

VARC

Read the passage below and answer the questions that follow:

In principle, a cohesive group—one whose members generally agree with one another and support one another's judgments—can do a much better job at decision making than it could if it were noncohesive. When cohesiveness is low or lacking entirely, compliance out of fear of recrimination is likely to be strongest. To overcome this fear, participants in the group's deliberations need to be confident that they are members in good standing and that the others will continue to value their role in the group, whether or not they agree about a particular issue under discussion. As members of a group feel more accepted by the others, they acquire greater freedom to say what they really think, becoming less likely to use deceitful arguments or to play it safe by dancing around the issues with vapid or conventional comments. Typically, then, the more cohesive a group becomes, the less its members will deliberately censor what they say out of fear of being punished socially for antagonizing their fellow members.

But group cohesiveness can have pitfalls as well: while the members of a highly cohesive group can feel much freer to deviate from the majority, their desire for genuine concurrence on every important issue often inclines them not to use this freedom. In a highly cohesive group of decision makers, the danger is not that individuals will conceal objections they harbor regarding a proposal favored by the majority, but that they will think the proposal is a good one without attempting to carry out a critical scrutiny that could reveal grounds for strong objections. Members may then decide that any misgivings they feel are not worth pursuing—that the benefit of any doubt should be given to the group consensus. In this way, they may fall victim to a syndrome known as "groupthink," which one psychologist concerned with collective decision making has defined as "a deterioration of mental efficiency, reality testing, and moral judgment that results from in-group pressures."

Based on analyses of major fiascos of international diplomacy and military decision making, researchers have identified groupthink behavior as a recurring pattern that involves several factors: overestimation of the group's power and morality, manifested, for example, in an illusion of invulnerability, which creates excessive optimism; closed-mindedness to warnings of problems and to alternative viewpoints; and unwarranted pressures toward uniformity, including self-censorship with respect to doubts about the group's reasoning and a concomitant shared illusion of unanimity concerning group decisions. Cohesiveness of the decision-making group is an essential antecedent condition for this syndrome but not a sufficient one, so it is important to work toward identifying the

additional factors that determine whether group cohesiveness will deteriorate into groupthink or allow for effective decision making.

1. Which one of the following most accurately expresses the main point of the passage?

- A. Despite its value in encouraging frank discussion, high cohesion can lead to a debilitating type of group decision making called groupthink.
- B. Group members can guard against groupthink if they have a good understanding of the critical role played by cohesion.
- C. Groupthink is a dysfunctional collective decision-making pattern that can occur in diplomacy and military affairs.
- D. Future efforts to guard against groupthink will depend on the results of ongoing research into the psychology of collective decision making.

2. Which one of the following, if true, would most support the author's contentions concerning the conditions under which groupthink takes place?

- A. A study of several groups, each made up of members of various professions, found that most fell victim to groupthink.
- B. There is strong evidence that respectful dissent is more likely to occur in cohesive groups than in groups in which there is little internal support.
- C. Extensive analyses of decisions made by a large number of groups found no cases of groupthink in groups whose members generally distrust one another's judgments.
- D. There is substantial evidence that groupthink is especially likely to take place when members of a group develop factions whose intransigence prolongs the group's deliberations.

3. The passage mentions which one of the following as a component of groupthink?

- A. unjustified suspicions among group members regarding an adversary's intentions
- B. strong belief that the group's decisions are right
- C. group members working under unusually high stress, leading to illusions of invulnerability
- D. careful consideration of objections to majority positions

4. It can be inferred from the passage that both the author of the passage and the researchers mentioned in the passage would be most likely to agree with which one of the following statements about groupthink?

- A. Groupthink occurs in all strongly cohesive groups, but its contribution to collective decision making is not fully understood.
- B. The causal factors that transform group cohesion into groupthink are unique to each case.
- C. The continued study of cohesiveness of groups is probably fruitless for determining what factors elicit groupthink.

D. On balance, groupthink cannot be expected to have a beneficial effect in a group's decision making.

5. *There is a sentence that is missing in the paragraph below. Look at the paragraph and decide where (option 1, 2, 3, or 4) the following sentence would best fit.*

Sentence: Typophilic publishers tend to pay minute attention to a typeface's nuances, things that the average reader couldn't care less about.

Paragraph: Lest we take our type too seriously, here's a short story. ____ (1) ____ . You may have noticed how some books carry a colophon at the end—a device of rich and varied history—that conveys the details of their production. ____ (2) ____ . Since we're no longer so mediocrally lavish with our curses, it's often just a logo or a note that describes the chosen typeface, its history, and the circumstances of its choosing within the overall design. ____ (3) ____ . And admittedly, some take it too far. ____ (4) ____ .

- A. Option 1
- B. Option 2
- C. Option 3
- D. Option 4

6. *The four sentences (labelled 1, 2, 3 and 4) given below, when properly sequenced, would yield a coherent paragraph. Decide on the proper sequencing of the order of the sentences and key in the sequence of the four numbers as your answer.*

1. They found and publicized patterns of ethical lapses and improperly vetted research, even in the face of insults and lawsuits.
2. It also highlights the dogged work of outside scientists, teachers, and journalists who questioned the institute's research history.
3. As a result, the research institute was investigated and the research director barred from practicing medicine.
4. This Science investigation unravels the systematic problems at the research hospital where the hydroxychloroquine study took place.

