
- 5. None of these – all statements are coherent.

**45. Incoherent Passage Question**

- A. There are consolation prizes which console, and some which char the soul.
- B. I am not suggesting we write a condolence letter, but sympathy is certainly due to Sachin.
- C. Membership of Parliament is a handsome freebie for Sachin Tendulkar
- D. Nomination to the Rajya Sabha is a pretty desultory substitute for someone who has been promised the Bharat Ratna.

Sachin did not ask for this honour. Delhi's politicians, ever eager to climb a bandwagon, led the clamour for Sachin's elevation to jewel of India after he got his 99th international hundred.

Incoherent statement is:

- 1. A
- 2. B
- 3. C
- 4. D
- 5. None of these – all statements are coherent.

**46. Find the correctly spelt words.**

- A. Eflorescence
- B. Efllorescence
- C. Efflorescence
- D. Efflorascence
- E. Eflorece

**47. Find the correctly spelt words.**

- A. Swelte
- B. Filpant
- C. Licentious
- D. Puessile
- E. Ofspring

In each question below, two sentences are given. These sentences are to be combined into a single sentence without changing their meaning. Three probable starters of the combined sentence are given which are denoted by A, B and C. Anyone or more or none of them may be correct. find out the correct starter(s) and accordingly select your answer from among the given five answer choices.

**48. He had accumulated wealth disproportionate to his known sources of income. This was revealed when the income tax officials raided his house.**

- A. On revealing the accumulated wealth, the income tax officials raided

B. His accumulated wealth which was disproportionate to his known sources of income was revealed to him by the income  
C. On raiding his house, the income tax officials accumulated

- (1) None
- (2) Only A
- (3) Only B
- (4) Only C
- (5) All the three

49. He is very rich and has all the luxuries at his disposal. He is not contented.

A. Despite being very rich  
B. He is not contented because he is  
C. Although he has all

- (1) Only A
- (2) Only B
- (3) Only C
- (4) Both A and B
- (5) Both A and C

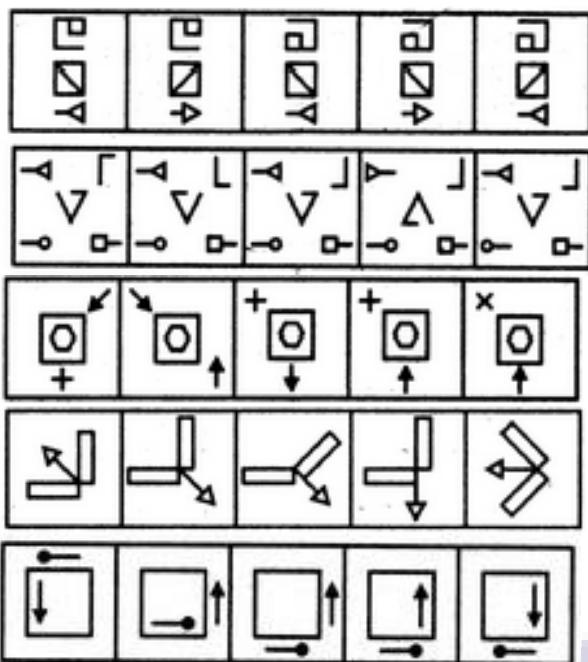
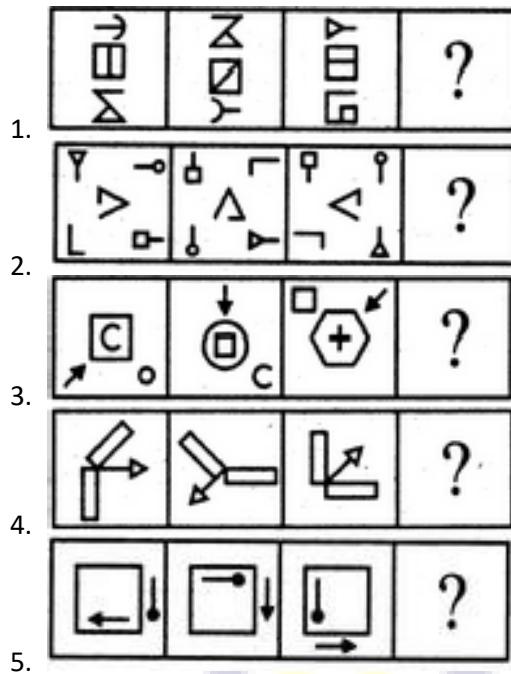
50. Cheteshwar Pujara reached his 10th Test century in style. Pujara reached century with a six over deep midwicket. This was Pujara's third successive century in as many Tests.

A. Cheteshwar Pujara reached his 10<sup>th</sup> ....  
B. 3<sup>rd</sup> Test of Chetashwar Pujara...  
C. Although it was his 6 Chetashwar Pujara...

