

VARC

Read the passage below and answer the questions that follow:

Acts of selflessness are at the center of many ancient teachings and religious traditions, both Abrahamic and karmic. Kolbe's own Christian faith teaches, "Greater love hath no man than this, that a man lay down his life for his friends." Charity toward others is one of the Five Pillars of Islam. Dharma in Hinduism refers to the righteous path that a person's life should take, which includes being honest, avoiding causing harm, and showing generosity toward others.

Although self-sacrifice might seem unnatural and against human nature, the reverse is true. Some evolutionary biologists contend that altruism is an innate trait that evolved to foster cohesion in kinship groups; they note that the characteristic is also found among nonhuman primates. This behavior extends even to laying down one's life for friends and kin, a phenomenon that scholars believe occurs because of what they call "identity fusion": I am willing to die for you because I believe my membership in this community is paramount, so defending it is worth my sacrifice; in that sense, I am dying for me, too.

Such courage and self-sacrifice toward kin can certainly be inspiring, but moral beauty is most striking in acts of goodness toward others with whom one does not have obvious ties, exhibiting a degree of altruism that is clearly contrary to one's individual interests. This occurs when a person helps another for no reason at all, forgives someone who truly does not deserve it, or—in the most extreme circumstances—gives up their life for a stranger. Witnessing this kind of moral beauty elicits what the social psychologist Jonathan Haidt calls "moral elevation," which is experienced both psychologically and neurologically. Indeed, researchers writing in the journal *Brain Research* have identified specific areas of the brain that are stimulated by moral beauty.

The psychologist Rhett Diessner has written a great deal about moral beauty and elevation. With his co-authors, he notes that this association induces "pleasant feelings of warmth in the chest, feeling uplifted, moved." Further, as Diessner told me by email, new research undertaken in his laboratory at Lewis-Clark State College, in Idaho, demonstrates that these "magical" feelings lead to a desire to be better people ourselves and to help others. This results in prosocial actions, which can provide higher levels of individual and collective happiness.

Happiness derived from self-sacrifice is much deeper than plain positive feelings. Psychologists writing in 2016 showed that people feel that their life has more significance when they either help another person, without self-aggrandizement or any expectation of gain, or work to make the

world a better place. The scholars found that this has the greatest benefit when people are suffering from a loss of their sense of significance, perhaps after being rejected in a relationship or losing a job.

Putting all the research together, we know that witnessing acts of moral beauty can elevate us to higher happiness, all the more so if we imitate these acts. We should seek out moral beauty in our lives, especially in times of suffering, when we need inspiration and a reminder that there is good in the world.

1. It can be inferred from the passage that an act of "moral beauty" is distinct from the kin-based altruism primarily because:

- A. it is motivated by religious teachings rather than by innate evolutionary traits.
- B. it generates a sense of "moral elevation" in the witness, whereas kin-based altruism does not.
- C. it is perceived as being less motivated by an underlying self-interest at the group-identity level.
- D. it is more likely to be performed by someone who has recently lost a job or ended a relationship.

2. The author's chain of reasoning in paragraphs 3 and 4 suggests that:

- A. prosocial actions are the primary cause of the "magical" feelings associated with moral elevation.
- B. the desire to be a better person is a neurological response that is independent of any emotional feeling.
- C. witnessing an act of moral beauty is a necessary and sufficient condition for an increase in collective happiness.
- D. an emotional response to a selfless act can be a catalyst for tangible, positive behaviors.

3. Which of the following scenarios would most effectively illustrate the "greatest benefit" described by the scholars in the passage?

- A. A successful CEO donates a large sum of money to a university and has a building named after her.
- B. A person who was recently laid off spends her weekends volunteering at a soup kitchen for strangers.
- C. A soldier sacrifices his life during a battle to save several members of his own platoon.
- D. A social media influencer films himself giving Rs. 20000 to a homeless person and feels a "warmth in the chest."

