Detailed solution
Model Test 61 (GS Paper II)

1) D In paragraph 1, we learn that "fleas are ideally equipped to do what they do, making them very difficult to defeat." In paragraph 2 the author explains why fleas are hard to squish and why they resist so many sprays designed to kill them. In paragraphs 3-6, the author explains what makes fleas so difficult to get rid of, both in terms of their physical characteristics and the way they reproduce. In the last paragraph, the author calls fleas "intimidating opponents" and suggests that preventing an infestation is easier that getting rid of an infestation. From this we can understand that the primary purpose of the passage is to explain why a flea infestation is hard to get rid of. Therefore (D) is correct. The passage does provide information about the physical characteristics of fleas, but it also educates readers about the life cycle and reproduction process of a flea. Furthermore, these details all support the author's main point, which is that a flea infestation is very hard to get rid of. Because it is too narrow in scope, (A) is incorrect. In paragraph 1, the author briefly compares a flea to "a shark in the water or a wolf in the woods." Later the author says that fleas "are some of the best jumpers in the natural world." However, the author does not expand on these comments; rather, the author describes in detail why a flea infestation is hard to get rid of. Because the comparisons are only minor details in the passage, (B) is incorrect. The passage does not contain any information about the problems that can result from a flea infestation, so (C) is incorrect.

2) C The author presents facts about the characteristics of fleas without expressing any emotions or opinions in the passage. Since the author's main purpose is to present information, we can conclude that the tone is informative. Therefore (C) is correct. Concerned means worried or anxious. The author does not express any anxiety about fleas, so (A) is incorrect. Passionate means caused by strong feelings. Since the author does not express emotions in the passage, (B) is incorrect. Opinionated means certain of one's opinions or stubborn. The author is presenting facts, not opinions, so (D) is incorrect.

3) A In paragraph 2, we learn that "a flea has a very hard exoskeleton, which means the body is covered by a tough, tile-like plate called a sclerite." From this we can understand that, on a flea, a sclerite forms the exoskeleton. Later in paragraph 2, the author says that "the exoskeletons of fleas are also waterproof and shock resistant, and therefore fleas are highly resistant to the sprays and chemicals used to kill them." Since we know that the exoskeleton on a flea is called a sclerite, we can infer that the sclerite is waterproof, which makes fleas resistant to sprays and chemicals. Therefore (A) is correct. The other answer choices are all characteristics of fleas mentioned in the passage, but none of them make fleas resistant to chemicals. Therefore (B), (C), and (D) are incorrect.

4) A In paragraph 2, we learn that "a flea has a very hard exoskeleton, which means the body is covered by a tough, tile-like plate called a sclerite. Because of these plates, fleas are almost impossible to squish." From this we can understand that the sclerite makes a flea difficult to squish. This supports option (I). In paragraph 3, we learn that fleas do have spines attached to the sclerite, but these spines make a flea difficult to pull off, not difficult to squish. This eliminates option (II). In paragraph 5, we learn

that fleas have a protein in their joints called resilin, "which helps catapult fleas into the air as they jump." From this we can understand that resilin helps fleas jump, but it does not make them difficult to squish. This eliminates option (III). Therefore (A) is correct.

5) A In paragraph 3, we learn that fleas have little spines that normally lie flat, but "if anything (like fingers or a self-grooming pet) tries to pull a flea off through the hair coat, these spines will extend and stick to the fur like Velcro." From this we can understand that if a flea is threatened by something trying to remove it, it will extend its spines in order to stick to the fur. This means that (A) is correct. In paragraph 4, we learn that "a flea can jump seven inches, or 150 times its own length." This means that fleas are able to jump higher in proportion to their body sizes than humans are, but fleas can only jump 7 inches. A human can jump higher than 7 inches, so (B) is incorrect. There is no reference in the passage to humans consuming resilin, which makes (C) incorrect. In paragraph 5, we learn that resilin "helps catapult fleas into the air as they jump, similar to the way a rubber band provides momentum to a slingshot." This means the resilin found in fleas joints helps them spring in a way similar to rubber bands, but the passage does not state that rubber bands contain resilin. Therefore (D) is incorrect.

6) B In paragraph 4, we learn that "fleas are able to accelerate through the air at an incredibly high rate—a rate which is over ten times what humans can withstand in an airplane." From this we can understand that fleas are able to jump with a high rate of acceleration. This supports option (I). Also in paragraph 4, we learn that fleas are able to jump "horizontally and vertically." From this we can understand that fleas can jump up and down and from side to side. This supports option (II). In paragraph 5, we learn that "several of their joints contain a protein called resilin." This means that resilin is not consumed by fleas, but rather it is found in their joints. This eliminates option (III). Therefore (B) is correct.

