

## Solutions

1. Ans. C

It can be inferred from the last few lines of the first paragraph of the passage

2. Ans. C

It has been clearly stated in the passage

3. Ans. A

It can be clearly picked up from the latter half of the passage. It as it is states, 'The Scottish Act of 1998 clearly states that acts of the Scottish Parliament that are not compatible with EU legislation are "not law". So if the U.K. leaves the EU, these laws would have to be repealed and replaced with new ones.'

4. Ans. B

It is clearly stated in the passage, 'Secondly, Scottish leaders are keenly aware of the local sentiment in support of the EU. Recent polls suggest that the public mood in Scotland is already swinging in favour of leaving the U.K.'

5. Ans. C

It can be clearly picked up from the passage, 'Ever dissatisfied with English domination in the U.K., Scots see themselves as part of the European project.'

6. Ans. B

Option A can be inferred from the following line of the first para, 'Young people value the European labour market for employment.'

Option B can be inferred from the following line of the second para, 'The U.K. is not just another "country" where provinces blindly follow the centre's diktats. It is a confederation of four nations with competing histories and where regional sensibilities are of great significance.'

Option C can be inferred from the following line of the second para, 'The Scottish Act of 1998 clearly states that acts of the Scottish Parliament that are not compatible with EU legislation are "not law".'

Option D can be inferred from the following line of the second para, 'So if the U.K. leaves the EU, these laws would have to be repealed and replaced with new ones. That could certainly put Scotland and London on a collision course.'

Option E can be inferred from the following line of the second para, 'If Scotland gets another independence vote, calls for Northern Ireland to be merged with the Republic of Ireland, an EU member, could gain momentum.'

7. Ans. C

Nowhere in the passage is there a discussion regarding the creation of laws in terms of a contrast, hence option A can be eliminated.

Option B has not been discussed in the form of any comparison or dissimilitude, hence option B can be eliminated as well.

Refer to the following line of the first para, 'Scots overwhelmingly voted to Remain, while Brexiteers won the composite U.K. vote by a 52-48 per cent majority.' Refer to the following line of the second para, 'Recent polls suggest that the public mood in Scotland is already swinging in favour of leaving the U.K.' From the first para, it is clear that Scots were in the favour of remaining in the EU while the second para brings a contrast and states that the Scots wanted to leave the EU.

8. Ans. D

Plummeted is a verb which means to fall or drop straight down at high speed. Or in other words, something decreases rapidly in value or amount. The synonym word for plummet should mean the same, i.e. to decrease or fall.

Option A: Levitated means to rise or cause to rise and hover in the air, typically by means of supposed magical powers.

Option B: Hurtled means to move or cause to move at high speed, typically in an uncontrolled manner.

Option C: Intumesced means to swell up.

Option D: Nosedived means to deteriorate suddenly and dramatically.

Option E: Pullulated means to breed or spread prolifically or rapidly.

Therefore, option D is the apt answer.

9. Ans. C

We can clearly decipher from the following lines, 'Indian inequality data has traditionally been derived from consumer surveys that understate the extent of the problem. Chancel and Piketty have calculated inequality from tax data, national income accounts and sample surveys—a much better method, though the way these disparate data sources have been integrated leads to potential methodological tangles that could lead to an overstatement of the extent of inequality in India.' Therefore, option C is the apt answer.

10. Ans. E

Gleaned is a verb which means to obtain information from various sources, often with difficulty. The antonym of glean should mean to distribute or plant something.

Option A: Wangled means to manage to obtain something by persuading or cleverly manipulating someone.

Option B: Nabbed means to take, grab, or steal something.

Option C: Avulsed means to pull off or tear away forcibly.

Option D: Culled means to select from a large quantity or obtain something from a variety of sources.

Option E: Prorated means to divide, distribute, or assess proportionately or in other words, to make a pro rata distribution.

Therefore, option E is the apt answer.

11. Ans. C

I and II: We can clearly decipher from the following lines, 'The two economists show that income inequality has been rising steadily since Rajiv Gandhi became prime minister. This is not a unique finding. The most obvious conclusion to be drawn is that economic reforms have relatively benefited a tiny group at the top of the Indian income pyramid, though absolute incomes have gone up across deciles since 1980 while the poverty ratio has plummeted. However, the uneven distribution of higher growth needs more public attention.'

III: Instead of 'relative incomes', it should be 'absolute incomes.' Therefore, option B is the apt answer.

12. Ans. D

We can clearly decipher from the following lines, 'There are two important lessons to be gleaned from a careful reading of the data that has been released. First, the increase in income inequality coincides with the sharp rise in Indian economic growth after 1980.....This point to the famous hypothesis put forth by Simon Kuznets—that inequality tends to rise during periods of rapid growth thanks to the uneven pace at which people move from low productivity to high productivity activities.' Therefore, option D is the apt answer.

13. Ans. E

I, II and IV: It can be clearly deciphered from the following lines, 'There are two major political economy lessons that flow from these trends. First, that a sustainable attack on mass poverty should be focused on job creation in the modern sectors of the economy rather than redistribution through fiscal spending that is eventually destabilizing. Second, widening income inequality weakens public support for liberal economic reforms. It is also apt to once again underline the historical fact that no country has been able to win the battle against mass poverty without rapid economic growth.'