4. Which of the following, if true, would most seriously weaken the author's claim about moral elevation mentioned in paragraph 4?

- A. A study finds that people who report "pleasant feelings of warmth" after witnessing a selfless act are no more likely to donate to charity than a control group.
- B. Neuroscientists discover that the same brain areas stimulated by moral beauty are also stimulated by listening to beautiful music.
- C. It is found that people who are suffering from depression feel worse after witnessing acts of extreme moral beauty.
- D. Research shows that "identity fusion" is a significantly more powerful and common motivator for prosocial behavior than "moral elevation."

5. 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. A rapid transformation in social context and reality, a rising number of political parties, frequent elections and bye-elections, an increase in the number of eligible voters and continuous updating of electoral rolls have led to new challenges for election management bodies of today.
- 2. Over the last six decades, the structure and functions of the Election Commission have undergone major changes, and thus, the management of elections has become increasingly complex.
- 3. The Election Commission of India (ECI) established the India International Institute of Democracy and Election Management (IIIDEM) to advance its professional competence in election management.
- 4. This initiative aims to promote people's participation, contribute to developing stronger democratic institutions and support the efforts of ECI in carrying out its mandate and functions.

6. 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: One problem is that we factor in spatial distance, but we ignore temporal distance.

Paragraph: Our self-predictive powers are so poor for a variety of reasons. ____ (1) _____. For one, we imagine the future without much detail, like we see a faraway object without much detail. ____ (2) _____. So, we trust that a Monday morning dentist appointment six months from now will seem sensible, and then discover what a bad idea it was when the time comes. ____ (3) _____. Another problem is that present circumstances color the way we envision the future. ____ (4) _____. If you go shopping on an empty stomach, you'll buy more food than you'll be happy with having bought later on.

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

7. 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. Although the group did eventually succeed in finding 10 questions that stymied the bot, the researchers were astonished by how far AI had progressed in the span of one year.
2. By the end of the meeting, the group started to consider what the future might look like for mathematicians.
3. If AI reaches that level, the role of mathematicians would undergo a sharp change.
4. Discussions turned to the inevitable “tier five”—questions that even the best mathematicians couldn't solve.
5. For instance, mathematicians may shift to simply posing questions and interacting with reasoning bots to help them discover new mathematical truths.

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

When someone asks, ‘Who are you?’, it’s tempting to respond with labels, like ‘Asian’, ‘male’, ‘vegetarian’, or ‘student’. These tags are easy to understand and help others quickly identify us. But such labels only scratch the surface. They tell us about general physical traits, societal roles, or personal choices, but they don’t really dive into the deeper question: What does it mean to be you? Or in general, what does it really mean to be human? Are we just organisms, or is there something more – like a soul, or some other deep basis of our existence? Or are we defined by the relationships we build, our actions, or our potential? Understanding what it means to be human influences how we treat ourselves and others, how we structure society, and how we interact with emerging technologies like AI.

- A. Advances in artificial intelligence have made it easier to understand what it means to be human.
- B. Labels like nationality and occupation are the most accurate ways to describe who we are.
- C. Human identity is complex and cannot be fully captured by superficial labels or social roles.
- D. The concept of humanity is purely biological, defined by our physical and genetic makeup.

9. 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: When it was clear that they were down, the go-ahead was given.

Paragraph: The aircraft flew south, towards Egypt, and soared upwards when it reached Port Said. ____ (1) _____. Travelling up and down the Suez Canal, the electronic devices installed in the Vautours delivered a sustained signal that had a dramatic effect. ____ (2) _____. Below them, Egyptian radar operators and anti-aircraft batteries found, to their amazement, that their screens had gone blank. ____ (3) _____. Israeli Dakota and Stratocruiser aircraft flying nearby monitored the activity of the Egyptian radar stations. ____ (4) _____.