7) A In paragraph 1, we learn that fleas are parasites that "feast on anything containing blood." Since blood is their food source, we can infer they will die if they do not have access to blood. This means (A) is correct. The passage does not provide us any information about the best habitat for fleas, so (B) is incorrect. In paragraph 6, we learn that "one flea can lay up to 50 eggs in one day and over 2,000 in her lifetime." Although a flea may stop producing eggs after approximately 2,000, it does not logically follow that a flea will die once it produces 2,000 eggs. It could continue to live without producing eggs. This means (C) is incorrect. In paragraph 6, we learn that flea eggs are the size of a grain of salt, but newly hatched fleas emerge from the cocoon, where they become "fully developed adults." We cannot assume that a fully developed adult flea is the same size as a flea egg. This means (D) is incorrect.

8) B In paragraph 4, the author writes, "A flea can jump seven inches, or 150 times its own length….An equivalent jump for a person would be 555 feet, the height of the Washington Monument." The author uses the example of a human jumping the height of the Washington Monument to compare a human's ability to jump with that of a flea. This example shows why the flea's ability to jump 150 times its own length is so amazing, when compared to a human's ability to jump. This means the mention of the Washington Monument illustrates a comparison between fleas and humans. Therefore (B) is correct. A flea is not able to jump the height of the Washington Monument. It can only jump 7 inches, so (A) is incorrect. The author mentions the Washington Monument while discussing how high fleas can jump.

The author does not discuss fleas and acceleration until later in the paragraph, so (C) is incorrect. Although in proportion to its body size, a flea can jump higher than a human can, this fact does not necessarily demonstrate the superiority of fleas over humans. This means (D) is incorrect.

9) C In paragraph 6, we learn that fleas "will hatch when conditions become favorable. Fleas can detect warmth, movement, and carbon dioxide in exhaled breath, and these three factors stimulate them to emerge as adults." We can infer those three factors are crucial because they indicate the presence of living things that contain blood, which the new adults need in order to live. This means that fleas only emerge from eggs as adults when they sense there is access to blood. Therefore (C) is the correct answer. The passage does not provide information to support answer choices (A) and (D), so they are incorrect. In paragraph 6, we learn the entire life cycle of a flea take only 3 weeks "under ideal conditions." However: "If the flea does not detect appropriate conditions, it can remain dormant in the cocoon state for extended periods." This means that fleas can emerge as adults after different periods of time, not necessarily 3 weeks, so (B) is incorrect.

10) D In paragraph 1, we learn that fleas are "designed by nature" to be "ideally equipped to do what they do." The rest of the passage describes the unique advantages of the flea's physical body as well as the way a flea reproduces. These advantages make fleas an "intimidating opponent," because they help fleas survive and thrive. From this information we can conclude that fleas are designed in such a way as to give them unique physical advantages in life. Of all the answer choices, this is the only conclusion that can be made using only the information presented in the passage. Therefore (D) is the correct answer. Choices (A), (B), and (C) may seem like plausible conclusions that can be made about fleas and humans. However, the question asks about a conclusion that can be made using the information presented in the passage as a guide. The passage does not provide enough information to validate these answer choices. Although they may seem like they could be true, they would require additional outside information to validate. Therefore they are incorrect.

11. **B:** "Terrestrial" means land. No choice here offers a synonym for "marine," e.g. nautical/naval/water/seagoing, and no other choices match either marine or terrestrial.

12. **A:** "Quagmire" means literally a bog or marsh, and figuratively an involved situation difficult to escape; entanglement is a synonym, more specifically similar than the other choices.

13. **A:** Longitudes are imaginary geographical lines running north and south. Latitudes run east and west. The other choices do not equal either latitude or longitude in direction.

14. **C:** Topography means the physical features of a land mass. It does not mean coastline (A), mountain range (B), or islands (D).

15. **C:** A peninsula is a piece of land connected to the mainland by an isthmus and projecting into the ocean such that it is surrounded on three sides by water. A peninsula is not a coast (A); it is not found inland (B); and it is not a border (D).

16. **B:** The passage was found near 50 degrees S latitude. Latitudes are measured horizontally, in relation to the equator or central imaginary line, equidistant between the North and South Poles. Longitudes are measured

vertically. Greenwich (A), the location of zero degrees longitude, adopted as the global standard, is both incorrect and never named in the passage. Spain (C), Portugal (D), and Madrid (E) in Spain are also incorrect.

17. **A:** Meridians are imaginary geographical circles intersecting the poles. Imaginary lines parallel to the equator (B) are latitudes. The International Date Line is a specific meridian, not an area (C). It is not a land mass (D) as it crosses both water and land.

