

### ANSWER KEY

Q.	Ans.
1	4
2	5
3	4
4	2
5	3
6	2
7	5
8	5
9	1
10	5
11	5
12	4
13	2
14	1
15	4
16	2
17	2
18	3
19	1
20	3
21	5
22	4
23	1
24	5
25	5
26	4
27	2
28	4
29	4
30	4

Q.	Ans.
31	2
32	1
33	1
34	4
35	5
36	4
37	5
38	5
39	4
40	4
41	4
42	1
43	3
44	4
45	2
46	4
47	2
48	5
49	5
50	3
51	5
52	4
53	3
54	3
55	4
56	1
57	5
58	3
59	1
60	5

Q.	Ans.
61	1
62	1
63	5
64	5
65	3
66	5
67	4
68	1
69	2
70	3
71	1
72	4
73	2
74	2
75	4
76	5
77	4
78	2
79	5
80	5
81	5
82	3
83	5
84	4
85	2

## Detailed Solutions:

- Consider the following lines: "Chaitanya Rao and Ajit Singh.....and both have been **nominated** for officer status". They have yet to become officers.  
Hence, the correct answer is **option 4**.
- 1, 3 and 4 are biased as they mention resignation for only one of the two employees. 2 also mentions an either/or condition. Option 5 clearly mentions that both have to resign from one or the other committee.  
Hence, the correct answer is **option 5**.
- The information does not talk about Baft and Hebe and so no conclusion can be made about the two.  
Hence, the correct answer is **option 4**.
- Asking customers to wait will aggravate the problem. Options 3, 4 and 5 do not deal with the epicentre of the problem. Option B will not only help buy time, it will also calm the customers and in fact make them receptive to PAC because of the discounts and gifts  
Hence, the correct answer is **option 2**.
- A is not fair. B misses a very important point about informing the customer about Ginger Automobile and its announcements. D does not maximize Mr. Ahmed's position or cash flow in anyway. E has the same error as B. C is fair on both Mr. Ahmed and the customer get a fair deal.  
Hence, the correct answer is **option 3**.
- Here, first calculate the time taken for each journey and tabulate it so as to help calculate the requisite values.  
The timings from Jamshedpur to Delhi and from Delhi to Jamshedpur are as follows:

Jamshedpur to Delhi				
Train			Time	
12801	6:45	4:50	22 hrs 5 min	1325
12443	15:55	10:35	18 hrs 40 min	1120
Road			Time	
Jamshedpur to Ranchi by Car			3 hrs	180
Delhi airport to site			1.5 hrs	90
Delhi railway to site			0.5 hrs	30
Flight			Time	
AI 9810	8:00	9:45	1 hr 45 min	105
AI 810	15:25	17:10	1 hr 45 min	105
IT 3348	19:20	21:05	1 hr 45 min	105

Delhi to Jamshedpur				
Train			Time	
12802	22:20	20:05	21hrs 45 min	1305
12444	17:20	10:35	17hrs 15 min	1035
Road			Time	
Ranchi To Jamshedpur by car			3 hrs.	180
Site to Delhi airport			1.5 hrs.	90
Site to Delhi railway			0.5 hrs.	30
Flight			Time	
AI 9809	5:50	7:35	1 hr. 45 min	105
AI 809	11:00	12:45	1 hr. 45 min	105
IT 3347	17:10	18:55	1 hr. 45 min	105

Also, the waiting time at the airport, navigation time at the railway station and work duration are:

Waiting	Aiport		1 hr	60
Navigation	Railway			5

Work Duration		6 hrs	360
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Now, keep in mind that each flight (in either direction) takes 105 minutes.

So, the time taken from Tina's house to the work site will always remain constant. This will be:

$$\begin{aligned}
 &\text{Jamshedpur to Ranchi by car} + \text{Waiting time at airport} \\
 &+ \text{Flight time} + \text{airport to work site} \\
 &= 180 + 60 + 105 + 90 \\
 &= 435 \text{ minutes i.e. 7 hours and 15 minutes.}
 \end{aligned}$$

This will remain constant while returning from the work site to Jamshedpur as well.

Similarly, the time from Tina's house to the Jamshedpur railway station (excluding train time) will be always be 10 minutes (5 for travel and 5 for navigation). This will remain constant even when she returns from Jamshedpur railway station to her house. Also, the time from Delhi railway station to the work site will always be 35 minutes (30 for travel and 5 for navigation). Again, this will remain constant even when she returns from the work site to Delhi railway station.

Finally, work time will always be constant at 360 minutes

Also, always Total time = Travelling Time + Work Time + Waiting Time

Now, consider each option:

**Option 1:**

Since she travels by flight in both case, total travelling time =  $435 \times 2 = 870$  minutes

Work time = 360 minutes

Now, if she goes by AI 9810, she reaches the site 90 minutes after 9:45 i.e. at 11:15 a.m. and finishes the work at 17:15. Because IT 3347 departs at 17:10 hours, she will have to wait till 14:40 hours on the next day i.e. wait time of 1285 minutes

**So, total time =  $870 + 360 + 1285 = 2515$  minutes**

**Option 3:**

Again, because she travels by flight both ways, travel time = 870 minutes

Work time = 360 minutes

Now, if she goes by IT 3348, she reaches the site 90 minutes after 21:05 i.e. at 22:35 hours and finishes the work at 04:35 hours. Because IT 3347 departs at 05:50 hours, she will have to wait till 03:20 hours on the next day i.e. wait time of 1365 minutes

**So, total time =  $870 + 360 + 1365 = 2595$  minutes**

**Hence, option 3 can be eliminated.**

**Option 2:**

She goes by flight and returns by train

Travel time = Flight time + Time from work site to Delhi railway station + Actual train travel + Time from Jamshedpur railway station to home =  $435 + 35 + 1305 + 10 = 1785$  minutes

Work Time = 360 minutes

Now, if she goes by AI 9810, she reaches the site 90 minutes after 9:45 i.e. at 11:15 a.m. and finishes the work at 17:15. Because train 12802 departs at 22:20 hours, she will have to wait till 21:45 hours on the same day i.e. wait time of 270 minutes

**So, total time =  $1785 + 360 + 270 = 2415$  minutes**

**Hence, option 1 can be eliminated.**

**Option 5:**

She goes by flight and returns by train

Travel time = Flight time + Time from work site to Delhi railway station + Actual train travel + Time from Jamshedpur railway station to home =  $435 + 35 + 1035 + 10 = 1515$  minutes

Work Time = 360 minutes

Now, if she goes by AI 9810, she reaches the site 90 minutes after 9:45 i.e. at 11:15 a.m. and finishes the work at 17:15. Because train 12444 departs at 17:20 hours, she will have to wait till 16:45 hours on the next day i.e. wait time of 1410 minutes

**So, total time =  $1515 + 360 + 1410 = 3285$  minutes**

**Hence, option 5 can be eliminated.**

**Option 4:**

She travels both ways by train

So, the journey between her house and Jamshedpur railway station will be counted twice and the journey between the workplace and Delhi railway station will be counted twice. Also, the actual train time will be counted once each for the two journeys.