7. *The passage given below is followed by four alternate summaries. Choose the option that best captures the essence of the passage.*

Historians generally agree that, of the great modern innovations, the railroad had the most far-reaching impact on major events in the United States in the nineteenth and early twentieth centuries, particularly on the Industrial Revolution. There is, however, considerable disagreement among cultural historians regarding public attitudes toward the railroad, both at its inception in the 1830s and during the half century between 1880 and 1930, when the national rail system was completed and reached the zenith of its popularity in the United States. In a recent book, John Stilgoe has addressed this issue by arguing that the "romantic-era distrust" of the railroad that he claims was present during the 1830s

vanished in the decades after 1880. But the argument he provides in support of this position is unconvincing.

A. While historians agree that the railroad profoundly shaped America's industrial development, they differ sharply on how the public viewed it, and one recent attempt to resolve this debate fails to persuade.

B. Despite the railroad's undisputed influence on American history, cultural historians have largely dismissed debates about how it was perceived by the public in different periods.

C. John Stilgoe's claim that early skepticism toward the railroad faded after 1880 has been widely accepted as the most comprehensive account of nineteenth-century public opinion.

D. The railroad's role in the Industrial Revolution is unquestioned, but its influence on American culture and public imagination has received little scholarly attention.

8. *Five jumbled-up sentences (labelled 1, 2, 3, 4 and 5), related to a topic, are given below. Four of them can be put together to form a coherent paragraph. Identify the odd sentence and key in the number of that sentence as your answer.*

1. If you encounter a snake while out on a hike, fear will lead you to back away and exercise caution.

2. By contrast, the fears that dominate political discourse are less concrete.

3. In ordinary life, fear is often a fitting response to danger.

4. If the snake is poisonous, fear will have saved your life.

5. Citizens face real dangers from failed political leadership, as lethal to our livelihood as snake bites.

9. *Five jumbled-up sentences (labelled 1, 2, 3, 4 and 5), related to a topic, are given below. Four of them can be put together to form a coherent paragraph. Identify the odd sentence and key in the number of that sentence as your answer.*

1. This seems like just atheism repackaged.

2. There are pantheists, who think that 'God' and 'the universe' are simply different words for the same thing.

3. However, there are versions of the God hypothesis that don't see things in such binary terms.

4. There is a fit with the conviction of many mystics, as well as the English Romantic poets, that the Divine is present in all things.

5. The idea of God I received as a child was of something completely separate from the universe.

10. *There is a sentence that is missing in the paragraph below. Look at the paragraph and decide where (option 1, 2, 3, or 4) the following sentence would best fit.*

Sentence: The flesh is low in fibre, making it exceptionally succulent.

Paragraph: Yumemizuki peaches are notable for their large size and sweetness. ____ (1) _____. Developed by a prefectural facility that experiments with fruit trees, Yumemizuki peaches have milky-white flesh that contrasts beautifully with their vibrant, deep pink skin. ____ (2) _____. While delicious eaten fresh, this variety is also used as an ingredient in desserts and other dishes. ____ (3) _____. "You can simply freeze the mashed flesh to enjoy as an exquisite sherbet," said Rina Suzuki, a Yamanashi Prefectural Government Marketing and Export Support Division staffer. ____ (4) _____.

- A. Option 1
- B. Option 2
- C. Option 3
- D. Option 4



DILR

Four friends, A, B, C and D, played a game of Poker. Initially, they had chips in the 60s, 40s, 50s, and 70s, respectively, such that each one of them had a prime number of chips. They played 6 rounds of the game such that the chips were transferred among them. It is also known that:

- A lost 10 chips in each round.
- The number of chips with B after every round formed an increasing arithmetic progression.
- The chips with D were all numbers between 71 and 77(both inclusive) but not in any specific order.
- B ended up with as many chips as A had at the start of the game.
- The number of chips with D was even after rounds 1, 3 and 5
- The number of chips with C was a perfect square after rounds 1 and 4.
- Both C and D had 74 chips at the end of round 3.
- All except D ended up with a prime number of chips.

11. What was the total number of chips used in the game?

12. At the end of how many rounds did C have more chips than anyone else?

- A. 3
- B. 2
- C. 1
- D. C never had the highest number of chips

13. After which round was the difference in the number of chips between A and B the least?

- A. Round 4
- B. Round 3
- C. Round 2
- D. Round 1

14. At the end of which round did D have 75 chips?

- A. Round 4
- B. Round 3
- C. Round 6
- D. Round 2

15. At the end of which round was the range of chips held by the four players the smallest?

- A. Round 4
- B. Round 3
- C. Round 2
- D. Round 1

CAT 50 Day Streak – Day 13

100 people each were surveyed by Apple in three months: Jan, Feb and Mar, to find out the likelihood of people buying a MacBook or an iPhone. The results of the survey are given in the following table.