18. D An author's purpose is directly related to the content of a passage. In this passage, the author begins in paragraph 1 by identifying PTSD as a problem, especially for female military veterans. He or she claims that "more that needs to be done" to provide treatment options for this population. In paragraphs 2 and 3, the author describes two factors that may make female veterans more susceptible to PTSD than male veterans: low unit cohesion and a desire not to appear weak, especially in light of gender stereotypes. In paragraph 4, the author states that until very recently, female veterans have had less access than males to treatment for PTSD. In paragraph 5, the author informs readers that the quality of care a PTSD sufferer receives "can vary widely." Finally, in paragraph 6, the author notes the lack of research targeting women PTSD sufferers specifically, and argues that "more must be done to help the women who have sacrificed so much for their country." Throughout the passage, the author provides information about female veterans suffering from PTSD and the problems they face. Based on this overview, we can determine that the author's purpose is to educate readers about the problem of insufficient treatment available for female veterans with PTSD. Therefore (E) is correct. The author focuses specifically on why female veterans are more susceptible to PTSD than male veterans. He or she notes that military veterans are more likely than civilians to develop it, but does not explain why this is true. This means (A) is incorrect. Although the author may agree that government officials should increase funding for PTSD treatment centers, the author's primary purpose here is to educate, not to persuade. Furthermore, the author addresses a general audience rather than government officials specifically. This makes (B) incorrect. Although the author does criticize the government for not doing more about female soldiers' PTSD, the tone is not so critical that the purpose could be to denounce the government. The author focuses on providing information more than assigning blame. This eliminates (C).

19. C In paragraph 2, the author mentions that "women are less likely to develop the social support structures that will help prevent them from developing PTSD, depression, or other serious mental health problems." This is the only mention of depression in the passage, so the author does not state or imply that women are more likely than men to suffer from depression. Therefore (C) is correct. In paragraph 2, the author states, "Women are more likely than men to experience low unit cohesion for a variety of reasons." Earlier in the paragraph the author states that low unit cohesion could be a significant factor in the development of PTSD. This means (A) is incorrect. In paragraph 2, the author notes that "pervasive male prejudice against women is another factor that can diminish unit cohesion for female soldiers." Since the author links low unit cohesion to an increased risk of PTSD, this makes (B) incorrect. In paragraph 2, the author points out that there are far fewer women serving in the military than men, a factor that can contribute to low unit cohesion, which is linked to an increased risk of PTSD. This eliminates (D)

20. D paucity (noun): scarceness; a small number; inadequacy or lack of something. The author writes in paragraph 2, "One of the most obvious factors [leading to low unit cohesion] is the relative paucity of females in the military; currently, women make up only 20% of the armed forces." Based on this information, we can understand that there are significantly fewer women in the military than men. This tells us that paucity means a small number. Since abundance means a large number, it is a good antonym. Therefore (E) is correct. Certainty means sureness or conviction. While there is a relative lack of females in the military, it does not make sense to say there is a relative uncertainty of them. This means (A) is incorrect. Audacity means boldness or daring. The author does not in any way imply that women in the military lack daring. Rather, this sentence is about the number of women in the military. This makes (B) incorrect. Deference means respectful submission. The author does not in any way imply that women in the military are disrespectful or not submissive. Rather, this sentence is about the number of women in the military. This eliminates (C).

21. C In paragraph 2, the author states, "Pervasive male prejudice against women is another factor that can diminish unit cohesion for female soldiers. Because women are less likely than men to experience unit cohesion while serving in the military, women are less likely to develop the social support structures that will help prevent them from developing PTSD." This means that male prejudice against women may limit unit cohesion for women and prevent them from forming close bonds with their units. Low unit cohesion is cited as a factor that may lead to increased risk of PTSD. This supports option (I). In paragraph 3, the author states that "for women, this hesitation to self-identify as a sufferer of PTSD could be even greater; historically, female soldiers have struggled to be counted as equals to men on the battlefield. Women, stereotypically considered to possess less emotional fortitude than men, may be unwilling to admit that they are suffering from PTSD lest they appear to conform to this stereotype." This means that some women hesitate to admit they are suffering from PTSD because they do not want to conform to stereotypes that portray women as weak. This supports option (II). Although it might be true that women's awareness of negative stereotypes may lead to a reduction in self-esteem, this not discussed in the passage. Furthermore, a reduction in self-esteem is cited as a result of PTSD, not a factor that increases the likelihood of developing PTSD. This eliminates option (III). Therefore (C) is correct.

22. D In paragraph 1, the author notes that due to "recent changes," there are now "improved treatment options" for female veterans suffering from PTSD. In paragraph 4, the author discusses a rule change that now makes mental health counseling available to women who have not served in combat positions, which increases women's eligibility for benefits. Despite these improvements, the author suggests in the final paragraph that the amount of care provided is still insufficient by stating, "More must be done to help the women who have sacrificed so much for their country." Based on this information, we can determine that the author believes the amount of care provided has improved over the past few years, but it is still insufficient. Therefore (D) is correct. The author does not suggest that state and independent agencies have made up for government deficiencies, so (A) is incorrect. Although the author is critical of the government, he or she is not so harsh as to suggest that the government has done almost nothing to help. This makes (B) incorrect. The author claims that mental health care has been worse for female veterans as compared to males, not better, so (C) is incorrect.