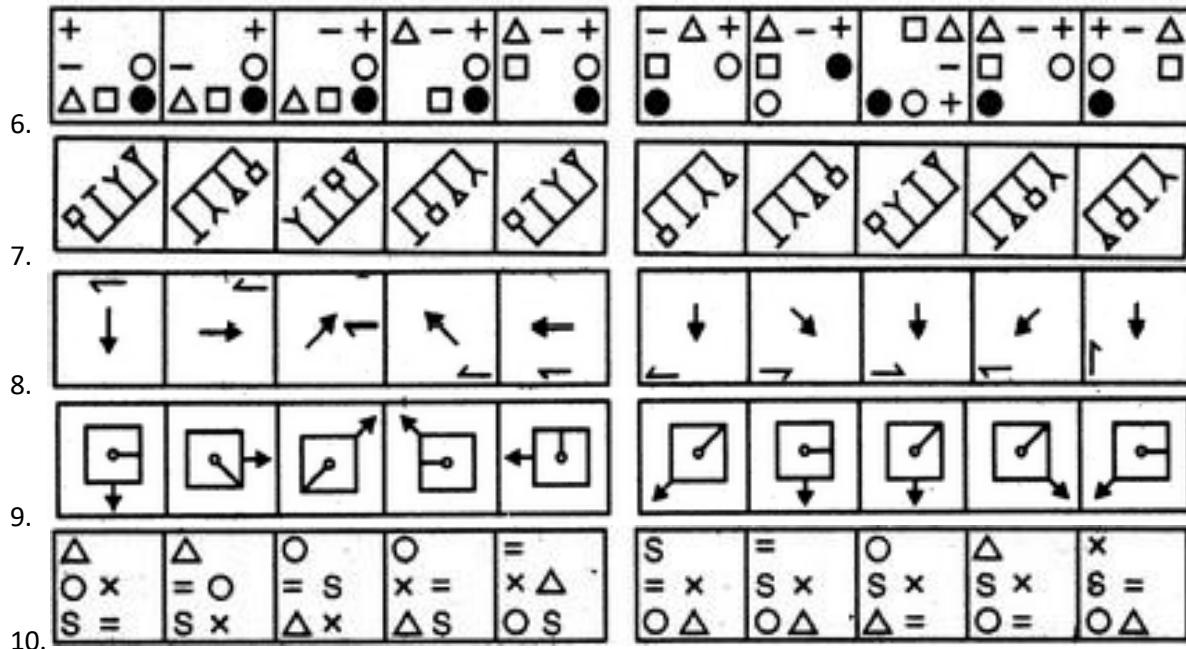
- (1) Only A
- (2) Only B
- (3) Only C
- (4) Both A and B
- (5) Both A and C

**Visual Reasoning**

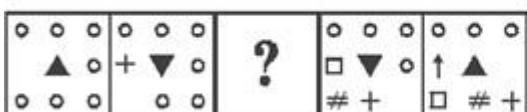
Each of the following questions consists of two sets of figures. Figures A, B, C and D constitute the Problem Set while figures 1, 2, 3, 4 and 5 constitute the Answer Set. There is a definite relationship between figures A and B. Establish a similar relationship between figures C and D by selecting a suitable figure from the Answer Set that would replace the question mark (?) in fig. (D).



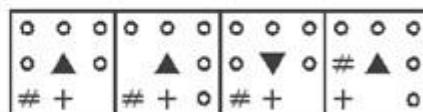
In these questions, there are two sets of figures. The Problem Figures and the Answer Figures. The Problem Figures are presented in two units. The first unit contains two figures and the second unit contains one figure and a question mark. You have to find out which of the Answer Figures should be in place of the question mark?



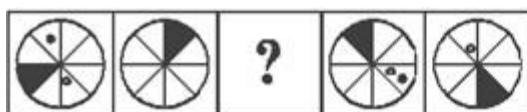
In these questions, there are two sets of figures. The Problem Figures and the Answer Figures. The four Problem Figures make a series. That means they change from left to right in a specific order. The question is, if the figures continue to change in the same order, what should be the third figure, so that the series is completed?

**PROBLEM FIGURES**
**ANSWER FIGURES**


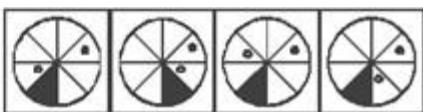
11..



(a) (b) (c) (d)



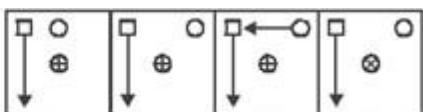
12..



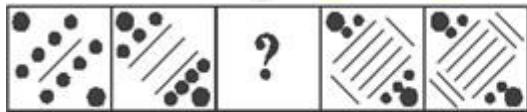
(a) (b) (c) (d)



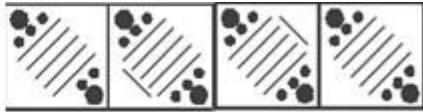
13..