Travel Time =  $(10 \times 2) + (35 \times 2) + 1120 + 1035 = 2245$  minutes

Work time = 360 minutes.

Now, observe that work time and travel time together are  $2245 + 360 = 2605$  minutes which is greater than the least time obtained for option 2. So, there is no point in calculating the waiting time which will only increase this value.

Hence, option 4 can be eliminated.

Hence, **option 2.**

7. Note that in this question, the work needs to be completed any time between 9:00 hours and 17:00 hours. It DOES NOT mean that the work has to be started and completed between the 9:00 hours and 17:00 hours.

Consider each option.

**Option 1:**

Since there are 2 train journeys,

Travel time =  $(2 \times 10) + (2 \times 35) + \text{Actual travel in 12443} + \text{Actual travel in 12444}$   
 $= 20 + 70 + 1120 + 1035 = 2245$  minutes

Work time = 360 minutes.

If she goes by train 12443, she will reach the work site at 11:10 hours and finish the work at 17:10 hours which violates the condition of the question.

So, she will have to wait till 03:00 hours on the next day to start the work so that she can complete the work at 09:00 hours. This is a wait of 950 minutes.

Once she finishes the work at 09:00 hours, she will have to wait till 16:45 hours on that day to catch train 12444. This is a waiting time of 465 minutes.

Total waiting time =  $950 + 465 = 1415$  minutes.

**So, total time =  $2245 + 360 + 1415 = 4020$  minutes.**

**Option 2:**

Since there are 2 train journeys,

Travel time =  $(2 \times 10) + (2 \times 35) +$  Actual travel in 12801 + Actual travel in 12802

$$= 20 + 70 + 1325 + 1305 = 2720 \text{ minutes}$$

Work time = 360 minutes.

If she goes by train 12801, she will reach the work site at 05:25 hours, start immediately and finish the work at 11:25 hours which satisfies the condition of the question.

Once she finishes the work at 11:15 hours, she will have to wait till 21:45 hours on that day to catch train 12802. This is a waiting time of 630 minutes.

**So, total time =  $2720 + 360 + 630 = 3710$  minutes.**

**Hence, option 1 can be eliminated.**

**Option 3:**

Since there are 2 flight journeys,

Travel time =  $435 \times 2 = 870$  minutes

Work Time = 360 minutes

If she goes by AI 9810, she will reach the work site at 11:15 hours and finish the work at 17:15 hours which violates the condition of the question.

So, she will have to wait till 03:00 hours on the next day to start the work so that she can complete the work at 09:00 hours. This is a wait of 945 minutes.

Once she finishes the work at 09:00 hours, she will have to wait till 03:20 hours on the next day to catch AI 9809. This is a waiting time of 1100 minutes.

Total waiting time =  $945 + 1100 = 2045$  minutes.

**So, total time =  $870 + 360 + 2045 = 3275$  minutes.**

**Hence, option 2 can be eliminated.**

**Option 4:**

Since there are 2 flight journeys,

Travel time =  $435 \times 2 = 870$  minutes

Work Time = 360 minutes

If she goes by AI 810, she will reach the work site at 18:40 hours and finish the work at 00:40 hours which violates the condition of the question.

So, she will have to wait till 03:00 hours on the next day to start the work so that she can complete the work at 09:00 hours. This is a wait of 500 minutes.

Once she finishes the work at 09:00 hours, she will have to wait till 03:20 hours on the next day to catch AI 9809. This is a waiting time of 1100 minutes.

Total waiting time =  $500 + 1100 = 1600$  minutes.

**So, total time =  $870 + 360 + 1600 = 2830$  minutes.**

**Hence, option 3 can be eliminated.**

**Option 5:**

Since there are 2 flight journeys,

Travel time =  $435 \times 2 = 870$  minutes

Work Time = 360 minutes

If she goes by IT 3348, she will reach the work site at 22:35 hours and finish the work at 04:35 hours which violates the condition of the question.

So, she will have to wait till 03:00 hours on the next day to start the work so that she can complete the work at 09:00 hours. This is a wait of 265 minutes.

Once she finishes the work at 09:00 hours, she will have to wait till 14:40 hours on the same day to catch IT 3347. This is a waiting time of 340 minutes.

Total waiting time =  $265 + 340 = 605$  minutes.

**So, total time =  $870 + 360 + 605 = 1835$  minutes.**

**Hence, option 4 can be eliminated.**

**Hence, option 5.**

8. Tina cannot leave before 16:00 hours on 8<sup>th</sup> January. So, if any of the travel modes necessitate departure before 16:00 hours, she will have to start the journey on 9<sup>th</sup> January. However, keep in mind that the "time out of Jamshedpur" is to be minimized. So, the time that she spends in Jamshedpur till her departure on 9<sup>th</sup> January cannot be considered "waiting time".

Consider each option.

**Option 1:**

Since there are 2 train journeys,

Travel time =  $(2 \times 10) + (2 \times 35) +$  Actual travel in 12443 + Actual travel in 12444

$$= 20 + 70 + 1120 + 1035 = 2245 \text{ minutes}$$

Work time = 360 minutes.

If she goes by train 12443, she will depart on 9<sup>th</sup> January, reach the work site at 11:10 hours on 10<sup>th</sup> and finish the work at 17:10 hours. Because train 12444 departs at 17:20 hours, she will miss it and will have to catch it on 11<sup>th</sup> January. This means a waiting time till 16:45 hours of 11<sup>th</sup> January i.e. 1415 minutes

**So, total time =  $2245 + 360 + 1415 = 4020$  minutes.**

**Option 2:**

She goes by train and returns by flight

Travel time = Time from home to Jamshedpur station + Actual train travel + Time from Delhi railway station to work site + Flight time =  $10 + 1120 + 35 + 435 = 1600$  minutes

Work Time = 360 minutes

If she goes by train 12443, she will depart on 9<sup>th</sup> January, reach the work site at 11:10 hours on 10<sup>th</sup> and finish the work at 17:10 hours. Flight AI 9809 departs at 05:50 hours on 11<sup>th</sup> January. So, she will have to wait till 03:20 hours of 11<sup>th</sup> January i.e. a waiting time of 610 minutes

**So, total time = 1600 + 360 + 610 = 2570 minutes.**

**Hence, option 1 can be eliminated.**

Observe that options 3 and 4 can straightaway be eliminated as the mention a return journey by train 12801, which is not possible as that train travels from Jamshedpur to Delhi and not the other way round.