23. D In paragraph 5, the author argues, "Even if female veterans are eligible for these benefits, the quality of the care a wartime PTSD sufferer receives can vary widely." The final sentence in paragraph 5 suggests that some doctors do receive specialized training to treat those who suffer from wartime PTSD, but these doctors are most often located in urban centers. Intense cognitive therapy might be one of the specialized treatments referred to in paragraph 5, but most mental health care professionals that veterans have access to may be trained only to offer prescription drugs as treatment. This piece of evidence would support the author's argument that different veterans receive different treatment, and that this treatment can vary in its effectiveness. Therefore (D) is correct. The number of women serving in the military is irrelevant to the quality of care a wartime PTSD sufferer receives. This makes (A) incorrect. In paragraph 5, the author argues that the quality of care can vary widely, not that there are benefits to therapy. This means (B) is incorrect. The likelihood of women experiencing sexual assault while deployed could be evidence used to argue that women develop PTSD at higher rates than men, but the argument in paragraph 5 is specifically about the varying quality of care that all sufferers of PTSD receive, male or female. This makes (C) incorrect.

24. A In paragraph 5, the author's main argument is contained in the first sentence: "Even if female veterans are eligible for these benefits, the quality of the care a wartime PTSD sufferer receives can vary widely." Later in the paragraph he or she writes: "Therapy provided by non-VA professionals may not be covered by health insurance. Access to mental health professionals who have been specially trained to treat wartime PTSD is often difficult for those not living near major urban centers." The information in the first sentence is one piece of evidence that the quality of care varies widely for sufferers of PTSD. The information in the second sentence provides additional or supplemental evidence. Therefore, the conjunction "Furthermore" would be the best choice, because it signals to the reader that further, related information is forthcoming. This conjunction clarifies the sentence's role in the paragraph, which is to provide an additional reason why care varies widely. Therefore (A) is correct. The conjunction "Incidentally" indicates that the information to follow is in some way a departure from the previous idea, or only loosely connected to the main idea. This is not the case, so (B) is incorrect. The conjunction "Although" indicates that the information to follow contains an idea that qualifies or contrasts with the idea presented either previously or directly following. This is not the case, so (C) is incorrect. The conjunction "Nevertheless" indicates that the information to follow contrasts in some way with the previous point. This is not the case, so (D) is incorrect.

25. D In paragraph 1, the author states, "Recent changes made by the United States Department of Veterans Affairs have improved treatment options for female veterans living with PTSD, but there is still more that needs to be done." At the end of the final paragraph, the author reiterates, "On both the research level and the policy level, more must be done to help the women who have sacrificed so much for their country." Based on these calls to action, we can determine that the author is advocating for female veterans who suffer from PTSD. Because the author includes such direct statements of advocacy and states that change is needed, we can infer that he or she is most likely someone who believes that advocating for others can lead to change. Therefore (D) is correct. The author does not give any indication that he or she does not believe that women should be allowed to serve in the military. This eliminates (A). Although the author appears interested in and knowledgeable about mental health care,

there is no information in the passage to suggest that he or she is a mental health care professional. This means (B) is incorrect. The author cites studies on PTSD among veterans, but this is not an indication that he or she personally conducted such studies. This makes (C) incorrect.

26. *(D) All the rest grow under ground.*

27. True

> **Explanation:**
>
> Let's use symbols from math to help us understand this. "Greater than" (>) will mean "is wealthier than," and "less than" (<) will mean "is less wealthy (poorer) than."
>
> (1) Nicholas is wealthier than Scott but poorer than Leslie: Leslie > Nicholas > Scott
>
> (2) Leslie is poorer than Pamela and wealthier than Barbara: Pamela > Leslie > Barbara
>
> Now, we know that Pamela is wealthier than Leslie, so we can write:
>
> Pamela > Leslie > Nicholas > Scott
>
> This tells us that Pamela is wealthier than Scott.

28. True

> **Explanation:**
>
> When someone is "industrious," he or she is hard working—not lazy. Let's use symbols from math to help us understand this. "Greater than" (>) will mean "is lazier than," and "less than" (<) will mean "is less lazy (more industrious) than."
>
> (1) Richard is lazier than Brandon who is more industrious than Larry. This gives us two statements:
>
> (a) Richard > Brandon
>
> (b) Brandon < Larry, which could also be rewritten: Larry > Brandon
>
> (2) Larry is lazier than Paul but more industrious than Todd. This gives us two statements as well:
>
> (a) Larry > Paul
>
> (b) Larry < Todd, which could also be rewritten: Todd > Larry
>
> Now, we could thus take 1.b and 2.b to get:
>
> Todd > Larry > Brandon
>
> Thus, it is true that Todd is lazier than Brandon

29. True

Explanation:

Let's use symbols from math to help us understand this. "Greater than" (>) will mean "is more intelligent than," and "less than" (<) will mean "is less intelligent than."

