

CAT 2014 Solutions

Solutions

1. The passage is primarily concerned with

A. explaining why until recently scientists failed to recognize the risks presented by biocontrol agents.
Nope. Nothing like that has been mentioned.

B. emphasizing that biocontrol agents and chemical pesticides have more similarities than differences.
>> Nope. Nothing like that has been mentioned.

C. suggesting that only certain biocontrol agents should be used to control plant or animal pests.

>> Nope, no preference regarding any particular agent has been mentioned.

D. arguing that biocontrol agents involve risks, some of which may not be readily discerned.

"The paucity of known extinctions or disruptions resulting from indirect interactions may reflect not the infrequency of such mishaps but rather the failure to look for or to detect them: most organisms likely to be adversely affected by indirect interactions are of little or no known commercial value and the events linking a biocontrol agent with an adverse effect are often unclear"

2. The passage suggests that the author would be most likely to agree with which of the following statements about the use of biocontrol agents?

D. The risks of using native biocontrol agents may be easier to predict than the risks of using nonnative biocontrol agents.

"determining the potential risks of biocontrol agents before they are used is difficult, especially when a nonnative agent is introduced, because, unlike a chemical pesticide, a biocontrol agent may adapt in unpredictable ways. so that it can feed on or otherwise harm new hosts."

3. Which of the following is mentioned in the passage as an indirect effect of using a biocontrol agent?

D. Diminution of the positive effects conferred by a nontarget animal species.

"competing with them for resources: a biocontrol agent might reduce the benefits conferred by a desirable animal species by consuming a plant on which the animal prefers to lay its eggs."

4. The example presented by the author in highlight text most clearly serves to illustrate

B. a way in which the introduction of a biocontrol agent can affect a nontarget species.

"...in turn reducing underground ant nests and triggering the extinction of a blue butterfly that had depended on the nests to shelter its offspring."

5. b After 1, (C) states a fact about salvation. (B) states the Christian belief in that regard. (A) opposes it to Buddhism, by using 'but'. (D) elaborates the fact.

6. d After the factors stated in 1, (A) states the relationship between size of a state and development. (B) states that the problems of agricultural sector will remain with us in the next century. (C) emphasizes the need to improve agriculture. (D) states that rural India has to start moving, an idea that is continued in (6).

7. (c) There are two cases in the given question:

Case 1: If the answer is correct, then the person belongs to the 'No' type of people. In this case, the person has contradicted himself by saying the truth, and 'no' type cannot say the truth.

Case 2: If the answer is incorrect, then the person belongs to the 'No' type of people. This makes his answer correct and converts him into a 'yes' type.

Thus in both cases we arrive at a contradiction.

8. (a) Let's take make cases again.

Case 1: none of them are 'yes', that is both are 'yes'.

In this case his statement is false, and at least one will have to be 'no'. Since Laxman lied, he has to be 'no'.

Case 2: both of them are yes.

In this case what he said is false, and Laxman becomes a no. But this is a contradiction with our assumed result. So this is logically invalid.

In both the cases, the case is negated. Hence, options 2 and 4 can be ruled out. Now let's take option

4. We assume Laxman lied and is a 'no', and Ram is 'yes'. This is again invalid, as in this case, Laxman has said the truth (as one of them is a 'no'). Thus, option (d) is also not possible.

9. b (B) shows the relationship between a magazine and its editor, 'editors' are referred to as 'they'. (C) states that the number of editors should be determined by the contributions it gets. (D) continues with this fact. (A) follows by using 'furthermore'.

Solution

T = tallest & opposite to Red; Shortest opposite to Green; U = orange & the position of U is: P/S U S/P; R = yellow & opposite to P ; Q = Green & opposite to U ; P = White & (S, Q) > P > R (in height) We can deduct, $T > (S, Q) > P > R > U$ in terms of height and form following two cases.