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

10. 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. What is the unique position of Ethiopia?
2. It is one of the very few places that managed to sustain an unbroken chain of historical civilisation free of foreign "corruption".
3. Since the country has never been colonised, it boasts a history of independence that stretches back to distant antiquity.
4. The Africanist approach sees itself as the saviour of, specifically, Africa and Ethiopia's history.
5. As the historian Teshale Tibebu wrote: 'Ethiopia is a historically antique polity.'

MBA KARO

DILR

The Indian Women's Cricket Team played a 5-match ODI series. In all five matches, only 5 batters got a chance to bat, and all the batters had a distinct score in a match. The table below gives the runs scored by the top 3 batters in each of the matches and the percentage contribution of the top 3 batters in the total score of the match. Data for the other two is missing. No extra runs were scored.

Player	Match 1	Match 2	Match 3	Match 4	Match 5
Smriti	64		59	48	
Pratika		78	55		55
Jemimah	56	60		42	
Harmanpreet		54	68		50
Richa	48			50	65
Contribution of top 3	75%	80%	87.5%	83.33%	85%

For example, Smriti, Jemimah and Richa were the top three batters in match 1, and their contribution to the total score was 75%.

11. What could be the maximum number of runs scored by any batter in the series?

12. Which of the following statements is false?

- A. Only three people scored more than 50 in match 2
- B. The minimum possible total of any batter in the series is 158
- C. Only one player could have achieved a total above 250
- D. The minimum possible score in every match is 0

13. The difference between the total runs of Pratika and Harmanpreet cannot be more than

14. If Richa got a total of 237 runs, what is the sum of runs scored by Smriti and Jemimah in the series?

- A. 333
- B. 345
- C. 359
- D. 363

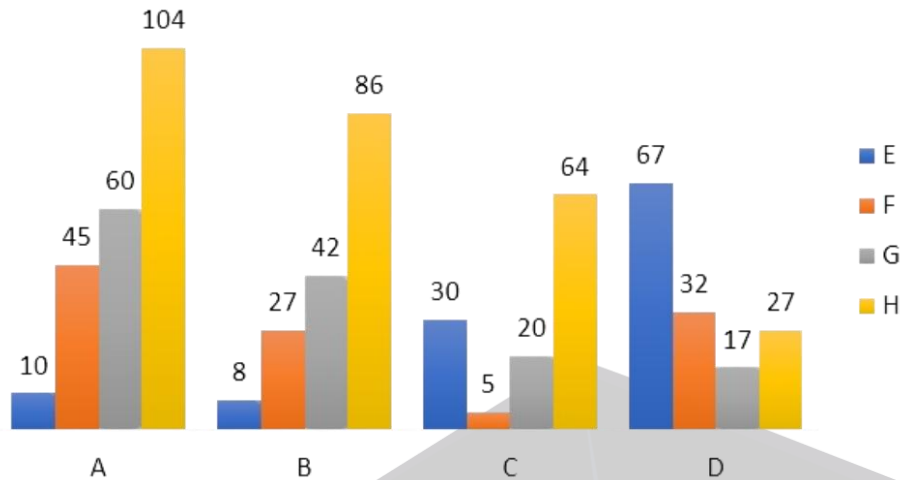
15. Which of the following cannot be the ratio of the total runs scored by Smriti and Pratika?

- A. 83:87
- B. 95:98
- C. 86:99
- D. 100:101

8 students, A, B, C, D, E, F, G, and H, appeared for a competitive examination. The bar graph below shows the differences in the number of

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marks between A, B, C, and D, compared to the marks scored by E, F, G, and H. The marks scored by all students were positive integers.



For example, the difference between the marks scored by A and E is 10, the difference between the marks scored by A and F is 45 and so on.

16. Who among the following can be the student who was ranked 3rd?

- A. C
- B. B
- C. F
- D. E

17. If one student scored 56 marks and F was ranked 4th, which of the following can be the score of one of the other students?