(1) Jonathan is more intelligent than Jeremy, who is more intelligent than Lola: Jonathan > Jeremy > Lola

(2) Regina is less intelligent than Lola, who is more intelligent than Lena. This gives us:

(a) Regina < Lola, which could be rewritten: Lola > Regina

(b) Lola > Lena

Now, Jonathan is more intelligent than Lola, who is more intelligent than both Regina and Lena; therefore, Jonathan is more intelligent than Regina and Lena.

30. Uncertain

Explanation:

Let's use symbols from math to help us understand this. "Greater than" (>) will mean "is more depressed than," and "less than" (<) will mean "is less depressed than."

(1) Karen is more depressed than Carol, who is less depressed than Edward. This gives us two statements:

(a) Karen > Carol

(b) Carol < Edward, which is the same as: Edward > Carol

(2) Edward is more depressed than Paula, who is more depressed than Byron: Edward > Paula > Byron

Now, we know that Byron is less depressed than Edward and that Carol likewise is less depressed than Edward; however, we cannot say anything about the relative depression of Carol and Byron. Thus, the third statement is merely uncertain.

31. Uncertain

Explanation:

Let's use symbols from math to help us understand this. "Greater than" (>) will mean "is busier than," and "less than" (<) will mean "is less busy than."

(1) Sarah is busier than Leo, who is busier than Harold: Sarah > Leo > Harold

(2) Harold is less busy than both Peter and Paul. This gives us two statements:

Harold < Peter, which could be written: Peter > Harold

Harold < Paul, which could be written: Paul > Harold

Now, we know that Sarah is busier than Harold, as is the cause with Paul; however, Paul could be *much, much, much* busier than Harold and hence be busier than Sarah is. Also, Paul could be only slightly more busy than Harold but still less busy than Leo, hence being less busy than Sarah. Thus, the third statement provides us with a merely uncertain conclusion.

32. Uncertain

33. Option D
Explanation:

Here S = {TTT, TTH, THT, HTT, THH, HTH, HHT, HHH}

Let E = event of getting at most two heads.

Then E = {TTT, TTH, THT, HTT, THH, HTH, HHT}.

$$\therefore \ P(E) = \frac{n(E)}{n(S)} = \frac{7}{8}.$$

34. Option C
Explanation:

Rate downstream = $\left(\frac{1}{10} \times 60\right)$ km/hr = 6 km/hr.

Rate upstream = 2 km/hr.

Speed in still water = $\frac{1}{2}(6 + 2)$ km/hr = 4 km/hr.

$\therefore$ Required time = $\left(\frac{5}{4}\right)$ hrs = $1\frac{1}{4}$ hrs = 1 hr 15 min.

35. Option B
Explanation:

Le the required time be x seconds.

More metres, More time (Direct Proportion)

∴ $0.128 : 25 :: 1 : x$ ⟺ $0.128x = 25 \times 1$

$x = \dfrac{25}{0.128} = \dfrac{25 \times 1000}{128}$

⟹ $x = 195.31.$

∴ Required time = 195 sec (approximately).

36. Option C
Explanation: This is an alternating subtraction series in which 2 is subtracted twice, then 3 is subtracted once, then 2 is subtracted twice, and so on.

37. Option D
Explanation: This simple addition series adds 4 to each number to arrive at the next.

38. Option C
Explanation: S.I. for 3 years = (12005 - 9800) = 2205.
S.I. for 5 years = (2205/3)x 5 = 3675
Principal = (9800 - 3675) = 6125.
Hence, rate = (100 x 3675)/(6125x5)% = 12%

39. Option D
Explanation: According to the statement, National Aluminium Company has moved Georgia from a position of shortage in the past to self-sufficiency in the present. This means that previously, Georgia had to import aluminium. So, I follows. Also, it can be deduced that if production increases at the same rate, Georgia can export it in future. So, II also follows

40. Option B
Explanation: Clearly, I does not provide a strong reason in support of the statement. Also, it is not possible to analyze the really deserving and not deserving. So/argument II holds strong.

41. Option B

Explanation: The demolition of unauthorized buildings would teach a lesson to the unscrupulous builders and also serve as a warning for the citizens not to indulge in such activities in the future. This is essential, as unauthorized constructions impose undue burden on the city's infrastructure. So, only argument II holds strong.

42. Option B
Explanation: Clearly, there should be some norms regarding the number of ministers in the Government, as more number of ministers would unnecessarily add to the Government expenditure. So, argument II holds strong; Also, giving liberty to the party in power could promote extension of unreasonable favour to some people at the cost of government funds. So, argument I does not hold.

43. Option A
Explanation: Without students, a school cannot exist; therefore, students are the essential part of schools. The other choices may be related, but they are not essential.