**Hence, options 3 and 4 can be eliminated.**

**Option 5:**

She travels both ways by flight.

Travel time =  $435 \times 2 = 870$  minutes

Work Time = 360 minutes

If she goes by AI 9810, she departs on 9<sup>th</sup> January, reaches the work site at 11:15 hours on 9<sup>th</sup> and finishes the work at 17:15 hours. Flight AI 9809 departs at 05:50 hours on 10<sup>th</sup> January. So, she will have to wait till 03:20 hours of 11<sup>th</sup> January i.e. a waiting time of 605 minutes

**So, total time = 870 + 360 + 605 = 1835 minutes.**

**Hence, option 2 can be eliminated.**

Hence, **option 5.**

9. Note that in this case, we are not interested in the travel time and work time at all, as the objective is to minimize the waiting time. The waiting time of one hour at the airport is to be considered but the navigation time of 5 minutes at the railway station is not to be considered.

Also, the waiting time will be nothing but the difference between completion of work and time at which she needs to leave from the work site. We need to add 0, 60 or 120 minutes to this (depending on how many times she travels by flight).

Consider each option.

**Option 1:**

Since she travels by flight once, 60 minutes will be added to the waiting time.

If she goes by train 12801, she will complete the work by 11:25 hours. To catch flight IT 3347 which departs at 17:10 hours, she needs to leave at 14:40 hours i.e a wait time of 195 minutes.

**So, total wait time = 195 + 60 = 255 minutes**

**Option 2:**

Since she travels by train twice, 0 minutes will be added to the waiting time.

If she goes by train 12443, she will complete the work by 17:10 hours. To catch train 12802 which departs at 22:20 hours, she needs to leave at 21:45 hours i.e a wait time of 275 minutes.

**So, total wait time = 275 minutes**

**Hence, option 2 can be eliminated.**

**Option 3:**

Since she travels by flight once, 60 minutes will be added to the waiting time.

If she goes by flight AI 9810, she will complete the work by 17:15 hours. To catch train 12802 which departs at 22:20 hours, she needs to leave at 21:45 hours i.e a wait time of 270 minutes.

**So, total wait time = 270 + 60 = 330 minutes**

**Hence, option 3 can be eliminated.**

**Option 4:**

Since she travels by flight twice, 120 minutes will be added to the waiting time.

If she goes by flight AI 810, she will complete the work by 00:40 hours. To catch flight AI 9809 which departs at 05:50 hours, she needs to leave at 03:20 hours i.e a wait time of 160 minutes.

**So, total wait time = 160 + 120 = 280 minutes**

**Hence, option 4 can be eliminated.**

**Option 5:**

Since she travels by flight twice, 120 minutes will be added to the waiting time.

If she goes by flight IT 3348, she will complete the work by 04:35 hours. To catch flight AI 809 which departs at 11:00 hours, she needs to leave at 08:30 hours i.e a wait time of 235 minutes.

**So, total wait time = 235 + 120 = 355 minutes**

**Hence, option 5 can be eliminated.**

Hence, **option 1.**

10. A fails to address the problem well. He only looks at the new deadline option and not if and how the deadline will be achieved.

B is incorrect as the external consultant will only be able to give a professionally 'correct' solution and may not be able to address the core of the issue.

C only talks about new members. It ignores the ones already a part of BAG.

D is incorrect. A 360 degrees viewpoint is required to sort this issue which is found in option 5. Option 5, will result in brainstorming and possible solutions, it will also motivate the members by making them take some responsibility.

Hence, the correct answer is **option 5.**

11. A just goes to show that Shiv met the criteria to be selected to take up the job. B does not state the immediate cause. C is ambiguous. D mentions what is contrary in the passage. The passage states that since the older members were on the verge of retirement they decided to play along with the younger members. It is clear from the passage that in many instances, Shiv could have asked for some help, opinions and suggestions from his colleagues and put them to practice which he failed to do.  
Hence, the correct answer is **option 5**.
12. A is an escape. B shows signs of confusion and anxiety on Shiv's part. C is unfair. E mentions 'take care of ad-hoc requirements'. Also, out-bound programmes seems a little too relaxed given the situation. D addresses the problem appropriately.  
Hence, the correct answer is **option 4**.
13. A is mentioned in the 2<sup>nd</sup> paragraph: "She preferred that BAG....being made to report to the new members"  
C finds support in the last lines of the 6<sup>th</sup> paragraph: "Not willing to disagree...earlier decided 14 months".  
D finds support in paragraph 4: "This was heavily influenced .....working on an already existing one".  
E finds support in the last paragraph.  
B has not been mentioned. Hence, the correct answer is **option 2**.
14. B is unfair. C is impersonal and would not help her understand first-hand what her father's company is all about. D suggests an indirect approach to know one's employees well which is not the best option. E is not holistic in its approach. A is the best alternative, it discusses the issue with all members together and makes each one feel 'relevant' at the work place.  
Hence, the correct answer is **option 1**.
15. A and B are superficial. Nothing about stakeholders is mentioned for the efficiency of the implementation of an ERP package .C is ruled out. E is ambiguous with 'operations'. D is correct.  
Neither Miss Teknikwali nor Shiv nor the external consultant was absolutely sure about the ERP technology which led to unrest in their organization.  
Hence, the correct answer is **option 4**.
16. Ms Shabina is the principal which means she has power to take tough decisions single-handedly. A does not deal with the problem at hand. C seems too impractical with 'teachers, parents and management'. D is erroneous in its latter part with 'staunch supporters of the current practices'. It makes Ms Shabina unfair. E is too dogmatic. B is fair and also achievable.  
Hence, the correct answer is **option 2**.
17. The problem is that of teachers attending school on a weekend. Option I does not deal with this immediate problem. II is a very good recommendation. It will help reduce the discomfort of the unhappy teachers and ensure smooth functioning of the school. III misses the point. IV is in line with II and also the previous question.  
Hence, the correct answer is **option 2**.
18. Mr. Dev wants a stable and trustworthy driver while his family wants a driver who is not young. The perspective of the HR manager is not to be considered at all.  
As per Mr. Dev's criteria, Sunder and Chintan cannot be considered because they are not stable - Sunder because he keeps on changing jobs frequently and Chintan because he has become a driver only because he is out of a job.  
Also, Chethan may not be suitable because his services have been offered on a temporary basis. Again, this creates an issue of stability.  
From the family's point of view, Mani is not suitable as he is the youngest (23 years old).  
Bal Singh is the most suitable in terms of age (40 years), experience (20 years), stability and trustworthiness (Ram Singh's cousin and has already worked for Dev Anand earlier).  
Therefore, Dev Anand would like to have Bal Singh as his driver.  
Hence, **option 3**.
19. Looking at the solution to the earlier question, Bal Singh would be Dev Anand's most preferred driver. Also, as explained earlier, Sunder and Chintan would not be suitable as they not stable; Mani would not be suitable as he is not trustworthy (claims to have more than one year of experience but cannot substantiate it) and Chethan would not be suitable as he is neither stable (he is coming over on a temporary basis) nor trustworthy (the competitor is offering the services which could be a ploy). So, Chethan would be the least preferred driver.  
Thus, Statement I is in conformance with the given information.  
The family members want a driver who is not young. Chintan who is the eldest among the candidates (44 years) has been mentioned as the least preferred

driver. Based on the given information, the least preferred driver for the family should have been Mani. Thus, Statement II is not in conformance with the given information.