III: It is clearly stated in the following line, '. This point to the famous hypothesis put forth by Simon Kuznets—that inequality tends to rise during periods of rapid growth thanks to the uneven pace at which people move from low productivity to high productivity activities. The correlation between economic growth and income inequality since 1965 needs to be worked out in a statistically rigorous manner.'

Therefore, all options are correct.

14. Ans. B

It can be clearly deciphered from the following lines, 'Second, income inequality is not just about the share of national income going to the top 1%. There are deeper distributional issues. A comparison with China tells us a lot. Chancel and Piketty show that the share of national income captured by the bottom half in both India and China after 1980 has been broadly similar. The big difference between the two countries is in the fact that the middle 40% in India got 23% of the increase in national income since 1980 while the same group in China got 43%—a massive gap of 20 percentage points.

This difference of 20 percentage points was largely captured by the top 1% in India.'

Therefore, option B is the apt answer.

15. Ans. C

Option A: It is clearly stated in following lines, 'Chancel and Piketty have calculated inequality from tax data, national income accounts and sample surveys—a much better method, though the way these disparate data sources have been integrated leads to potential methodological tangles that could lead to an overstatement of the extent of inequality in India.'

Option B: We can clearly decipher from the following lines, 'This new paper believes the answer to this paradox lies in the failure of labour-intensive manufacturing in India compared to its massive success in China. The latter could absorb millions of people who left farming because of the rapid expansion of large enterprises, as was the case in most other successful structural transformations in Asia. India has failed on this front.'

Option C: Read this, 'This new paper believes the answer to this paradox lies in the failure of labour-intensive manufacturing in India compared to its massive success in China.' You will realise that it is about India and China Income inequality data not about only India.

Option D: It is clearly stated in the following line, 'In a new paper written in collaboration with Lucas Chancel, the French economist has shown that income inequality in India is now at its highest level since the income tax was first levied in 1922.'

Option E: We can decipher it from the following lines, 'In a new paper written in collaboration with Lucas Chancel, the French economist has shown that income inequality in India is now at its highest level since the income tax was first levied in 1922..... The big difference between the two countries is in the fact that the middle 40% in India got 23% of the increase in national income since 1980 while the same group in China got 43%—a massive gap of 20 percentage points. This difference of 20 percentage points was largely captured by the top 1% in India.'

Therefore, option C is untrue according to the passage.

16. Ans. C

The adjective 'subject to' means "likely or prone to be affected by a particular condition". In this case it is the highest 28 percent rate. 'Grow' means to increase in quantity or quality. It is used to show increase in the pressure. 'Burden' is a heavy load. In this case it is caused by the new tax on business in India.

17. Ans. D

'Final' is something that comes at the end. It is used in context of an agreement which is the last or latest. 'Among' means 'being a member or members of a larger set'. In this case the larger set is the TPP. 'Issues' are important topics or problems. In the sentence, the problems are involving Mexico and Vietnam.

18. Ans. B

'Topped' means to surpass or outdo a previous achievement. In this case sale exceeded well over 10 billion yuan. The discounts were available on the e-commerce website, through which the products are sold online, by means of the internet. 'Become' means 'grow to be'. In this case online sale has become the biggest of its kind.

19. Ans. A

'Warn' means to give someone cautionary advice about their actions or conduct. In the above sentence, the US Secretary of State cautioned other countries. 'Larger' means 'of considerable or relatively great size'. 'Back' means to give moral, material or financial support to someone. The correct answer is option A.

20. Ans. C

'Remain' means to continue to possess a particular quality or fulfil a particular role. In this case the demand of gold was same as it was before. 'Kept' means to have or retain possession of something. In the above sentence, buyers were retained on the side-line and did not buy much gold. The correct answer is option C.

21. Ans. D

Statements A and B are about 'toxic and unregulated pesticides that are killing farmers and laborers.' Statement C shows the state and central government's take on this. Statement E is the reason behind this. As we can decipher that statements A, B, C and E are general statements stating how pesticides are creating an immense developmental backlog and an acute agrarian crisis and not about any particular pesticide on some particular plant, whereas statement D focuses on cotton pests (cotton crops).

Therefore, option D is the apt answer.

22. Ans. E

The question focuses on the scenario of land acquisition in Bihar. Statement A introduces the problem. Statement B provides the reason. Statement C gives the process used to acquire land in Bihar. Statement D sums up the scenario. Statement E is very general and does not connect with the rest of the statements.

Therefore, option E is the apt answer.

23. Ans. E

Statement A introduces the idea behind the action. Statement B explains the action. Statements C and D support the idea and state the positive side. Statement E states the loophole regarding the action. As we can decipher from all the statements that the very first statement introduces the main idea that is "government's poverty alleviation strategy" and statements B, C and D are in support of it, it is only statement E which is in contrast to the idea.

Therefore, option E is the apt answer.