(a) (b) (c) (d)

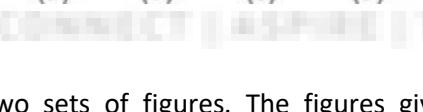
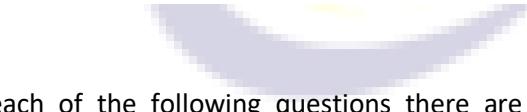


14..



(a) (b) (c) (d)

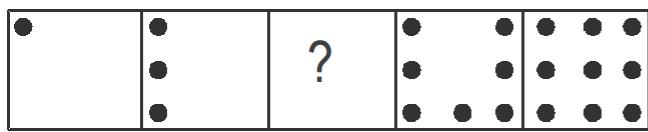
15..



(a) (b) (c) (d)

15..

In each of the following questions there are two sets of figures. The figures given above are "Problem Figures" and those given under them are "Answer Figures". A series is established if one of the answer figures is placed in place of question mark. You have to select that option from the answer figures which will continue the series given in the "Problem Figure" and mark it as the answer.

**Problem Figure**
**Answer Figure**


16.

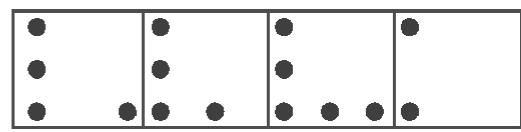
A

B

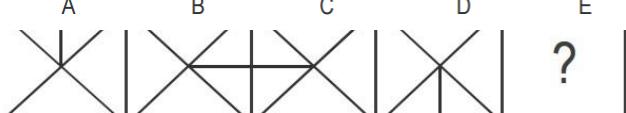
C

D

E



(a) (b) (c) (d)



17.

A

B

C

D

E



(a) (b) (c) (d)

18.

		?		
--	--	---	--	--

(a) (b) (c) (d)

19.

	?			
--	---	--	--	--

(a) (b) (c) (d)

20.

S	S X	?	X X X	X X X
X X X	X		X S X	X X X
S	X S		X X X	X X X

(a) (b) (c) (d)

21.

**Problem figures**

? * □	# @ #	?	* □ #	@ + β
~ T #	□ W β	?	? C @ # G ~	
β + @	* ? ~		~ β +	□ * ?

**Answer figures**

? * □	+ β ~	? * □	β ~ ?	β ~ ?
~ A #	@ Z ?	~ B #	+ A *	+ C *
β + @	# □ *	β # @	@ # □	@ # □

(a) (b) (c) (d) (e)

22.

		?		
--	--	---	--	--

(a) (b) (c) (d) (e)

23.

↑ O □ P △ N T X ♀ ↑ O □	T X ♀ N △ P ↑ O □ T X ♀	?	T X ♀ N △ P ↑ O □ T X ♀	↑ O □ P △ N T X ♀ ↑ X
----------------------------------	----------------------------------	---	----------------------------------	--------------------------------

(a) (b) (c) (d) (e)

24.

→ O □		?		→ O □
-------	--	---	--	-------

(a) (b) (c) (d) (e)

25.

## SOLUTION (REASONING)

1. 2
2. 2.4
3. 3.4
4. 4.5
5. 5.1

All buildings are houses + No house is an apartment = A + E = E = No building is an apartment (i). Again, No house is an apartment + All apartments are flats = E + A = O\* = Some flats are not houses (ii). Again, No building is an apartment + All apartments are flats = E + A = O\* = Some flats are not buildings (iii)

6. 2; Conclusion (i) above is the conclusion II.

7. 4; None follows.

Some oceans are seas (I) → conversion → Some seas are oceans (I) + All oceans are rivers = I + A = I = Some seas are rivers (i). Again, All ocean are rivers + No river is a canal = A + E = E = No oceans is a canal (ii). Again, Some seas are rivers + No river is a canal = I + E = O\* = Some canals are not seas (iii).

8. 4; All rivers can never be oceans → implication → Some rivers are oceans. This conclusion is the converse of the given premise 'All oceans are rivers.'

9. 5; Conclusion 11 is the above conclusion (ii). Conclusion I is the above conclusion (i).

10. 1; All beans are pulses + All pulses are crops = A + A = A = All beans are crops. Therefore, conclusion II follows. Again, All pulses are crops (A) => conversion => Some crops are pulses (1). Therefore, conclusion I does not follow.

11. 5; Some apples are fruits + No fruit is vegetable = I + E = O = Some apples are not vegetables. Again, All potatoes are vegetables + No vegetable is fruits = A + E = E = No potato is fruit. Therefore, neither conclusion I nor conclusion II follows.

12. 5; All books are journals (A) => conversion => Some Journals are books (I). Therefore, conclusion I does not follow. Again, All diaries are journals + Some journals are books = A + I = No conclusion. But 'Some diaries being books is a possibility' exists. Therefore conclusion II follows.