44. Option D
Explanation: Pain is suffering or hurt, so choice d is the essential element. Without hurt, there is no pain. A cut (choice a) or a burn (choice b) may cause pain, but so do many other types of injury. A nuisance (choice c) is an annoyance that may or may not cause pain.

45. Option A
Explanation: A gala indicates a celebration, the necessary element here. A tuxedo (choice b) is not required garb at a gala, nor is an appetizer (choice c). A gala may be held without the benefit of anyone speaking (choice d).

46. Option B
Explanation: The essential part of a monopoly is that it involves exclusive ownership or control.

47. Option B
Explanation: Valerie signed a legally binding document that requires her to pay a monthly rent for her apartment and she has failed to do this for the last three months. Therefore, she has violated her apartment lease.

48. Option B
Explanation: Each arrow in this continuing series moves a few degrees in a clockwise direction. Think of these arrows as the big hand on a clock. The first arrow is at noon. The last arrow before the blank would be 12:40. Choice b, the correct answer, is at 12:45.

49. Option B
Explanation: (5 x 6 x 8) + (7 x 4 x 9) = 492
and (7 x 5 x 4) + (6 x 8 x 9) = 572
Therefore (4 x 3 x 5) + (7 x 2 x 5) = 130.

50. Option B
Explanation:
Because the letters are the same, concentrate on the number series, which is a simple 2, 3, 4, 5, 6 series, and follows each letter in order.

51. Option A
Explanation:
The total cost of the school music program and national radio is $1 million, the amount left after the international airport and agricultural subsidies are funded. International airport + Agricultural subsidy program $4 million + $2 million = $6 million school music program and national radio is $1 million. Hence, Total $7 million.

52. Option B
Explanation:
The only two programs that total 1.5 million dollars are the harbor improvements and school music program.

53. Option D
Explanation:
The total of the three programs (2 million + 0.5 million + 3 million) is 5.5 million. That leaves 1.5 million (7 million - 5.5 million), and the only single program needing that amount is the senate office building remodeling.

54. Option A

Explanation:
The middle letters are static, so concentrate on the first and third letters.
The series involves an alphabetical order with a reversal of the letters.
The first letters are in alphabetical order: F, G, H, I , J.
The second and fourth segments are reversals of the first and third segments.
The missing segment begins with a new letter.

55. Option D
Explanation:
The second and forth letters in the series, L and A, are static.
The first and third letters consist of an alphabetical order beginning with the letter E.

56. Option A
Explanation:
Olliopolis got 44 inches of rain. Last Stand got more rain than that, so it got 65 inches, which is the most.

57. Option B
Explanation:
Olliopolis got 44 inches of rain, Last Stand got 65, and Polberg got 12. New Town is in the mountains, and the city in the mountains got 32 inches of rain. Therefore, Mile City got 27.

58. Option D
Explanation:
The city that got the least rain is in the desert. New Town is in the mountains. Last Stand got more rain than Olliopolis, so it cannot be the city with the least rain; also,Mile City cannot be the city with the least rain. Olliopolis got 44 inches of rain. Therefore, Polberg is in the desert and got 12 inches of rain.

59. Option C
Explanation:
Olliopolis got 44 inches of rain, so it is not in the desert or the forest. The city in the mountains got 32 inches of rain; the coast 27. Therefore, Olliopolis is in a valley.

60. Option D

Explanation:

Let the expenditure in 1996 = x.

Also, let the incomes in 1996 and 1999 be I1 and I2 respectively.

Then, for the year 1996, we have:

$$55 = \frac{I_1 - x}{x} \times 100 \implies \frac{55}{100} = \frac{I_1}{x} - 1 \implies I_1 = \frac{155x}{100} \text{ ... (i)}$$

$$70 = \frac{I_2 - x}{x} \times 100 \implies \frac{70}{100} = \frac{I_2}{x} - 1 \implies I_2 = \frac{170x}{100} \text{ ... (ii)}$$

From (i) and (ii), we get:

$$\frac{I_1}{I_2} = \frac{\left(\frac{155x}{100}\right)}{\left(\frac{170x}{100}\right)} = \frac{155}{170} \approx \frac{0.91}{1} \approx 9 : 10.$$

61. Option C
Explanation: Let the expenditure is 1998 be x

$$\text{Then, } 65 = \frac{264 - x}{x} \times 100$$

$$\implies \frac{65}{100} = \frac{264}{x} - 1$$

$$\implies x = \frac{264 \times 100}{165} = 160.$$

62. Option D
Explanation:
The line-graph gives the comparison of percent profit for different years bu the comparison of the expenditures is not possible without more data.
Therefore, the year with minimum expenditure cannot be determined.

63. Option D
Explanation:

From the line-graph we obtain information about the percentage profit only. To find the profit in 2000 we must have the data for the income or expenditure in 2000. Therefore, the profit for 2000 cannot be determined.