The HR manager would not prefer Bal Singh as he has a profile very similar to Ram Singh and that created discontent among senior employees. The HR manager wants to avoid that. So, Bal Singh will be his least preferred choice. Among the other four drivers, there is no information available to identify the driver who would be the most preferred.

Thus, Statement III is not in conformance with the given information.

Hence, **option 1**.

**Note:** Once statement II is identified as not in conformance, the answer straightaway becomes option 1 as all the other options mention statement II as one of the statements. Also, if you are confused in statement III, note that there is no option that has only statements I and III.

20. The biggest criterion for the GM HR is that the selection of a new driver should not lead to discontent among the senior employees of the firm. The earlier driver, Ram Singh was forced to quit because the earlier employees did not like the influence of Ram on Dev Anand. This was because of his contacts, information gathering skills and proximity to Dev Anand.

Among the profile of the candidates, only that of Bal Singh is similar. It is given that his knowledge and contacts in the firm are as good as Ram Singh. It is also given that used to substitute for Ram Singh and so already has some proximity to Dev Anand. As such, he is the only candidate who would definitely create discontent among the senior employees. The other candidates may or may not do so.

So, Bal Singh is the most likely to get rejected.

Hence, **option 3**.

21. According to the passage, ethics is an individual's code for society survival. In paragraph 2, Naresh has drawn the boundaries of his society to include himself, his family, his employees and their family members. In that respect, Naresh is being totally ethical as he is paying a bribe to ensure he gets the contract which will ensure his "society's survival".

Hence, the correct answer is **option 5**.

22. Naresh is ethical for the same reasons as mentioned in the above solution. No conclusion can be made about Srikumar as his actions are not too concrete

Hence, the correct answer is **option 4**.

23. Srikumar is immoral as he not only kept mum but also stopped Naresh from doing the right thing. At the same time he is ethical, as it is stated in paragraph 2 that Srikumar's principle is to help others with an expectation that s/he will return the favour.

Naresh is not unethical as his intention was to stand up for the truth. Nothing can be said about the contractors as their 'ethics/code for survival' is not specified and there is no option saying that the contractors are immoral alone.

Hence, the correct answer is **option 1**.

24. Option A with 'favourable position' is ambiguous. B is out of context. D is not nailing the crux of the issue. C is a likely possibility but in the presence of option E, C loses out. The paragraph talks about organizational performance affecting 'salaries'.

Hence, the correct answer is **option 5**.

25. A and B are trivial points which the management wouldn't give importance to. Option C is irrelevant data. Option D places too much responsibility on the GM, and is not representative of the 'entire management'.

Option E is apt.

Hence, the correct answer is **option 5**.

26. "On a wing and a prayer" is a phrase meaning 'in poor condition, but just managing to get the job done'.

Hence, the correct answer is **option 4**.

27. Options 1, 3 and 4 use the present tense whereas the sentence clearly requires a past tense, indicated by 'but back then'. Option 5 with "ever", meaning 'at all times; always' becomes erroneous as it is placed after the word "before".

Hence, the correct answer is **option 2**.

28. All the sentences can be implied except option 4. The sentence indicates that "libero" was introduced in the 60s, as an Italian default, as a result of AC Milan's success and it was their success that killed the "libero" a quarter of a century later. Option 4 interprets this wrongly and says that AC Milan's success was killed for almost a quarter of a century.

Hence, the correct answer is **option 4**.

29. All options except option 4 are antonyms of each other or convey opposite ideas.

Hence, the correct answer is **option 4**.

30. The information talks about a rise/fall in literacy rate in and around 3 years: 1991, 2001 and 2006. It talks about, a rise in literacy rate from 1991 to 2006 with a fall in the rate according to the 2001 census. A refutable statement to this is option 4 which talks about a larger drop in literacy rate between 1991 and 2001 than a rise in the rate from 2001 to 2006 (which does not indicate progress from 1991 to 2006 as mentioned in the statement). The other options do not refute the statement as strongly as option 4. Hence, the correct answer is **option 4**.
31. The meaning of "embezzlement" is 'to take (money, for example) for one's own use in violation of a trust'. Hence, the correct answer is **option 2**.
32. The paragraph should begin with sentence E as it talks about the factors influencing forecast which sets the tone for the rest of the paragraph. Hence, options 3 and 4 are ruled out. Sentence A follows E as it categorizes these factors. C talks of 'another way' to classify these factors. D and B talk about macro and micro factors respectively. Hence, the correct order is **option 1**.
33. Option 1 is validated in the first paragraph, " We can see the person in terms of his or her 'agency' .....in terms of his or her 'well-being'" The paragraph also mentions words like 'duality' and 'dichotomy' to stress on this distinction. Also, consider the last few lines of paragraph 2, ".....does not imply that they are the same variable, or that they have the same values...." Hence, the correct answer is **option 1**.
34. Option 4 summarizes what is mentioned in the statement. The Japanese people, in the pursuit of their country's goals, have provided impetus to their sense of well-being but there is a certain 'departure from this self-interested behaviour' to achieve 'industrial success' Hence, the correct answer is **option 4**.
35. Option 5 summarizes the ideas mentioned in the passage. The politician's 'agency aspect' is seen in the fact that his fast helped in galvanizing the state government to enact new laws and his 'well-being aspect' is fulfilled as he has earned new respect in the minds of the voters. Hence, the correct answer is **option 5**.
36. Statement I is clearly stated in the first two lines of paragraph 2, "To recognize the distinction..." Statement III is mentioned in the mid-section of paragraph 1, "Agency may be seen as important.....but also intrinsically" The paragraph mentions that there is no sound basis for demanding that the agency and well-being aspects of a person should be independent of each other. Hence, the correct answer is **option 4**.
37. In all options except 5, the subject is in the pursuit of fulfilling his/her agency aspects –goals, values, needs, commitments which will affect his/her well-being. In option 5, the ascetic (person who renounces material comforts and leads a life of austere self-discipline, especially as an act of religious devotion.) is fulfilling his well-being aspect. Hence, the correct answer is **option 5**.
38. Sentence 5 uses the phrase 'ability of' which is incorrect. The correct phrase is 'ability to'. Hence, the correct answer is **option 5**.
39. Alfredo talks about Argentina being a football powerhouse in the past whereas Diego talks about the team being a powerhouse in the present. Hence, the correct answer is **option 4**.
40. The manager received support from 'people who had challenged him earlier'. The pronoun required to replace this should be third person singular. 'Those' is the correct pronoun to be used here. Hence, the correct answer is **option 4**.
41. The argument stated in the information is that all animal actions are as a result of an interaction between experiences and genotype. Hence, if all experiences and genotypes are identical, all actions will be identical. This is mentioned in option 4. Hence, the correct answer is **option 4**.
42. Therapists continue a therapeutic relationship until the patient is retained to stability and can function normally. Once this is achieved the therapist will not have sessions with the patient as (i) s/he has retained the patients' well-being (ii) each therapeutic session has to be paid for. The last line of the information mentions that very few therapist/patient relationships continue after the paid sessions are terminated. Hence, the correct answer is **option 1**.