13.1; Chocolates have three types of fats, one of which increases the cholesterol level will weaken the argument that Chocolate do not contain only health benefits of leafy vegetables.

In each step, one word gets arranged from the left and one from the right, Note that words starting with vowels get arranged from the left and those starting with consonants get arranged from the right. This goes on in such a manner that finally we have vowel-starting words arranged in reverse alphabetical order followed by consonant-starting words arranged in reverse alphabetical order.

Input: gem stat ace cast omit fan rate uncut era input

Step I: uncut gem stat ace omit fan rate era input cast

Step II: uncut omit gem stat ace rate era input fan cast

Step III: uncut omit input stat ace rate era gem fan cast

Step IV: uncut omit input era stat ace rate gem fan cast

Step V: uncut omit Input era ace stat rate gem fan cast

14. 3

15. 1

16. 1

17. 4

18. 5

X (Delhi)

D (-)

Y (Chandigarh)

C

Z (Agra)

A (-)

G (+)	F(-)	H (+)
E	B (+)	
19.4		
20.5		
21.5		
22.2		
23.1		

24.4; 'It has been noticed recently that private organisations take a lot of effort to retain their employees to get benefit from their experience' will definitely negates the statement made by the citizen.

25.1; "In the past one year the state government has increased the frequency of trains in peak hours and has also increased the number of passengers per train" will definitely weakens the perceptions of the people.

26.1; Using statement I: II => Suresh => 21 => Mohan => 16 So, there are 21 students between Suresh and Mohan. Using statement II: Mohan's name is not even mentioned in the given statement. So, we cannot find the answer using statement II alone.

27.5; Using either of the statements alone we cannot find the code for \$, but using both the statements together we can find that '#53' is 'good flowers are'. So, the code for \$ is 'really'.

28.5; Using statement I: We cannot find the relation using this statement as J's name is not even mentioned in it. Using statement II: We can say that J is the mother of P but cannot decide whether P is the son or daughter of J. Using both statements together: P is the daughter of J.

29.4; Using either of the statements alone we cannot find the code, and even by using both the statements together we can only find that 'never ever' is coded as 'na ja' the code for 'never' cannot be uniquely determined even by using both the statements together.

30. 5; Using either of the statements alone we cannot find the answer, but when we use both the statements together we can find the relation in terms of weight, i.e. K > J > W > P > M, T

31. 2; Best course of action would be to find the reason for the food poisoning and the food provided in the hospital should be inspected regularly.

32.1; S is 3, K is %, I is \*, R is 4 and T is 1 therefore code is 3%\*41

33.1; New arrangement is 3275 8194 therefore third digit from the right end is 1

34.; I is simply absurd. II follows as a solution to the complicated paperwork.

Friend	College	Subject
A	Y	Fashion
B	Y	Acting
C	Y	Architecture
D	Z	Teaching
E	X	Medicine
F	Z	Engineering
G	X	Business

35. 5

36. 3

37. 1

38. 1

39. 4

40. 4

41. 2

42. 2; R E C R U I T Only one pair, EI.

43. 2;

CONTAGIOUS  
GIOUSCONTA

44. 1; Let Shyam start A and travel to D via B and C. We have to find out the distance AD which is equal to  $\sqrt{(12)^2 + (9)^2} = 15$

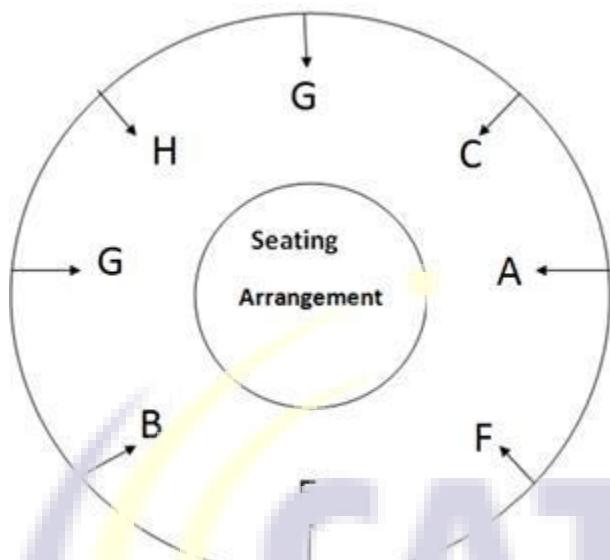
45. 2; A's father is the nephew of D.

46.5; Development of resistance against repellent drugs is naturally present in mosquitoes and does not depend on the amount of repellent used will definitely weaken the argument.