64. Option B
Explanation:
Average percent profit earned for the given years
= 1/6 x [40 + 55 + 45 + 65 + 70 + 60] = 335/6 = 55 5/6

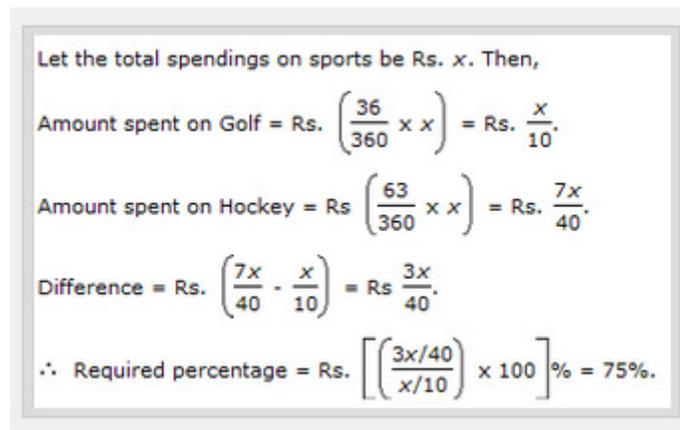65. Option A
Explanation:
Percentage of money spend on Tennis = (45/360)*100% = 12.5%.

66. Option D
Explanation:

Let the total spendings on sports be Rs. x. Then,

Amount spent on Golf = Rs. $\left(\dfrac{36}{360} \times x\right)$ = Rs. $\dfrac{x}{10}$.

Amount spent on Hockey = Rs $\left(\dfrac{63}{360} \times x\right)$ = Rs. $\dfrac{7x}{40}$.

Difference = Rs. $\left(\dfrac{7x}{40} - \dfrac{x}{10}\right)$ = Rs $\dfrac{3x}{40}$.

∴ Required percentage = Rs. $\left[\left(\dfrac{3x/40}{x/10}\right) \times 100\right]\%$ = 75%.

67. Option A
Explanation:
Amount spent on Basketball exceeds that on Tennis by:
Rs. (((50-45)/360) x 1,80,00,000) = Rs. 2,50,000.

68. Option C
Explanation:

Let the total spendings on sports be Rs. x. Then,

Amount spent on Cricket = Rs. $\left(\dfrac{81}{360} \times x\right)$ = Rs. $\dfrac{9x}{40}$.

Amount spent on Football = Rs $\left(\dfrac{54}{360} \times x\right)$ = Rs. $\dfrac{3x}{20}$.

Difference = Rs. $\left(\dfrac{9x}{40} - \dfrac{3x}{20}\right)$ = Rs $\dfrac{3x}{40}$.

∴ Required percentage = Rs. $\left[\left(\dfrac{3x/40}{9x/40}\right) \times 100\right]\% = 33\dfrac{1}{3}\%$.

69. Option D
Explanation:
Clearly, prevention from mosquitoes and elimination of mosquitoes are two ways to prevent malaria. So, both the courses follow.

70. Option B
Explanation:
In the break-out of a natural calamity, the basic duty of the government becomes to provide the basic amenities essential to save the lives of people and cattle. Providing financial assistance to all would put undue burden on the country's resources. So, only II follows.

71.

Explanation:

a. The passage states that the music industry is the fastest growing sector of the economy because it is enjoyed by both the youngest and oldest individuals in society. This suggests that it is enjoyed by a wide ranging target audience. Option a is the correct answer.

b. The passage states that forms of media, such as gaming, are enjoyed by a marginal sector of society. The question asks about the popularity of the music industry. This is therefore the wrong answer.

c. The passage makes no reference to the popularity of the music sector stemming from the age of the art form. It states that opera is a long-standing art form, which is becoming increasingly less popular. This is therefore the wrong answer.

d. The passage does not state that the music industry is popular because operatic music is dying out. This is therefore the wrong answer.

72.

Answer: d

Explanation:

a. The passage makes no reference to the expense of hiring local workers. For this reason, option a is incorrect.

b. The passage identifies that 'Dumbards' refuse to advertise via the internet. However, there is no reference to a 'previous bad experience'. The passage asks you to answer the question based solely on the information in the passage. For this reason, option b is incorrect.

c. The passage identifies that 'Dumbards' use recommendations from current employees in their selection process. However, this is not the only method of selection employed by the company. The passage notes that advertisements are also placed in shop windows and the local newspaper. For this reason, option c is incorrect.

d. Option d is the correct answer. The passage identifies that 'Dumbards' only select local employees as it wishes to appear 'exclusive'.

73.