43. Consider the second line of the information, "Despite large increases.....continues to increase". Option 3 completely contradicts this  
Hence, the correct answer is **option 3**.
44. All those who studied commerce are incorporated in the sports category and no tax consultant enjoys sports. Thus, no tax consultant studied commerce.  
Hence, the correct answer is **option 4**.
45. The sentence talks about seeing a fly in a soup. This is of major concern to a chef. Hence, options 1 and 3 are ruled out. The word housefly is not hyphenated and a space in between house and fly changes the meaning of the sentence.  
Hence, the correct answer is **option 2**.
46. "Hypothesize" means 'to speculate or anticipate; to assume by hypothesis'.  
Options 1, 2, 3 and 5 are synonyms of the word.  
"Refute" means "To deny the accuracy or truth of".  
Hence, the correct answer is **option 4**.
47. The paragraph must begin with E as it introduces the topic of warehouses. Options 3 and 4 are ruled out. E should be followed by C which answers the question of why the concept of warehouses is not new in India. B gives an example of the history of warehouses among Indian communities. D talks about warehouses in modern times and A with 'in fact' aptly fits in as the concluding sentence. The correct order is ECBDA.  
Hence, the correct answer is **option 2**.
48. Concurrence is synonymous with options 1, 2, 3 and 4. Harmony is a synonym of accord and consensus, however, it is not a synonym of concurrence.  
Hence, the correct answer is **option 5**.
49. The ii-i-v link is imperative. ii introduces the topic of governments influence on domestic economy. i gives an example of the same. v with 'but there is not the slightest evidence' must follow i as i gives evidence for government influence on economy.  
Only options 1 and 5 have this link. Between the two, option 5 has better construction. iii does not make for as good an introductory sentence as ii.  
Hence, the correct answer is **option 5**.
50. The logic in the given statement is that 'If A is reduced on increased, juxtaposing reaction is seen in B as well as C'.  
Option 3 exhibits the analogous relationship. If number of words is high, the text will not be read (reduction in reading) and when an advertisement text is not read, the product is not sold (production is reduced).  
Hence, the correct answer is **option 3**.
51. The CEO did not want to give a rosy picture of the sales growth nor would a strict or pessimistic picture help in motivating the team. "Conservatively" fits in well in this context. It means 'cautiously or moderately'.  
Hence, the correct answer is **option 5**.
52. Consider the last paragraph. The author mentions that SEZs have been thought of as a simple way out. In the next few lines the author says that their (SEZ) number should be few.  
Option 1 should have SEZs instead of EPZs. Options 2 and 3 are not the objectives of this passage. Option 5 is incorrect.  
Hence, the correct answer is **option 4**.
53. Consider the last lines of paragraph 3: "...governments at both the .....improve infrastructure".  
Option 3 misinterprets this.  
The passage mentions that the Government cites fiscal responsibility as a reason for being unable to improve infrastructure. The option states that fiscal responsibility laws limit the Government investment.  
Hence, the correct answer is **option 3**.
54. Paragraph 1 mentions "...huge tax benefits are promised to lure investors".  
Hence, the correct answer is **option 3**.
55. Paragraph 3 mentions "Even after 3 years of the enactment of the Electricity Act (2003)..."  
Hence, the correct answer is **option 4**.
56. Consider the following lines: "In other words, if we could understand evolution, we could understand the most precious of processes: innovation"  
The paragraph then goes to describe and define evolution. Hence, I can be inferred.  
Consider this: "Without evolution technologies seem to be born independently and improve independently.....develops it". . Hence, II can be inferred.  
III cannot be inferred. IV is very far-fetched.  
Hence, the correct answer is **option 1**.
57. Statements I and II are complete in themselves. They do not have any loopholes.  
III is present in every option. IV is incomplete. It talks about technologies appearing 'unlike novel biological species..' which has not been defined or stated. V says

'radar requires a different principle' but fails to mention what it is.

Hence, the correct answer is **option 5**.

58. VP (HR) visits on every third day, VP (Operations) visits on every fourth day and VP (Sales) visits on every sixth day.

Hence, all of them will visit together on every twelfth day.

Now, all VPs visited together on January 3, 2012.

Hence, they will visit on, 15<sup>th</sup> January, 27<sup>th</sup> January, 8<sup>th</sup> February and so on.

Hence, **option 3**.

59. Mean of the salaries of the five vice presidents is Rs. 5 lakhs. Hence, sum of the salaries of the five vice presidents = 25 lakhs.

Now, median of the salaries is Rs. 5 lakhs and 8 is the only mode.

Hence, the highest salary and second highest salaries are both 8 lakhs.

Hence, sum of two lowest salaries =  $25 - (5 + 8 + 8) = 4$  Lakhs.

As 8 is the only mode hence, the only combination of the lowest salaries is 1 lakhs and 3 lakhs.

Hence, lowest salary = Rs. 1 lakh.

Hence, the required sum =  $8 + 1 = 9$  lakhs.

Hence, **option 1**.

60. No data has been given in the question as to which year amongst the given years in the graph is 2010.

Hence this question is incorrect.

Note: By trial and error method, let us assume all the years one by one to be 2010.

Revenues of all the three companies are not equal in any of the 6 years and hence option A and B are incorrect.

Revenues of Google were less than that of Facebook and Yahoo in the first three years mentioned in the graph and hence option C is also incorrect.

Total of Yahoo and Facebook was less than Google in the fifth year shown in the graph and so option D is also wrong.

If this question needs to be compulsorily answered, then option E, none of the above would be the correct one.

However this doesn't refute the fact that this question is an incorrect one as data about the regarding which year represents 2010 is not given.

Hence, **option 5**.