47.1; Both C and D statements substantiates the expert's comment

48.4; B statement will be a consequence of the increased concentration of repellents

Puzzle:



Facing centre: A, D, G, B, H

PROFESSOR	BUILDING	PAPER
A	R	English
B	V	History
C	T	Maths
D	W	History
E	S	English
F	P	Maths
G	Q	Maths
H	Z	-

49. Answer (Option D)

50. Answer (Option E)

51. Answer (Option B)

52. Answer (Option C)

53. Answer (Option A)

54. Answer (Option D)

55. Answer (Option E)

56. Answer (Option C)

57. Answer (Option A)

58. Answer (Option E)

59.1; Conclusions:

I. N > R => Follow

II. R = N => Not Follow ( N > R )

60.4; Conclusions:

I. B > Z => Not Follow ( Relationship not exist)

II.  $W < A \Rightarrow$  Not Follow ( Relationship not exist)

61.5; Conclusions:

I.  $I > M \Rightarrow$  Follow

II.  $L < H \Rightarrow$  Follow

62.4; Conclusions:

I.  $C \geq G \Rightarrow$  Not Follow ( Relationship not exist)

II.  $F > E \Rightarrow$  Not Follow (  $E > F$ )

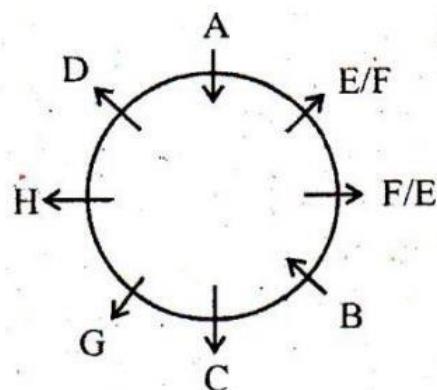
63.2; Conclusions:

I.  $V \geq U \Rightarrow$  Not Follow ( Relationship not exist)

II.  $V < R \Rightarrow$  Follow

64.3; An increase in the cases of atrocities on women and the police being unable to nab the culprits involved in the same are independent happenings in themselves.

65.5; The facts given in both the statements are clearly the result of acute power shortage.



66. 2

67. 4

68. 1

69. 5

70. 3

71. 5; 1 and 2 go in favour of online shopping. 3 is a defence of online shopping, 4 does not go into reason.

72. 4; A comparison between two experiences makes sense only when you have undergone both.

73.4;  $8 \times 1 - 2 = 6$ ,  $6 \times 2 - 3 = 9$ ,  $9 \times 3 - 4 = 23$ ,  $23 \times 4 - 5 = 87$ ,  $87 \times 5 - 6 = 429$  ...

74.2; This is an alternating multiplication and subtracting series: First, multiply by 2 and then subtract 8.

75.3; Here, every third number follows a different pattern from the main series. In the main series, beginning with 16, 10 is added to each number to arrive at the next. In the alternating series, beginning with 56, 12 is added to each number to arrive at the next.

## DI/DS Quant

1. Cost of production (A + B) by X2 = (15% of 75) crores

Cost of production of medicine A by X2 = ₹ (2/5 of (15% of 75) crores = 4.5 crores

Similarly, cost of production of medicine A by X6 = (3/8 of (8% of 75) crores = 2.25 crores

Required Ratio = 4.5 / 2.25 = 2:1

2. Cost of production of medicine A by company X2 = [2/5 of (15% of 75)] crores = 4.5 crores

Cost of production of medicine B by company X1 = [2/5 of (11% of 75)] crores = 3.3 crores

=> Total cost = (4.5 + 3.3) crores = 7.8 crores

3. Cost of production of medicine B by company X3 = [2/3 of (12% of 75)] crores = 6 crores

Cost of production of medicine B by company X4 = [4/5 of (5% of 75)] crores = 3 crores

=> Total cost = (6 + 3) crores = 9 crores

4. It is clear from the pie chart that the cost of production of both the medicines together by company X5 = (27% of 75) crores

Similarly, we have (from the pie chart) that the production of both the medicines together by combinations of companies is as follows:

(i)  $(X1 + X3) = [(11\% + 12\%) \text{ of } 75] \text{ crores} = (23\% \text{ of } 75) \text{ crores}$

(ii)  $(X6 + X7) = [(8\% + 22\%) \text{ of } 75] \text{ crores} = (30\% \text{ of } 75) \text{ crores}$

(iii)  $(X4 + X7) = [(15\% + 22\%) \text{ of } 75] \text{ crores} = (27\% \text{ of } 75) \text{ crores}$  which is same as that for company X5.

(iv)  $(X2 + X6) = [(15\% + 8\%) \text{ of } 75] \text{ crores} = (23\% \text{ of } 75) \text{ crores}$

5. 4; Cost of production of medicine B by company X6 = [ 5/8 of (8% of 75)] crores = 15/4 crores

Now, Profit earned = 25% of cost of production = (25% of 15/4) crores = 93.75 lakhs

6. Option B; In order that two books on Hindi are never together, we must place all these books as under: X E X E X E X .... X E X

Where E denotes the position of an English book and X that of a Hindi book.