Explanation:

a. The question asked you to identify which of the statements was incorrect, in other words, false. The passage identifies that the colour of a products packaging can be a helpful indication of what the product is. Based on the information in the passage alone, this is a correct statement. For this reason, option a is incorrect.

b. The question asked you to identify which of the statements is incorrect, in other words, false. The passage identifies that the colouring of a product's packaging may be culturally dependant and are, therefore, not always universal. Based on the information in the passage alone, this is a correct statement. For this reason, option b is incorrect.

c. The question asked you to identify which of the statements is incorrect, in other words, false. The passage identifies that the colouring of a product's packaging may be culturally dependant and are, therefore, not always universal. For this reason, this statement is incorrect. Based on the nature of the question, option c is the right answer.

d. The question asked you to identify which of the statements is incorrect, in other words, false. This statement correctly identifies the examples of 'colour coding' highlighted in the passage. Based on the nature of the question, Option d is incorrect.

74.

Answer: d

Explanation:

a. The passage does not state that food supplements can aid weight loss. For this reason, option a is incorrect.

b. The passage does not state that half the population take multivitamins, but half take "a form of food supplement" and is therefore incorrect.

c. The passage does not state that food supplements are becoming increasingly popular. For this reason, option c is incorrect.

d. Option d is the correct answer. The passage notes these products are not intended to replace a balanced diet.

75.

Explanation:

a. The passage states that these products will have <u>under half</u> of the amount of fat, rather than half the amount of fat than traditional products. For this reason, this statement is false. Based on the nature of the question, option a is incorrect.

b. The passage makes no reference to these products requiring further cooking. This statement is false. For this reason option b is incorrect.

c. Option c correctly identifies that the 'Half-baked' products will have under half the amount of fats and sugars as the traditional products. This statement is therefore true. Based on the nature of the question, option c is the correct answer.

d. Option d correctly identifies that these products will be on sale for a trail period. However, the passage makes no reference to the price of the products during this period. For this reason, option d is false. Based on the nature of the question, option d is incorrect.

76. Option D
Explanation:
Total income of Companies M and N together
= (35 + 50) million US $
= 85 million US $
Total expenditure of Companies M and N together
= (45 + 40) million US $
= 85 million US $.
Therefore Percent Profit/Loss of companies M and N together
% Profit/Loss = ((85-85)/85)x100%= 0%.
Thus, there was neither loss nor profit for companies M and N together.

77. Option A
Explanation:
Total income of all five companies
= (35 + 50 + 40 + 40 + 50) million US $
= 215 million US $.
Total expenditure of all five companies
= (45 + 40 + 45 + 30 + 45) million US $
= 205 million US $.
Therefore % Profit = ((215-205)/205)x100% = 4.88% ~= 5%.

78. Option D
Explanation:

The percentage profit/loss in the year 2001 for various comapanies are:

For M = $\left[\dfrac{(35 - 45)}{45} \times 100 \right]\% = -22.22\%$ i.e., Loss = 22.22%.

For N = $\left[\dfrac{(50 - 40)}{40} \times 100 \right]\% = 25\%$ i.e., Profit = 25%.

For P = $\left[\dfrac{(40 - 45)}{45} \times 100 \right]\% = -11.11\%$ i.e., Loss = 11.11%.

For Q = $\left[\dfrac{(40 - 30)}{30} \times 100 \right]\% = 33.33\%$ i.e., Profit = 33.33%.

For R = $\left[\dfrac{(50 - 45)}{45} \times 100 \right]\% = 11.11\%$ i.e., Profit = 11.11%.

Clearly, the Company Q earned the maximum profit in 2001.

79. Option D
Explanation:
Let the expenditure of Company R in 2000 be x million US $.
Then, expenditure of Company R in 2001 = (120/100xx) million US $.
Therefore 120x/100= 45 => x = 37.5.
i.e., expenditure of Company R in 2000 = 37.5 million US $.
Let the income of Company R in 2000 be I million US $.
Then, 10 = ((I-37.5)/37.5)x100 [Ref %Profit in 2000 = 10%]
=> I - 37.5 = 3.75
=> I = 41.25

80. Option B
Explanation:

Let the income of Company Q in 2001 = x million US $.

Then, income of Company in 2001 = $\left(\dfrac{110}{100} \times x\right)$ million US $.

$\therefore \dfrac{110x}{100} = 40 \quad \Rightarrow \quad x = \left(\dfrac{400}{11}\right).$

i.e., income of Company Q in 2000 = $\left(\dfrac{400}{11}\right)$ million US $.

Let the expenditure of Company Q in 2000 be E million US $.

Then, $20 = \dfrac{[(400/11) - E]}{E} \times 100 \quad [\because \text{ \%Profit} = 20\%]$

$\Rightarrow \quad 20 = \left[\left(\dfrac{400}{11E}\right) - 1\right] \times 100$

$\Rightarrow \quad E = \dfrac{400}{11} \times \dfrac{100}{120} = 30.30.$

$\therefore$ Expenditure of Company Q in 2000 = 30.30 million US $.