61. Revenue of Yahoo in 2006 = 1200

Revenue of Yahoo in 2004 = 250

So, percentage increase =  $(950/250) \times 100 = 380$

Average percentage increase =  $380/2 = 190$

Revenue of Facebook in 2006 = 2000

Revenue of Facebook in 2004 = 350

So, percentage increase =  $(1650/350) \times 100 = 235.71$

So, percentage difference in both the values =

$[(235.71 - 190)/190] \times 100 = 24.05$

None of the options are less than 35%, so the question is incorrect.

However, "None of the above" is not one of the given options and hence we will have to take the option closest to 24.05 as the correct answer.

Hence, **option 1**.

62. percentage increase in Google's growth between 5<sup>th</sup> and 6<sup>th</sup> year =  $(3250 - 1500)/1500 \times 100 = 116.67$

So, required value of Facebook revenue after 6<sup>th</sup> year =  $750 \times 216.67 = 1625.05$

So, the closest answer is 1600.

Hence, **option 1**.

63. Let T, M, G, L and B be the capacities of Tina's, Mina's, Gina's, Lina's and Bina's bucket.

Hence,  $T > M > G > L > B$

Assume that they spill  $x$  litres of water.

Hence, the percentages of the water spilled by them are;

$(x/T) \times 100$ ,  $(x/M) \times 100$ ,  $(x/G) \times 100$ ,  $(x/L) \times 100$  and  $(x/B) \times 100$  respectively.

As,  $T > M > G > L > B$ , this implies that  $x/T < x/M < x/G < x/L < x/B$

Hence, percentage of water spilled is highest for Bina.

Hence, **option 5**.

64. Let  $V$  be the volume of water-melon,  $S$  be the total surface area and  $t$  be the thickness of the skin, then volume useable for Juice is,

$V - St$

Hence, if total surface area is minimum, then useable volume of the water-melon will be highest.

Now, for equal volume, sphere has the least surface area.

Hence, **option 5**.

65. After one year, amount due =  $6000 \times 1.05 - 1200 = 5100$

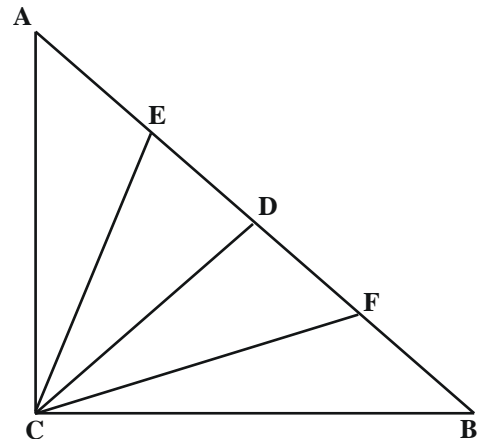
Hence, amount due after two years =  $5100 \times 1.05 - 1200 = 4155$

Hence, **option 3**.

66. Let  $r$  be the radius of the smaller sphere.  
Now, the volume of the big sphere and the 1000 small spheres is same.  
Hence, we have,
- $$\frac{4}{3}\pi 10^3 = 1000 \times \frac{4}{3}\pi r^3$$
- Hence,  $r^3 = 1$   
Hence,  $r = 1$   
Now, total surface area of big sphere =  $4 \times \pi \times 10^2 = 400\pi$   
Total surface area of 1000 new sphere =  $1000 \times 4\pi \times 1^2 = 4000\pi$   
Hence, total surface area increases by,  $(4000\pi - 400\pi)/400\pi = 9$  times.  
Hence, **option 5**.
67. Assume that the volume of the jug is  $l$  liters.  
Hence, after first replacement, the juice mixture contains  $l$  liters of pineapple juice.  
When the juice mixture is drawn out for the second time using the jug, the amount of pineapple juice in the jug =  $l \times (l/10)$   
This is replaced by  $l$  litres of pineapple juice.  
Hence, amount of pineapple juice after two replacements =  $l + (l - l \times (l/10)) = 5$   
Hence, we get,  
 $l^2 - 20l + 50 = 0$   
Solving the above quadratic we get,  
 $l = 5(2 - \sqrt{2})$  or  $l = 5(2 + \sqrt{2})$   
As,  $5(2 + \sqrt{2}) > 10$ ,  $l = 5(2 - \sqrt{2}) \approx 2.92$   
Hence, **option 4**.
68. Let Nikhil buy  $a$ ,  $b$  and  $c$  pieces of kajubarfi, gulabjamun and sandesh respectively.  
Hence, we have,  
 $a + b + c = 100$ , and ... (i)  
 $10a + 3b + 0.5c = 100$  ... (ii)  
By,  $2 \times \text{ii} - \text{i}$ , we get,  
 $19a + 5b = 100$   
Hence,  $a = (100 - 5b)/19$   
Now,  $(100 - 5b)/19$  will be positive integer only if  $b = 1$ .  
In that case,  $a = 5$ .  
Hence, Nikhil must buy 1 gulabjamun.  
Hence, **option 1**.
69. Let the potter's sons have  $x$  pots.  
Hence, they received Rs.  $x^2$  after selling these pots.  
As the price of one banana wafer packet is less than Rs. 10 hence,  $x^2$  will not be a multiple of 100.  
Assume that they bought  $n$  packets of potato wafers.

Hence, total number of wafers packet =  $n + 1$   
Hence, each son gets  $(n + 1)/2$  packets.  
Hence,  $n$  is odd.  
Let  $b$  be the price of banana wafers.  
Hence, they have Rs.  $(n \times 10 + b)$   
As  $n$  is odd, tens place of  $(n \times 10 + b)$  is odd.  
Now, each brother can have equal money if total amount earned by them is even.  
Hence,  $b$  must be even.  
Hence, we have the following condition,  
 $x^2 = 10 \times n + b$  such that  $b$  is even and  $n$  is odd.  
Hence,  $x$  is an even number.  
Now, if unit's digit is of  $x$  is 2 or 8, then tens place of  $x^2$  will be even.  
This violates our condition that tens digit of  $x^2$  is odd and hence it is not possible.  
Hence, unit's place digit of  $x$  is 4 or 6.  
In either case, unit digit of  $x^2$  is 6.  
Hence,  $b = 6$ .  
Hence, the son having banana wafers owes Rs.  $((n - 1) \times 10/2 + 6)$  and the other son owes  $((n + 1) \times 10/2)$   
Hence, one of the son has Rs.  $((n + 1) \times 10/2) - ((n - 1) \times 10/2 + 6) = \text{Rs. } 4$  more than the other.  
Hence, he must give Rs. 2 to the other to have financially equitable division.  
Hence, **option 2**.