Height	5	2/3	1	OR	1	2/3	5
Report Name	Richa	Qadar	Tanvi		Tanvi	Qadar	Richa
Color	yellow	green	blue		blue	green	yellow
Color	white	Orange	Red		red	Orange	white
Report Name	Piyush	Urvashi	Sandesh		Sandesh	Urvashi	Piyush
Height	4	6	3/2		3/2	6	4

10. 4 Diagonally opposite to yellow is red.

11. 5 Second tallest Project Report is either Q or S. So, we cannot determine.

12. 2 Tallest Project Report is T whose colour is Blue.

13. 4. Richa is yellow colored report

14. When we call others dogmatic, what we really object to is ____ their holding beliefs that are different from our own. This is the only phrase that fits here.

15. Correct answer is D

a) realize that science relies on imagination to approach absolute truth: No it does not rely on imagination because imagination itself is influenced by cultural contexts

b) insist on pure and unsullied facts rather than on theories: Nowhere is this mentioned that scientists should insist on facts

c) understand that theories are frequently strict inductions from facts: The opposite is mentioned here "Theories, moreover, are not inexorable inductions from facts"

d) consider the cultural biases of scientists: Correct, this seems to capture what is central to the argument that scientific results are influenced by cultural contexts.

16. Structure of argument:

lack of Sunlight ----> causes --> Seasonal depression.

C.H --> inc level of sero -> mood.

C.H acts as anti depression.

From this Clearly the answer is D.

(A) Seasonal depression is one of the most easily treated forms of depression.

No. There is no comparison made with other forms of depression.

(B) Lack of sunlight lowers the level of serotonin in the brain.

No. Not mentioned.

(C) People are more likely to be depressed in midwinter than at other times of the year.

No. Nothing about other seasons mentioned.

(D) Some antidepressants act by changing the brain's level of serotonin.

17. Solution: This Specific question asks what is true about partisan journalism throughout American history. What is stated is that since its beginning, the press has not significantly changed. The passage additionally says that like newspapers today, newspapers at the time of America's birth were all partisan, thereby making (D) the correct response. (A) is incorrect because the passage states that the commitment to a free press is a necessary ingredient for the political process to function properly. (B) is incorrect because the first paragraph does state that partisan journalism can be good journalism. (C) is incorrect because while partisan journalism has played an important role in informing individuals, we have no way of knowing whether it has done so reliably.

18. Solution: The opening paragraph states, "American newspapers at the time of this nation's birth were all partisan, believing that their responsibility was not to report news, but to convey, without apology, a particular political position." Therefore, one can conclude that early American journalists did not always present a balanced perspective, making (D) the correct response. (A) is incorrect because the passage does not compare the form of past newspapers with that of today's papers. (B) is incorrect because it is in sharp contrast to what the fourth sentence of the first paragraph states. "Yet, since the time of America's founding, the politicized nature of the press has not fundamentally changed." (C) is incorrect because the press has always been politically biased; it is not a recent phenomenon.

19. Solution: In this question, four of the answer choices will contain statements that the author will agree with. The author would agree with answer choices (A) and (C) because of the statements in the following sentence: "Over time, older laws that allowed publications to be punished for libel, obscenity, sedition, and publishing inflammatory material have given way to more expansive rights to publish." The author would agree with (D). "During the 1960's and 1970's, journalists exposed the government's mismanagement of the Vietnam War and their investigative reporting eventually brought about the resignation of President Nixon." The author would not agree with answer choice (B). The passage states that courts have continuously reinterpreted what is meant by freedom of the press. Therefore, the author would not agree that First Amendment protections are absolute, making (B) the correct response.

20. This is a Specific question in which four of the answers will be found within the passage. The one that cannot be found from information in the passage is the answer to this EXCEPT question. (A), (B), (D) are contained in the passage. They are all paraphrases of the second sentence of the third paragraph, which says, "Over time, older laws that allowed publications to be punished for libel, obscenity, sedition, and publishing inflammatory material have given way to more expansive rights to publish." The passage does say that the mainstream press has always been politically biased, making (C) the EXCEPTION and the correct answer.