Since there are 21 books on English, the number of places marked X are therefore, 22

Now, 19 places out of 22 can be chosen in  $22C19 = 22C3 = 22 \times 21 \times 20 / 3 \times 2 \times 1 = 1540$

Hence, the required number of ways = 1540

7. Option A

Total number of balls =  $(2 + 3 + 2) = 7$

Let S be the sample space.

Then,  $n(S) = \text{Number of ways of drawing 2 balls out of } 7 = 7C2 = 7 \times 6 / 2 \times 1 = 21$

Let E = Event of drawing 2 balls, none of which is blue.

$n(E) = \text{Number of ways of drawing 2 balls out of } (2 + 3) \text{ balls} = 5C2 = 5 \times 4 / 2 \times 1 = 10$

$P(E) = n(E)/n(S) = 10 / 21$

8. Option A

Let the son's present age be x years.

Then  $(38 - x) = x$

$2x = 38$

$x = 19$

Therefore son's age 5 years back =  $(19 - 5)$

= 14 years

9. Option B

S.P. = Rs.27.50

Then profit = 10%

So, C.P. = Rs. [  $100 / 110 \times 27.50$  ] = Rs.25

When S.P. = Rs.25.75

Profit = Rs.  $(25.75 - 25)$  = Rs.0.75

Profit =  $[0.75/25 \times 100]\%$  = 3%

10. Option A

Cost price of all eggs = Rs. $100 \times 1.2$  = Rs.120

Selling price of one egg =  $15 / 12$  = 1.25

So, selling price of 96 eggs =  $96 \times 15/12$  = Rs.120

11.5; Percentage =  $(70*100)/290$  = 24.13%

12.1; Total students from Hyderabad =  $84+52$  = 136

Percentage =  $(136*100)/1400$  = 9.71

13.3 Males = 820 After replacing =  $820-20=800$

Females = 290 After replacing =  $290+20=310$

Ratio = 800:310 =80:31

14.2 Total seats in Z college = 216

Post Graduate seats in Z college= 96

Percentage =  $(96*100)/216$  = 44.44%

15.3 Total seats in W college =  $360+30=390$  Total seats in X college =  $210+72 = 282$  Difference =  $390-282 = 108$

	HR	IT	Production	Marketing	Total
Male	13	65	130	117	325
Female	78	78	5	34	195

16. 1; Required % =  $117 / 520 \times 100 = 22.5\%$

17. 5; Required ratio =  $13 : 78 = 1 : 6$

18. 2;

19. 4; Required% =  $135/520 \times 100 = 25.96$  approx 26%

20. 3;

Let the quadratic equation be  $ax^2 + b + c = 0$  and find roots of this equation quickly.

These are the roots of the equation.

21. 3; I. x is area of a circle with radius 8 =  $3.14*9*9 = 254$

II. y is area of a square with side 15 =  $15 * 15 = 225$

22.1; Roots of x = 8, 7 or -8, -7 and Roots of y = 12, 11 or -12, -11

23. 5; Roots of x = 4, 3 or -4, -3 and Roots of y = 4, 2 or -4, -2

24. 2; Roots of x = 12, 10 or -12, -10 and Roots of y = 14, 12 or -14, -12

25. 4; Roots of x = 8, 4 or -8, -4 and Roots of y = 9, 8 or -9, -8

26. 3; A  $90 \times 130/100 = 117$ ; V = 90 R = 100

27. 4; Required units of electricity consumed =  $10 \times 8 (8 \times 2 + 3) = 1520$

28. 5; Required amount  $4000 \times (100 + 10)/100 =$  Rs. 4400

29. 5; Required number of selections  ${}^8C_1 \times {}^7C_5 = 168$

30. 1; Distance =  $44 / 60 \times 50 = x/60 \times 55 \Rightarrow x = 40$  min.

31. 3 Total number of students in School B =  $960 \times 11 = 10,560$

Physic students in School B =  $(10560 \times 9) / 20 = 4752$

Total number of students in School D =  $960 \times 24 = 23,040$

Chemistry students in School B =  $(23,040 \times 9) / 30 = 6912$  Total =  $6912 + 4752 = 11664$

32. Maths students in School A =  $18 \times 960 \times 8 / 15 = 9216$

Maths students in School B =  $11 \times 960 \times 5 / 20 = 2640$  Maths students in School E =  $14 \times 960 \times 5 / 21 = 3200$

Maths students in School G =  $15 \times 960 \times 3 / 10 = 4320$  Total students = 96,000 Percentage =  $(19376 / 96000) \times 100 = 20.18\%$

33. 3 Chemistry students in School B and C =  $(11 \times 960 \times 6 / 20) + (12 \times 960 \times 8 / 18) = 3168 + 5120 = 8288$

Maths students in School F and B =  $(6 \times 960 \times 6 / 15) + (11 \times 960 \times 5 / 20) = 2304 + 2640 = 4944$