70. Consider the following diagram.



Here D is midpoint of AB, E is the midpoint of AD and F is the midpoint of BD.  
Hence,  $AE = ED = DF = BF = 20$   
Let  $AC = b$  and  $BC = a$ .  
Now, applying Apollonius theorem in triangle ACD, we get,  
 $CE^2 + 20^2 = 1/2 \times (b^2 + CD^2)$  ... (I)  
Similarly, applying Apollonius in CDB, we get,  
 $CF^2 + 20^2 = 1/2 \times (a^2 + CD^2)$  ... (II)

Adding I and II, we get,

$$CE^2 + CF^2 + 2 \times 20^2 = 1/2 (a^2 + b^2 + 2 \times CD^2) = 1/2 (80^2 + 2 \times 40^2) = 3 \times 40^2$$

$$\text{Hence, } CE^2 + CF^2 + CD^2 = 3 \times 40^2 + 40^2 - 2 \times 20^2 = 5600$$

Hence, **option 3**.

71. Ramya has 10 litres petrol in her car to start with. She purchased 20 litres, 15 litres and 10 litres on three occasions. She was left with 5 litres in her car at the end of the journey. Hence, she utilized  $(10 + 20 + 15 + 10 - 5) = 50$  litres. She travelled  $(800 - 400) = 400$  km. Hence, the mileage of Ramya's car  $= 400/50 = 8$  km/litre Hence, **option 1**.

72. Ramya's car already has 5 litres in the tank. Her car's tank capacity is 35 litres. She can fill a maximum of 30 litres more. The petrol cost in Rampur is Rs. 45/litre As the cost of petrol is lower at all the succeeding petrol pumps that come on the way and hence, to minimize the cost, she will fill enough petrol to reach the first pump i.e 150 km. She already has 5 litres using which she can travel 40 km. Hence, to travel 110 km, she will need  $110/8 = 13.75$  litres at the rate of 45 per litre. On reaching the first petrol pump in the reverse journey, she will fill up enough petrol to reach the second petrol pump as the cost of petrol in the second pump is less than the cost of the first pump. This distance is 50 km. Ramya needs  $50/8 = 6.25$  litres at the rate of Rs. 40/litre. For the rest of the journey (200 km) she will need  $200/8 = 25$  litres at the rate of Rs. 35/litre. Hence the total cost is  $(13.75 \times 45 + 6.25 \times 40 + 25 \times 35) = 1743.75$  Hence, **option 4**.

73. 50 ml of potency 1 solution is equivalent to 1 tablet; 50 ml of potency 2 solution is equivalent to 2 tablets and so on. Hence, 10 ml of potency 1 solution is equivalent to  $10/50 = 1/5$  tablet. Similarly, 15 ml of potency 2 and 30 ml of potency 4 corresponds to  $15/50 \times 2$  and  $30/50 \times 4$  tablets respectively. Hence, the dosage administered is equivalent to  $1/5 + 3/5 + 12/5 = 16/5 = 3.2$  tablets

Hence, **option 2**.

74. Let Ram replace  $x$  litres of 12% solution with 39% solution. Hence, amount of alcohol in new solution  $= (27 - x) \times 0.12 + x \times 0.39 = 27 \times 0.12 + x \times 0.27$  Now, new concentration of the solution is 21%, hence, volume of alcohol  $= 27 \times .21$  Hence,  $27 \times 0.12 + x \times 0.27 = 27 \times 0.21$  Hence,  $0.12 + x/100 = 0.21$  Hence,  $x = 9$ . Hence, **option 2**.
75. Let the distance between the two terminuses be  $x$  km. Now, relative distance travel by the two buses before they meet for the first time  $= x$  km. Similarly, relative distance travelled by the two buses after first meet and before second meet  $= 2x$ . Now, bus originating from terminus A travels 7 km before the first meet. Hence, it should travel  $2 \times 7 = 14$  km after first meet and before second meet. Hence, total distance travelled by that bus before second meet  $= 7 + 14 = 21$  km. Now, second meet occurs at 4 km from the terminus B. Hence, total distance travelled by the bus starting from terminus A (from the beginning till they meet for the second time)  $= x + 4$  km Hence,  $x + 4 = 21$  Hence,  $x = 17$  km Hence, one bus travels  $34 \times 5 = 170$  km a day. Hence, cost of running one bus  $= 170 \times 20 = \text{Rs. } 3400$  Hence, cost of running two buses  $= 3400 \times 2 = \text{Rs. } 6800$  Hence, **option 4**.

76. Total distance travelled by Shyam is;  $50 + 50 + 50/\sqrt{2}$  km towards east, and  $50/\sqrt{2}$  km towards north Hence, smallest distance, say  $d$ , between village A and Village B is;

$$d = \sqrt{((100 + 25\sqrt{2})^2 + (25\sqrt{2})^2)}$$

$$\text{Hence, } d^2 = (100 + 25\sqrt{2})^2 + (25\sqrt{2})^2 = a^2(b + \sqrt{c})$$

$$\begin{aligned} \text{But, } (100 + 25\sqrt{2})^2 + (25\sqrt{2})^2 &= 2500(5 + 2\sqrt{2}) \\ &= 2500(5 + \sqrt{8}) \end{aligned}$$

$$\text{Hence, } a^2 = 2500, b = 5 \text{ and } c = 8$$

$$\text{Hence, } a + b + c = 50 + 5 + 8 = 63$$

Hence, **option 5**.

77. Let cost of a Roti, a plate of Tadka and a cup of tea be Rs.  $a$ ,  $b$  and  $c$  respectively.

Hence, we have,

$$10a + 4b + c = 80, \text{ and} \quad \dots \text{ (I)}$$

$$7a + 3b + c = 60 \quad \dots \text{ (II)}$$

Now, by II - I,

$$3a + b = 20 \quad \dots \text{ (III)}$$

Hence, by, (I) - 3(III), we have,

$$a + b + c = 20$$

$$\text{Hence, } 5a + 5b + 5c = 100$$

Hence, Anthony will pay Rs. 100.

Hence, **option 4**.

78. Assume that the software fails  $a$ ,  $b$  and  $c$  times in a single stage, in two stages and in all stages respectively.

$$\text{Hence, } b + 3c = 6 + 7 + 4 = 17$$

$$\text{But } c = 4, \text{ hence, } b = 5$$

Similarly, we have,

$$a + 2b + 3c = 15 + 12 + 8$$

$$\text{Hence, } a = 13$$

Hence, **option 2**.

79. Volume of the equipment is;

$$\frac{1}{3} \times \pi \times r^2 \times h = \frac{1}{3} \times 22/7 \times 7 \times (0.5)^2 = 11/6 \text{ cm}^3$$

Now,  $11/6 \text{ cm}^3$  can write 330 words.