21. Actually, the only nations that have adopted such regulations are farther from the equator than the continental United States. this wants to convey that on earth united states is near to the equator and all those nations who have adopted this regulation...they are more far from equator than is united states.

two facts given:

less visibility => in farther place from euator.

these places(where regulation is adopted) => such regulation will be more successful.

hence we can conclude D is answer.

22. The argument says before Twentieth-century the engineering team followed "rules of thumb to build bridges. Quebec Bridge in 1907 collasped even after following rules...therefore these rules were not sufficient/safe and engineers started depending on far more rigorous applications of mathematical analysis

Only A summarizes the given argument....

B....we don't know this....passage doesnot mention that coopers absence led to the accident

C..We dont have any information of bridges built before 1907...so OFS

D..OFS....we dont know this....

23. B, Its directly evident from last 2 lines where in the author says that woman is trying to imitate male-art. Hence answer should be B.

Game	Opening	Players Pick		Dealer's Pick		Closing
	Balance	Debit (-)	Credit (+)	Debit (-)	Credit (+)	Balance
1	0	0	8	16	0	-8
2	-8	0	10	0	10	12
3	12	0	6	6	0	12
4	12	0	8	16	0	4

24. A. the maximum gain is Rs. 12

25. B. Since the maximum loss that Rajesh can go to is -8, he should begin with at least Rs. 8, so that he does not have to borrow any money at any point.
26. D. In four games, Rajesh makes a profit of Rs. 4. If the final amount left with Rajesh is Rs. 100, the initial amount that he had would be Rs. 96.
27. C. According to the table maximum loss is -8 Rs.

28. c Ants attack strangers who might belong to the same species.
29. d If they did so they would have been unable to communicate with the drunken ants.
30. d Chloroform killed the ants.

31. Incoherent statement is C. For RIL, refining and selling oil and making petrochemicals are not new. Investors understand these businesses and value them realistically. Each of the other statement talks about reliance and its financial results.

32. Incoherent Statement is C. Rest of the statements are correlated which C is just stating the fact that Sachin is a member of Rajya Sabha.

33. Here is logic to arrive at the answer A)

A) "the cost of higher education for many adults is prohibitively high"

Both of them agree that the high cost of higher education. Correct.

B) many adult students do not have the time to attend courses in higher education

Only Union Leader, and not the Education Secretary, points to lack of time. Incorrect.

C) the cost of higher education is unfairly high

Although this option looks similar to A), it is incorrect due to the use of the word "unfairly". We don't know whether high cost of higher education is justified or not. Incorrect.

D) many adult students will not attend classes in higher education unless they are convinced that doing so will be a good investment.

This cannot be concluded from the statements. Incorrect.

34. Premise 1: In a political system with only two major parties, the entrance of a third-party candidate into an election race damages the chances of only one of the two major candidates. Premise 2: The third-party candidate always attracts some of the voters who might otherwise have voted for one of the two major candidates, but not voters who support the other candidate.

Conclusion: Since a third-party candidacy affects the two major candidates unequally, for reasons neither of them has any control over, the practice is unfair and should not be allowed.

A. If the political platform of the third party is a compromise position between that of the two major parties, the third party will draw its voters equally from the two major parties. As per premise 1 only 1 of the parties should get affected not both, so this is incorrect.

B. If, before the emergence of a third party, voters were divided equally between the two major parties, neither of the major parties is likely to capture much more than one-half of the vote. As per premise 1 only 1 of the parties should get affected not both, so this is incorrect.

C. A third-party candidate will not capture the votes of new voters who have never voted for candidates of either of the two major parties. Passage says third candidate affects one of the major parties candidate by drawing his/her voters, so it can be assumed that new voters who never voted might not vote from this third candidate.

D. The political stance of a third party will be more radical than that of either of the two major parties. The passage does not support that third party will have radical views.

35. It is the powerful compound capsaicin that makes a chili pepper hot; a single drop that has no taste and odor is capable of detection by humans at one part per million.

>> After semicolon, the next sentence need to be an IC. All options appears to be ICs :lol:

>> When a word is used in several ways (as Noun, Adj, Verb) preference goes as per VAN rule (Verb>Adj>Noun). So, detected > detectable > detection.

