VARC

Read the passage below and answer the questions that follow:

"Luxury beliefs" are trendy, expensive, and often impractical for the average person, but deeply satisfying for those who can afford them. And, on rare occasions, sickening. The term, coined by writer Rob Henderson, describes a set of ideas that he believes confer status on elites while imposing costs on everyone else. In his accounting, these include: academic elites advocate prison abolition while living in low-crime neighborhoods; Silicon Valley billionaires declare that college is a scam, ignoring the elite-education connections that got them their first venture capital meetings; and urban intellectuals claim homeownership is overrated—right up until they buy a brownstone in Brooklyn.

While this critique is more often levied against progressives, luxury beliefs are fascinatingly transpartisan. Like "virtue signaling" before it, the term is often used too loosely, simply indicating a set of beliefs with which the speaker disagrees and would like to associate with a villainous or hypocritical overdog. But what if luxury beliefs—frivolous, far-fetched, and sometimes downright wrong—actually serve a useful function? What if they're not (or not only) a maladaptive status signal, but also a mechanism by which new ideas emerge, social status gets reshuffled, and intellectual progress happens?

Perhaps luxury beliefs function as a kind of social R&D department. The powerful and well-insulated play around with new norms, experiment with weird ideas, and sometimes—accidentally?—stumble into something valuable. Another way of understanding the way this process works with beliefs is to examine how it happens with stuff. Many essentials of modern life—indoor plumbing, refrigeration, cellphones—began as indulgences available only to the wealthy. Over time, markets and technology transformed these once-extravagant luxuries into affordable, widely available necessities. It's not unreasonable to think that some of today's elite-only beliefs about governance, education, or social structures might go through a similar process, becoming first popular, then normalized, then indispensable.

Just as with luxury goods, the democratization of ideas can be unpredictable. The first automobiles were expensive playthings for the rich before Henry Ford figured out how to mass-produce them for the everyman. What starts as a status flex can turn into a social good. Historically, many ideas that once seemed to be eccentric elite fixations eventually became mainstream. Some of them fundamentally improved human civilization. The abolition of slavery, religious tolerance, gay rights, free markets—each of these can trace at least part of their genealogy to a

fringe belief held by a small, educated, and often elite minority before gaining wider acceptance.

In the early 19th century, abolitionists were often portrayed as disconnected from the broader populace's economic interests and social norms. Critics argued that their calls for immediate emancipation threatened the established economic order. George Fitzhugh, one of President Abraham Lincoln's least favourite people, wrote of the dire consequences of "liberty and equality" in 1854's Sociology for the South. "Crime and pauperism have increased. Riots, trades unions, strikes for higher wages, discontent breaking out into revolution, are things of daily occurrence, and show that the poor see and feel quite as clearly as the philosophers that their condition is far worse under the new than under the old order of things."

1. The author introduces the analogy of "luxury goods" (paragraph 3) to:
A. Suggest a model whereby ideas, like technologies, can transition from niche indulgences to widespread social necessities.
B. Argue that all elite beliefs, like all luxury goods, will eventually become affordable and accessible to the masses.
C. Emphasize that both luxury goods and luxury beliefs are primarily driven by a desire for status, which is their only true function.
D. Criticize the "democratization" of ideas as a process that, like mass production, devalues their original intellectual purity.

2. Which of the following, if true, would most seriously weaken the author's "social R&D" hypothesis for luxury beliefs?
A. A study showing that the majority of modern elite beliefs are recycled from historical ideologies rather than being genuinely new.
B. A report indicating that the term "luxury belief" is now used more frequently as a political insult than as a serious analytical term.
C. A historical analysis demonstrating that indoor plumbing and cellphones took, on average, over 50 years to become widely available.
D. Evidence that non-elite, grassroots movements have historically been the primary and most effective source of beneficial, lasting social change.

3. Based on the passage, all of the following can be inferred EXCEPT that:
A. The author acknowledges that the concept of "luxury beliefs" is sometimes used carelessly or politically.
B. Some beliefs that initially appear elitist or impractical may eventually prove socially beneficial.
C. The author believes that all luxury beliefs are destined to evolve into mainstream social norms.
D. There have been historical instances where unpopular ideas originating among elites reshaped civilization.

4. If a new elite movement promotes a 20-hour work week as the ideal, how would the author most likely interpret this phenomenon?
A. As another example of a frivolous elite preference that will fade without impact.
B. As a possible "luxury belief" that, though impractical now, might inspire future changes in labor norms.
C. As a sign that elites are increasingly disconnected from the realities of ordinary workers.
D. As evidence that the gap between luxury goods and luxury beliefs has finally closed.