Response	Macbook			iPhone		
	Jan	Feb	Mar	Jan	Feb	Mar
Very unlikely	50	46	22	17	18	21
Somewhat unlikely	24	26	29	14	13	8
Undecided	10	12	15	4	5	7
Somewhat Likely	5	6	11	46	36	34
Very Likely	2	4	7	16	21	25
No Response	9	6	16	3	7	5

NOTE:

No. of Persons likely to buy = somewhat likely to buy + very likely to buy

No. of Persons unlikely to buy = somewhat unlikely to buy + very unlikely to buy

16. In Jan, at least how many of the persons surveyed are unlikely to buy a MacBook and also unlikely to buy an iPhone?

- A. 5
- B. 8
- C. 10
- D. 13

17. In Mar, what is the least number of persons surveyed who are likely to buy at least one of the MacBook and iPhone?

18. In Feb, if among the persons surveyed, 14 persons said they were undecided to buy either MacBook or iPhone, what percentage of the total people surveyed were undecided to buy both MacBook and iPhone?

- A. 2%
- B. 3%
- C. 4%
- D. 5%

19. The same set of 100 persons was surveyed in each of the three given months. The number of persons who responded in the same manner regarding their likelihood of buying an iPhone in Feb and Mar is at most

20. The same set of 100 persons was surveyed in each of the three given months. The number of persons who were very unlikely to buy a MacBook in two or more of the three months is at least

- A. 26
- B. 23
- C. 21
- D. 18

QA

21. The average weight of boxers in a tournament is 72 kg. If 10 boxers having an average weight of 78 kg leave and in their place 4 boxers having an average weight of 80 kg join the tournament, the average weight of the group is reduced by 0.7 kg. What was the initial number of boxers in the tournament?

22. A natural number N has 4 factors. The sum of the factors excluding 1 and the number itself is 132. How many values of n are possible?

- A. 9
- B. 10
- C. 12
- D. 15

23. If a quadratic equation $f(x)=0$ has two distinct real roots opposite in sign, the roots of the equation $f(x) + f(-x) = 0$ are:

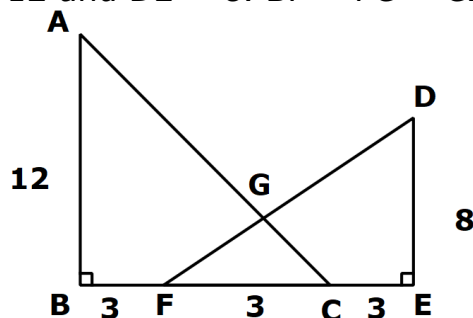
- A. Real, equal in magnitude but opposite in sign
- B. Real, unequal in magnitude and opposite in sign
- C. Real, unequal in magnitude and same in sign
- D. Imaginary

24. England and Australia play a test series until one team wins 5 matches. No match ends in a draw. In how many ways can the series be won?

- A. 126
- B. 144
- C. 231
- D. 252

25. A library had a certain number of shelves, and each shelf had an equal number of books. One day, ten shelves were removed from the library, and so each of the remaining shelves needed to hold one more book. A week later, 15 more shelves were removed from the library, and now there were three more books in each shelf than there were in the beginning. How many books are there in the library?

26. In the following figure, ABC and DEF are right-angled triangles. $AB = 12$ and $DE = 8$. $BF = FC = CE = 3$. What is the area of triangle CFG ?



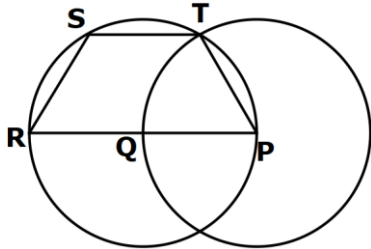
- A. 3.6 sq units
- B. 4.8 sq units
- C. 7.2 sq units
- D. 9.6 sq units

27. x and y are real numbers that satisfy the inequality: $10x^2 + y^2 - 6xy + 17 \leq 8x + 1$. Find the value of $y^2 - x^2$.

28. A shopkeeper bought three varieties of mangoes at Rs 100, Rs 80 and Rs 60 per kg and mixed them in the ratio 3:4:5. $\frac{1}{6}$ th of the mangoes were rotten and hence could not be sold. At what price per kg (approx.) should he sell the remaining mangoes so that he gains 35%?

- A. Rs 103
- B. Rs 86
- C. Rs 124
- D. Rs 112

29. In the given fig., there are two circles of unit radius and centres P and Q , respectively. What is the area of trapezium $PRST$?



- A. $3\sqrt{3}/8$
- B. $3\sqrt{3}/2$
- C. $4\sqrt{3}/3$
- D. $3\sqrt{3}/4$

30. A family consists of a couple and their daughter. The ratio of the present ages of the father and the daughter is 5:1, while that of the present ages of the mother and the daughter is 4:1. When the daughter was born, the average age of her parents was 28 years. How many years from now will the daughter be half as old as her mother?

- A. 12 years
- B. 14 years
- C. 16 years
- D. 18 years