Hence,  $1 \text{ cm}^3$  can write,

$$330 \times 6/11 = 180$$

We know that  $1 \text{ cm}^3 = 1 \text{ ml}$

$3/5^{\text{th}}$  of a litre is 600 ml which equals  $600 \text{ cm}^3$

Hence,  $600 \text{ cm}^3$  will write,  $180 \times 600 = 10800$  words.

Hence, **option 5**.

80. Total runs scored by the batsman = 306.

$$43.14\% \text{ of } 306 = (43.14/100) \times 306 = 132 \text{ runs.}$$

This is equal to 33 fours.

3.94% of 306 is equivalent to 4% of 300 runs which is equal to 12 runs.

This is equal to 2 sixes.

Hence, **option 5**.

81. Considering the changes mentioned in the question, total runs =  $306 + 20 - 4 = 322$ .

As calculated in the previous question, runs scored in fours = 132.

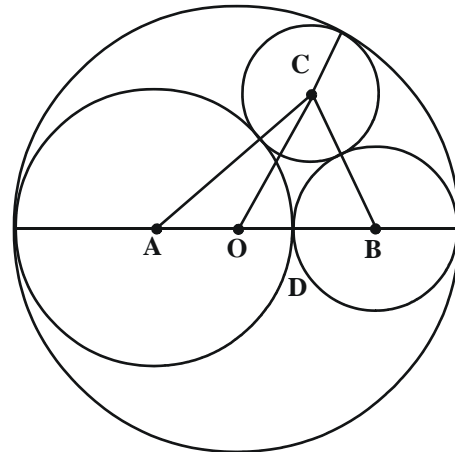
$$\text{So, runs scored in fours} = 132 + 20 = 152.$$

$$\text{So, central angle} = (152/322) \times 360 = 169.93$$

So, as per the options, the answer should be 170.

Hence, **option 5**.

82. Consider the given diagram,



Here, O is the center of the largest circle, A and B are the centers of the circle having radius 10 and 5 feet respectively.

Let C be the center of the largest circle that can be cut from the remaining portion.

The circles having radius 10 and 5 cm touch each other at point D.

Let radius of the largest circle that can be cut from the remaining portion be  $r$ .

Now, one can easily observe that  $AO = OD = BD = 5 \text{ cm}$ .

Now,  $AC = 10 + r$ , and  $BC = 5 + r$ , and  $OC = 15 - r$

Let  $DC = a$ .

Now, applying Apollonius in triangle ADC, we have,

$$(10 + r)^2 + a^2 = 2((15 - r)^2 + 5^2)$$

$$\text{I.e., } a^2 - r^2 + 80r = 400 \quad \dots \text{ (I)}$$

Similarly, applying Apollonius theorem in triangle OCB, we get,

$$(15 - r)^2 + (5 + r)^2 = 2(a^2 + 5^2)$$

$$\text{I.e. } 2a^2 - 2r^2 + 20r = 200 \quad \dots \text{ (II)}$$

By,  $2 \times \text{(I)} - \text{(II)}$ , we get,

$$140r = 600$$

$$\text{Hence, } r = 30/7$$

Hence, diameter of the required circle =  $60/7 \approx 8.57$

Hence, **option 3**.

83. Consider each option separately,

**Consider option A:**

In this case, we don't know the Lionel's age.

Hence, the only conclusion can be derived is;

Jose has 3 sons and sum of their age is 13.

**Consider option B:**

In this case also, we only know that Jose has 3 sons and sum of their ages is 13 and two of them are twin.

But it still doesn't provide adequate information to calculate age of each son.

**Consider option C:**

As, age of Lionel is not known, we only know that the sum of ages of Jose's three son is 13 out of which sum of the age of the younger two brother is 4.

By this we can calculate age of the Jose's eldest son, but we cannot age of the remaining two children.

**Consider option D:**

In this case, statement 7 is redundant, as by statement 2 only we can guess that Jose is not the father of a triplet.

Hence this statement doesn't provide adequate information to guess the ages of all the three children.

**Consider option E:**

By, i, ii and iii, we can conclude that the age of the Jose's eldest son is 9 and sum of the other two children is 4.

Now, by statement vi, Jose has fathered twins, we can easily conclude that the younger two children are twins.

Hence, their ages are 2 and 2 respectively.

Hence, E is sufficient to answer.

Hence, **option 5.**

84. For first Rs. 200000, Shyam gets,  $6000/(4000 + 6000) \times 100 = 60\%$  of the profit.

For next Rs. 200000, he gets 20% + plus 60% of the remaining profit.

I.e.  $20\% + 80 \times 0.6\% = 68\%$

Similarly, for a profit margin greater than Rs. 400000, he will get,  $35\% + 65 \times 0.6\% = 74\%$  of the profits beyond Rs. 400000

Now, for a profit of first Rs. 400000, Shyam will receive  $200000 \times (68 + 60)/100 = 256000$

But Shyam earns a total profit of 367000.

Let total profit earned by them be Rs.  $400000 + x$ .

Hence, Shyam received  $367000 - 256000 = \text{Rs. } 110000$  from Rs.  $x$  profit.

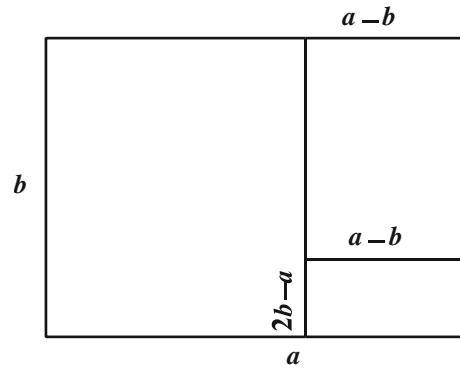
I.e. Rs. 110000 is 74% of  $x$ .

Hence,  $x = 110000/0.74 = 150000$

Hence, total profit earned by them =  $400000 + 150000 = \text{Rs. } 550000$

Hence, **option 4.**

85. Consider the following diagram.



Here,  $a$  is the length of the plot and  $b$  is the height of the plot.

Hence, from the diagram, perimeter of the remaining portion is;

$$2 \times (2b - a + a - b) = 2b$$

$$\text{Perimeter of the original land} = 2(a + b)$$

$$\text{Hence, we have, } 2b : 2(a + b) = 3 : 8$$

$$\text{Hence, } b : a = 3 : 5$$

Now, without loss of generality we can assume that  $a = 5$  and  $b = 3$

Hence, area of the land = 15 square unit.

Hence, cost of the land =  $1000 \times 15$

Now, selling price of small and big squares are,  $9 \times 1200$  and  $4 \times 1150$  respectively.

Let he sells the remaining land at Rs.  $x/\text{sq. ft.}$

Hence, we have,

$$9 \times 1200 + 4 \times 1150 + x \times 2 = 1100 \times 15$$

$$\text{Hence, } x = 550$$

Hence, **option 2.**