5. The passage given below is followed by four alternate summaries. Choose the option that best captures the essence of the passage.
Many people aren't so well prepared when extreme heat strikes. They might not have ready access to shade or water or appropriate clothing, and they might not be accustomed to hot climates to begin with. In these situations, extended exposure to lower wet-bulb temperatures still can prove deadly. The new study set out to investigate a lower limit for lethal heat, based on scientific studies of human physiology. "The threshold we looked at in this paper I would think of as the lower bound," Powis said. "These are the conditions that would be lethal assuming that you didn't do everything you could do to stay cool. You're just an average healthy person taken off the street and exposed to this temperature."
A. Scientific studies have conclusively established that heat lethality occurs only when wet-bulb temperatures surpass the commonly recognized upper limits.
B. The lethality of extreme heat is determined solely by high wet-bulb temperature thresholds, typically above 35°C, regardless of individual preparedness or environmental factors.
C. Exposure to extreme heat is only dangerous for those living in hot climates or without adaptation, with wet-bulb temperatures serving as a definitive measure of risk.
D. Many people are vulnerable to lethal heat exposure even at relatively low wet-bulb temperatures if they lack access to protective measures, and new research aims to identify this lower limit under real-world conditions.

6. 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. That is what drove me, writing a recent popular-level account of astrobiology's frontiers called The Little Book of Aliens, to stare hard into the entangled history of UFOs, the scientific search for life beyond Earth, and the all-important question of standards of evidence.
2. At the time, I was reading both hard-science books and speculative works about UFO-related topics.

3. This served as a kind of training ground for dealing with questions facing me and my colleagues about proper standards of evidence in astrobiology.
4. It's also why, as a public-facing scientist, I must work to understand how people not trained in science come to questions surrounding UFOs as aliens.
5. Early on, as a teenager reading both Carl Sagan and Erich von Däniken, I had to figure out how to separate the wheat from the chaff.

7. 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: From this pragmatic perspective, fiction, with its focus on the non-linear, ambiguous, and emotionally specific, is often dismissed as an inefficient medium for knowledge acquisition.
Paragraph: ___(1)___. For many of these leaders, reading is often not a leisure activity but an extension of their work—a hunt for "informational arbitrage." ___(2)___. Non-fiction is perceived as a direct conduit to acquiring new mental models, identifying historical parallels, and gleaning actionable insights that can be applied to complex business problems. ___(3)___. The goal, in this framework, is to extract quantifiable data and replicable systems from a text, a task for which a business biography or a scientific treatise is ostensibly better suited than a novel. ___(4)___. However, some critics of this "non-fiction bias" posit that it represents a significant cognitive blind spot.
A. Option 1
B. Option 2
C. Option 3
D. Option 4

8. The passage given below is followed by four alternate summaries. Choose the option that best captures the essence of the passage.
One way to see the power of cravings is to think about substance addictions. Substance addictions present the sharpest example of how cravings seem to impact motivation and behaviour differently than other desires. Cravings make for one of the most challenging, baffling and terrifying aspects of addiction: no matter how devastating the consequences of ongoing drug use become for someone, as well as for those who love and care for them, no matter whether their addiction is no longer pleasurable, and no matter how adamantly they want and try to manage or stop their drug use, their attempts are continually overwhelmed by intensely motivating desires to engage in the addiction.
A. Substance addictions illustrate how cravings can overpower an individual's will, persistently driving behaviour despite harmful consequences and loss of pleasure.
B. Cravings are unique desires that, unlike other motivations, always result in positive reinforcement and pleasure in addiction.

C. Addictive behaviours arise mainly from a lack of desire to change, even when users recognize the damage caused by their substance use.
D. The main difficulty in overcoming addiction lies in the inability to experience cravings, which weakens motivation to stop.

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. It has a Swiss cheese-like texture, creating an internal filtration system that provides clean water for neighbouring communities.
2. The fragile rock also makes the area particularly suspectable to landslides and sinkholes.
3. It also moves through karst terrain; a landscape made of soft limestone.
4. The path of the pipeline tears through steep hills, crossing hundreds of waterways.
5. The pipeline becomes a necropolitical zone of violence and death, where human depravity is inseparable from the landscape that human bodies inhabit.

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: Education should teach problem-solving, not just test-taking.
Paragraph: To sustain growth, India must not just produce more, but think better. ___(1)___. That requires building a genuine culture of curiosity, in classrooms, laboratories and public life. ___(2)___. Bureaucracies must see experimentation not as chaos but as discovery. ___(3)___. India also needs to embrace competition. ___(4)___. Too often, policy shelters incumbents, public or private, in the name of stability.
A. Option 1
B. Option 2
C. Option 3
D. Option 4

DILR

There are 600 students in a music school. They play 5 different musical instruments among Piano, Guitar, Violin, Flute and Drum. Each student plays at least one of the 5 instruments. Any student who plays Piano also plays Guitar, and any student who plays Violin also plays Flute. Any student who plays Drum also plays Piano, and no student who plays Flute plays Piano. Further, it is known that:

1. The number of students who play Drum is thrice the number of students who play only Flute.
2. The number of students who play only Guitar is 40 less than the number of students who play exactly 1 instrument.
3. The number of students who play Piano is 6 less than the number of students who play Violin.
4. The number of students who play at most 2 instruments is 310.
5. The number of students who play only Flute is 180 fewer than the number of students who play Piano.
6. The number of students who play only Guitar and Flute is half of the number of students who play only Guitar.