- A. 43
- B. 110
- C. 76
- D. 145

18. If one student scored 8 marks and D was ranked 7th, which of the following cannot be the score of any student?

- A. 102
- B. 52
- C. 35
- D. 70

19. What is the difference between the marks scored by F and G?

20. The median score of the eight students cannot be

- A. 40
- B. 45
- C. 50
- D. 60

QA

21. In a 100 m race, A runs at 8 kmph. If A gives B a start of 4 m and still beats him by 15 seconds, what is the speed of B?

- A. 5.76 km/h
- B. 4.8 km/h
- C. 5.33 km/h
- D. 6.08 km/h

22. Solve for the non-integer value of x

$$2^{x+5} = 3^{x^2+6x+5}$$

- A. $\log_2 \frac{3}{2}$
- B. $\log_2 \frac{5}{3}$
- C. $\log_3 \frac{2}{3}$
- D. $\log_3 \frac{3}{5}$

23. Find the average of all natural numbers less than 500 that, when divided by 4, leave a remainder of 1, but when divided by 5 leave a remainder of 2.

- A. 247
- B. 257
- C. 267
- D. 277

24. What annual installment will discharge Rs. 8400 due in 5 annual equal installments at the rate of simple interest of 10% per annum?

25. If $\{f(x)\}^2 + f(x) = \frac{25x^2 + 10x}{4}$, and $f(3)$ is negative, find the value of $f(10)$.

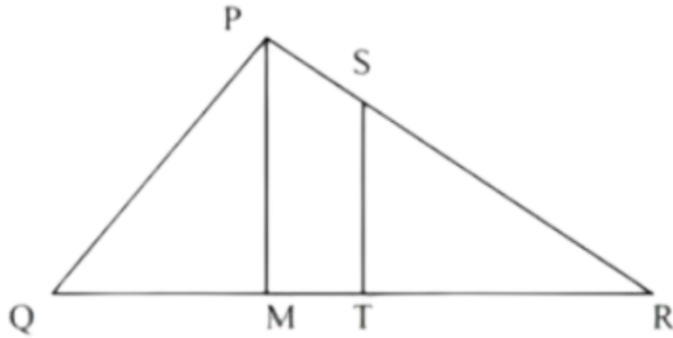
- A. -26
- B. -25
- C. -24
- D. 25

26. Three numbers are in an increasing geometric progression with common ratio r . If the middle number is doubled, then the new numbers are in an arithmetic progression with common difference d . If the fourth term of the GP is $3r^2$, then $r^2 - d$ is equal to:

- A. $7 - 7\sqrt{3}$
- B. $7 + 3\sqrt{3}$
- C. $7 - \sqrt{3}$
- D. $7 + \sqrt{3}$

27. In the given ΔPQR , $PQ = 13$ units, $QR = 14$ units, and $PR = 15$ units. PM is an altitude, and the line segment ST is perpendicular to QR . Also,

ST divides $\triangle PQR$ into two equal areas. What is the area of trapezium $PMTS$ (sq. units)?



28. Gautam wrote an eight-digit number on the board. Aarav calculated the sum of the digits of this eight-digit number and found it to be 4. Bikas, who had not seen the number, was asked to take a guess from the data. At most, how many numbers can he guess wrong before guessing the actual number?

- A. 124
- B. 119
- C. 149
- D. 98

29. The cost price of red paint and white paint is Rs. 1200 per litre and Rs. 800 per litre. Maxwell mixes red paint and white paint to prepare Colour A, and Rashid mixes red paint and white paint to prepare Colour B. Pratyusha mixes Colour A and Colour B in the ratio of 2:1 and sells it for Rs. 1330 per litre by gaining 40% profit. If the costs of colours A and B are in the ratio of 6:7, find the quantity (in litres) of white paint mixed by Maxwell with 20 litres of red paint.

30. In a circle, AB and DC are two chords. When AB and DC are produced, they meet at P . If $PC = 11.2$ cm, $PB = 12.6$ cm and $AB = 15.4$ cm, the length of CD is

- A. 18.7 cm
- B. 19.5 cm
- C. 20.3 cm
- D. 21 cm