- (A) a single drop that has no taste and odor is capable of detection >> wordy+violets VAN rule
- (B) a single drop is detectable, though without taste and odor, >> violets VAN rule
- (C) a single tasteless and odorless drop can be detected >> favors VAN rule
- (D) single [tasteless and odorless drops] are capable of detection >> SVA issue+violets VAN rule+wordy

36. Conclusion – Old firms don't innovate & underestimate other companies that do.

Evidence – Old firms concentrate on protecting what they have.

Assumptions – Protecting what you have = NOT innovating

What's the blank represent? An example that will prove the author's point.

Prediction: An old firm that didn't innovate & suffered as a result of another company that did.

- A. Incorrect. This is contradictory since the traditional pocket watch makers changed their marketing (and thus innovated.)
- B. Incorrect. This is contradictory since it shows a company that innovated.
- C. Correct! Here an old buggy whip firm does not innovate and simply focuses on what they already have.
- D. Incorrect. This focuses on the consumer. We would consider this "out of scope" since our argument focuses on the producers.

37. A. B talks about the previous records of mid-term elections, and its implications on the present situation, A presents a contradictory fact, and C states the implications of this fact. D concludes the passage.

38. B. A introduces critical elections as the subject of the passage, B explains it, D states that none of the Indian elections so far has been a critical election, instead as C states, there have been many semi-critical ones.

39. A. Let $\cap$ means common $M \cap D$ means there are some M who are D

(1) $X = M.D = M \cap D$ - means there are some M who are D

(2) $X = D$ – means all X are Dogs

Combining both (1) and (2) $M \cap D = D$

$\Rightarrow D \subset M$; Thus all dogs are mammals.

40. C.

$Y = F \cdot (D \cdot V) = F \cap (D \cap V)$ is not a null set - means some F are D and some D are V.

That means some $F \cap D$. fish are dogs.

41. A.

$Z = (P.D) \cup M = (P \cap D) \cup M$ means Some P are D and All of them are M.

$P \cap D$ means pluto the dog.

$P \cap D \cup M$ means pluto the dog or any other mammal.

42. C.

$P.A = \phi$ $P \cup A = D$

$P \cap A = \phi$ means no alsations are pluto or pluto is not an alsation where dogs are composed of alsation or pluto or both.

43. B. A jet stream has length, width as well as depth.

44. b Most data is available over the Northern hemisphere.

45. c A jet stream is defined as 'a strong, narrow air current'.

46. A. Some decisions are obvious under certain circumstances. You may, for example, readily accept a relative's offer of free holiday accommodation. Or step in for your boss when she is away.

A is unambiguous, so right choice for the essence.

B. Some decisions are no-brainers. You need not think when making them. Examples are condo offers from in-law and job offers from bosses when your bank account is low or boss is away.
 B is not right because the boss did not offer any job.
 C. Easy decisions are called 'no-brainers' because they do not require any cerebral activity. Examples such as accepting free holiday accommodation abound in our lives.
 C is wrong because free holiday accommodation does not come that frequently in our lives.
 D. Accepting an offer from in-laws when you are short on funds and want a holiday is a no-brainer. Another no-brainer is taking the boss's job when she is away.
 D is wrong because you never take the boss's job when she is away.

Answers:

First series: $(S_1) = m, n, m/2, p, m + 20$

Second series: $(S_2) = a_1, a_2, a_3, a_4$

Now $a_1 = n - m$, $a_2 = m/2 - n$, $a_3 = p - m/2$ and $a_4 = m + 20 - p$

$a_2 - a_1 = 30$ gives $3m - 4n = 60 \dots (i)$

$a_4 - a_3 = 30$ gives $3m - 4p = 20 \dots (ii)$

and $a_4 - a_2 = 60$ gives $m - 2p + 2n = 80 \dots (iii)$

Solving these equations we get the values of $m = 100$,

$n = 60$, $p = 70$

Therefore $S_1 = 100, 60, 50, 70, 120$

$S_2 = -40, -10, 20, 50$

47. c

48. a

49. c

50. b

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