11. How many students play exactly one instrument?

12. How many students play both Piano and Guitar?
A. 100
B. 120
C. 180
D. 220

13. How many students play Flute?
A. 304
B. 226
C. 264
D. 170

14. How many students play neither Violin nor Flute?
A. 262
B. 256
C. 296
D. 304

15. Among the students who play exactly two instruments, which of the following pairs of instruments are not played by anyone?
A. Guitar and Flute
B. Drum and Piano
C. Violin and Flute
D. Piano and Guitar

A calculator does all the operations correctly, but it does not necessarily take the same digit as entered. For example, if you enter 1+1, it might not answer 2, as the calculator might be inputting a different value when the key for 1 is pressed. Although it will certainly keep inputting the same digit for the same keystroke, i.e. if on pressing 1 it enters 6, then if you press 1 again, it will again enter 6. All keystrokes enter a different digit from 0 to 9. Given below is the summation of two six-digit numbers done on this calculator:

$$\begin{array}{rcccccc} & 2 & 6 & 7 & 6 & 4 & 1 \\ + & 1 & 4 & 8 & 6 & 5 & 2 \\ \hline & 3 & 8 & 3 & 2 & 3 & 4 \end{array}$$

16. What digit should be pressed when 2 is needed?

17. What is the digit entered when 5 is pressed?
A. 1
B. 2
C. 3
D. 5

18. What is the digit entered when 8 is pressed?

19. What is the digit entered when 7 is pressed?
A. 6
B. 4
C. 3
D. 9

20. If a person tries to add 62 + 45, the output in the calculator will be:
A. 118
B. 127
C. 133
D. 146

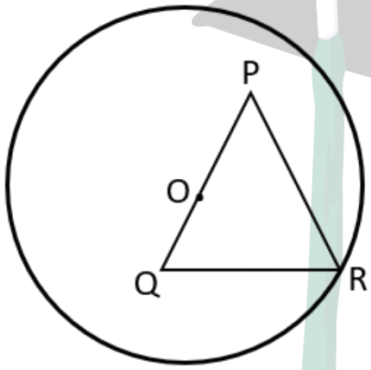
QA

21. A drum contains a mixture of two liquids, A and B, in the proportion 8:3. If 11 litres of the mixture is replaced by 11 litres of liquid A, then the ratio of the two liquids becomes 41:15. If instead 11 litres of the mixture is replaced by 11 litres of liquid B, then the ratio of the two liquids will be

A. 5:2
B. 7:3
C. 11:5
D. 9:4

22. A bakery sells cupcakes only in packs of 5 and 9. What is the largest number of cupcakes that it is impossible to buy exactly using those pack sizes?

23. In the given figure, PQR is an equilateral triangle with a side of 5 cm. O is the centre of the circle and OP = 3 cm. Find the area of the circle.



A. 15 π sq cm
B. 19 π sq cm
C. 20 π sq cm
D. 22 π sq cm

24. Rajat travels from his home to his office by car. While going to his office, he covers the first one-third of the distance at 40 km/h and the next one-third at 60 km/h. He covers the last one-third of the distance at a constant speed of X km/h. His average speed for the entire journey is 48 km/h. For his return journey from office to home, he travels at speed X km/h for the first half of the travel time and at 72 km/h for the second half of the travel time. What is his average speed for the entire round trip?

A. 48 km/h
B. 50.67 km/h
C. 53.33 km/h
D. 54 km/h

25. If $\log_2 \log_3 \log_4 \log_5 x = -\infty$, find the value of x.

26. 3 parties contested in a state election. In an exit poll conducted by a news channel, party P1 was getting 20% of the seats, P2 was getting 125 seats, and P3 was getting the rest of the seats. But in the actual results, P1 got 4 more seats than what was predicted, P2 got 80% of the predicted seats, and P3 defeated the nearest contender by 20 seats. How many seats were there in the election?

A. 360
B. 320
C. 300
D. 280

27. Find the sum of the roots of the equation:

$$\frac{1}{x^2-7x-8}+\frac{1}{x^2-7x-24}-\frac{2}{x^2-7x48}=0$$

A. 7
B. 10
C. -9
D. -2

28. Find the radius of a circle inscribed in a rhombus whose diagonals are 32 cm and 48 cm.

A. 40/√13
B. 48/√13
C. 64/√13
D. 72/√13

29. Two merchants purchased a shirt from a factory. One of them marked it at 8 times the cost price, and the second marked it at 7 times the cost. They found that their price were too high and it was hampering their sale. The first merchant reduced the price by 1/6, but still no sale. Then, after successive discounts of 20% and 25% respectively, he was able to sell the shirt. The second merchant first gave a discount of Rs 900 on the marked price and later gave 20% off on the reduced price. Both sold the shirt at the same price. Find the cost price of the shirt.

A. Rs 400
B. Rs 500
C. Rs 450
D. Rs 550

30. The sum of the 5th, 11th, and 17th terms of an Arithmetic Progression consisting of 21 terms is 192. What is the sum of all the terms in this progression?