Ratio = 518:309

34. 4 Physics Students in School A,C and E

=  $(18 \times 960 \times 3 / 15) + (12 \times 960 \times 5 / 18) + (14 \times 960 \times 4 / 21) = 3456 + 3200 + 3840 = 10,496$

Physics Students in B, D and G

=  $(11 \times 960 \times 9 / 20) + (24 \times 960 \times 10 / 30) + (15 \times 960 \times 3 / 10) = 4752 + 7680 + 4320 = 16,752$

Difference =  $16,752 - 10,496 = 6256$

35. 3 After increasing students in School B =  $10560 + 600 = 11160$

Maths students in School B =  $(5 \times 11160 / 20) = 2790$

After decreasing students in School D =  $23040 - 600 = 22440$

Maths students in School D =  $(22440 \times 11 / 30) = 8228$

Total =  $2790 + 8228 = 11,018$

36. 2;

37. 1; Required amount =  $16500 [(1.12)^3 - 1]$

38. 3;  $15\% \text{ of } 80\% = 1896 \Rightarrow 12\% = 1896 \Rightarrow 100\% \text{ of Rs. } 15800$

39. 5;  $x + 2x / y + 2y = 14/5 \Rightarrow x/y = 14/5$

40. 1;  $7x + 8 / 6x + 8 = 9/8 \Rightarrow x=4$

41. Option A

A : B : C =  $35000 : 45000 : 55000 = 7 : 9 : 11$

A's share = Rs.  $*40500 \times 7 / 27+ = \text{Rs.} 10500$

B's share = Rs.  $*40500 \times 9 / 27+ = \text{Rs.} 13500$

C's share = Rs.  $*40500 \times 11 / 27] = \text{Rs.} 16500$

42. c Statement I tells us that the time taken to cover both distances is the same, but it does not tell us anything about the speeds at which these are covered. This information is given by the second statement, which says the speed from cinema hall to home is less than that between home to the office. Hence by using both the statements we can say that the distance between cinema hall to home is less than that between home to the office.

43. b  $2g + 3b = 20$ . Since b & g should be integers the values that satisfy this equation are (g = 10 & b = 0), (g = 7 and b = 2), (g = 4 & b = 4), and (g = 1 and b = 6). From the first statement we can shortlist the last two possibilities i.e. g = 4 or g = 1, but cannot get a unique answer. The second statement suggests that the number of girls and boys have to be equal. Hence we get a unique answer viz. g=4 & b=4. Only statement II is required to answer the question.

44. b  $P = (SP - CP) \times \text{Sales}$ . From the data given in the question we can figure out that  $P_1 = (1.1SP - CP) \times 0.9\text{Sales}$ . Hence  $P/P_1 = 1.11(SP - CP)/(1.1SP - CP)$ . To find this ratio we need to eliminate the variables  $CP$  &  $SP$ . This can only be done if in the denominator,  $CP$  is replaced by  $1.1CP$ . In other words, if the  $CP$  increases by 10%, as in that case our ratio will be  $1.11/1.1 = 1.01$ . Hence only Statement II is required to answer the question.

45. d Students please note the average weight of the original members is not mentioned anywhere. Neither do we know the number of members in the original team. And unless we know one of these this question cannot be solved.

46. c We cannot use the first statement I unless we know that the points are collinear. This is obtained from the second statement. Hence  $PQ = PB + BQ$  and  $RS = RE + ES$ . If  $BQ = ES$  and  $PB > RE$ , then  $PQ > RS$ . Hence both statements are required to answer the question.

	Train A (700)	Train B (910)
General Coaches	140	241
Sleeper Coaches	161	273
First Class	224	91
AC Coaches	175	205

47.3

48.4

49.5

50.2



## Verbal

1. 1; The passage says; 'For this unprecedented rise in oil is creating a most demanding environment for alternative fuels.'
2. 4; Read the third sentence of the first para.
3. 2; Read the preceding sentence.
4. 5; (1) is true from the first sentence of the third para. For (2) read the second sentence from the end of the second para. (3) follows from the fourth sentence of the second para. (4) follows from 'India showing the way with its nuclear deal' .
5. 2; Read the complete sentence in which the idiom has been used.
  
6. 2
7. 3
8. 3
9. 1
10. 4
  
11. 2
12. 5
13. 3
14. 1
15. 4
  
16. 1; substitute extensive.
17. 2; substitute government sponsored
18. 4; substitute of
19. 3; substitute indication
20. 2; substitute because for why
  
21. 2
22. 5
23. 3
24. 4
25. 1
  
26. 4
27. 4
28. 3
29. 5
30. 3
  
31. E
32. C
33. B
34. A
35. B
  
36. C
37. D
38. A
39. E
40. B

41. C  
 42. C  
 43. C  
 44. C  
 45. C
46. 3; Efflorescence - flowering, blossoming  
 47. 3; Licentious - unrestrained by law or general morality; lawless; immoral especially sexually
48. 1; None follow all are grammatically wrong as a starting of these lines.  
 49. 5; Both A and C are grammatically wrong as a starting of these lines.  
 50. 1; Correct order: Cheteshwar Pujara reached his 10th Test century in style, with a six over deep midwicket. This is his third successive century in as many Tests.

### Visual Reasoning

1. D, The upper and the lower elements interchange places; the element that reaches the upper position gets laterally inverted; the element that reaches the lower position gets laterally inverted and its head also gets laterally inverted; the line segment inside the square (central element) rotates 45°CW.
2. C. The elements move in the sequence the elements reaching the upper-left and the lower-right positions rotate 90°ACW; the elements reaching the upper-right and lower-left positions rotate 90°ACW; the central element rotates 90°ACW and gets laterally inverted.
3. D. The arrow rotates 135°CW and moves a distance equal to one and a half sides of the square boundary in a CW direction. Out of the two central elements, the outer element diminishes in size and becomes the inner element, the inner element moves to the position of the corner element and the corner element gets enlarged and moves to the central position to become the outer element.
4. D. The arrow rotates 135°CW and the remaining part of the figure rotates 90°ACW.
5. D. The outer element rotates 90°ACW; moves to the adjacent side of the square in an ACW direction and shifts inside the square. The inner element rotates 90°ACW; moves to the adjacent side of the square in an ACW direction and shifts outside the square.
6. D. In each step, the CW-end element moves to the ACW-end position.
7. B. Similar figure reappears in every second step. Each time the first figure reappears, the elements interchange positions in the order: . And, each time the second figure reappears, the elements interchange positions in the order: .
8. A. The central arrow rotates 90°ACW and 45°CW alternately. The half-arrow moves half-a-side of the square boundary in a CW direction and its head turns to the other side of the line in each step.
9. C. The pin rotates 45°CW and 90°ACW alternately and moves one space (each space is equal to half-a-side of the square) and two spaces CW alternately. The arrow rotates 90°ACW and 45°ACW alternately and moves two spaces and one space.
10. B. The elements move in the sequence's and alternately.
11. d The shaded triangle flips alternately by 180° along the horizontal axis in every figure. So, option (c) gets eliminated. From first box onwards, one circle disappears every time and a new element appears at position 4. Hence, in box 3 of the problem figure, a new element '#' is



sequence the elements reaching the upper-left and the lower-right positions rotate 90°ACW; the elements reaching the upper-right and lower-left positions rotate 90°ACW; the central element rotates 90°ACW and gets laterally inverted.



every second step. Each time the first figure reappears, the elements interchange positions in the order: . And, each time the second figure reappears, the elements interchange positions in the order: .



10. B. The elements move in the sequence's and alternately.

11. d The shaded triangle flips alternately by 180° along the horizontal axis in every figure. So, option (c) gets eliminated. From first box onwards, one circle disappears every time and a new element appears at position 4. Hence, in box 3 of the problem figure, a new element '#' is

introduced at position 4 and the '+' sign moves one step ACW. Also, if you further observe the vacant place moves one step ACW.

12. a The shaded region moves by three steps CW. The small circle moves three steps ACW. The dot moves by one step CW.
13. b Simple logic. In box 3 of the problem figure a circle appears at the top right corner.
14. d The shaded dots reduce by one and the lines increase by two in every step.
15. c Observe the fourth and the fifth boxes. The circle and the square remain in the same position but both the curved Xs which were bulging inwards now bulge outwards. Hence, now in the third box the Xs would remain as it is but the remaining three objects remain in the same position.
16. c The logic here is that an odd number of elements are added to subsequent figures along ACW direction.
17. b Option (b) is the correct choice as line is moving clockwise in one step, two steps, three steps and four steps.
18. a Option (a) is the correct choice as the movement of shaded region is in ACW direction.
19. b Option (b) is the correct choice as all the elements move in CW direction.
20. d Option (d) is the correct choice since all the 'S' are being consumed by 'X'
21. 1. d 'Lollypop' moves by  $135^\circ$  in clockwise direction. 'T' moves by  $45^\circ$  in anticlockwise direction. 'Circle' moves by  $90^\circ$  in clockwise direction. 'Cross' moves by  $45^\circ$  in clockwise direction. 'Arrow' moves by  $90^\circ$  in anticlockwise direction in each figure, at their own positions.
22. d The movement is like 1 – 8 – 3 – 4 – 9 – 2 – 7 – 6. A new element enters at the middle position each time.
23. c The arrow moves towards left-hand side completely and then reverses its movement; the circle moves about the corners in clockwise direction.
24. d The movement is like 1 – 7, 2 – 8, 3 – 9, 4 – 6, and the middle element remains the same.
25. b Half circle is added each time from alternate sides. 'Arrow' moves in clockwise direction. 'Box' moves in clockwise direction with internal line changing its position alternately.