24. Ans. E

Statement A introduces the protagonist of the passage, Sakti Burman. Statement B states the uniqueness of his work. Statement C states the characteristics of his work. Statement D shows his influence. Note that the focus in this statement is more on Sakti Burman than Hoskote. Statement E shows Hoskote and Burman's friendship and collaboration. We need an introduction of Hoskote and the book to add this statement to the rest of the passage. In this statement, the attention/focus is divided equally between the two.

Therefore, option E is the apt answer.

25. Ans. D

Statement A introduces the theme of the passage, "Missing labour force in India", which is in relation to decline in labour participation of women. Statement B prepares us for the reasons and further explains the theme. Statements C and E state the reasons. Statement D is not a reason for the decline rather it is linking this issue to another issue of feminising the forms of labour. Therefore, option D is the apt answer.

26. Ans. C

Statement A-'I am confident that along with the growth of' at expresses position, time or value while along with means in addition to Statement B- '...avoid using...' Avoid is not followed by from Statement D- 'the society will be put to difficulties' will expresses assertion would expresses willingness Statement E- 'Large mounds of rubbish' use of hills is incorrect over here. Only statement C is grammatically correct. C is the correct answer

27. Ans. A

Statement B-'A more dangerous animal' Since two things are being compared, the comparative degree must be used. Statement C- 'Taken into consideration' the preposition 'into' not for should be used here. Statement D- 'The rain was so continuous that' continual means occurring frequently, continuous means without interruption. Here the implied meaning is continuous not continual. Statement E- 'accumulation of useless knowledge' with denotes an instrument with which an action is done. The correct preposition here is of. Only statement A is grammatically correct.

28. Ans. D

Statement A-The possessive pronoun their and not the objective form them is correct here. Statement B- 'I had kept' should be used. Statement C-The subject is number which is singular not applicants hence the singular verb is should be used. Statement E- 'was buried quietly' is the correct usage of words. Only statement D is grammatically correct.

29. Ans. E

Statement A- The student about whom. The preposition about means concerning whom Statement B- No sooner is followed by than not when. Correlative conjunctions. Statement C-With the members of his family Statement D- Preferable to, more is redundant.

Only statement E is grammatically correct.

E is the correct answer

30. Ans. B

Every statement except B talks about Cardiac Myopathy. Option B talks about some operational technique. Hence the answer is B.

31. Ans. D

All the statements, except 'D' are about empowering students. D is the only statement which talks about someone's biggest success, hence it doesn't fit the theme of the passage.

32. Ans. B

Option A: at doesn't make sense in place of the second highlighted word, hence it can be eliminated.

Option B: It makes perfect sense in the given context, hence keep it on hold.

'Denounce' means to publicly declare to be wrong or evil.

'During' means through the course or duration of a time.

Option C: announced the violence by the past ten weeks doesn't make any sense, hence it can be eliminated.

Option D: allowed the violence time the past ten weeks makes no sense, neither grammatically nor contextually. Hence it can be eliminated.

The given sentence is incorrect as the UN will not assemble violence.

Hence, option B is the correct answer.

33. Ans. C

Option A: 'into the risks' is incorrect, hence it can be eliminated.

Option B: 'doing the risks' makes no sense, hence it can be eliminated.

Option C: The given words make sense, hence keep it on hold.

'Said' is used to refer to someone or something already mentioned. 'Test' is a procedure intended to establish the quality and performance of something. In this case, it is the missiles. 'Consideration' is careful thought, typically over a period of time. The preposition 'About' means 'on the subject of or concerning'.

Option D: 'performed privately that' makes no sense, hence it can be eliminated.

Option E: 'for the risks' is incorrect, hence it can be eliminated. Moreover, there's no point claiming things privately.

Hence, option C is the correct answer.

34. Ans. D

'Tie' means to come together in order to achieve a goal.

'Platform' is a standard for the hardware of a computer system. 'Service' is a system supplying a public need.

'Offering' is a thing produced for entertainment or sale.

The correct answer is option D.

35. Ans. C

'Altered' means to change in character or composition which is same as 'modified'. 'Remained' means "to continue to exist" which is same as 'persisted'. 'Amended' means to make minor changes to something, which is synonym of 'revised'. 'Freeze' means to hold something at a fixed level which is same as 'cap'. The correct answer is option C.

36. Ans. D

'Complicated' and 'intricate' mean "consisting of many interconnecting parts or elements". 'Consisting' and 'comprising' mean "be composed or made up of".

'Separate' and 'different' mean "forming or viewed as a unit apart or by itself". 'Beneath' and 'below' mean

"extending or directly underneath". The correct answer is option D.

37. Ans. C

In option A, the use of 'away' has been done at an incorrect place. In option B., 'that is' has been used at a wrong place where it doesn't make any sense. In option D, 'apart' has been used with water which is an uncountable noun. In option E, 'was' has been used in what is a general statement.

38. Ans. B

In option A, 'of' has been incorrectly used after 'thousand'. In option C, the sentence is poorly built as

"more than" comes after the subject 'documents'. In option D, larger has been used for countable noun. In

option E., the sentence is poorly built. The correct answer is option B.

39. Ans. D

In option A, 'much' has been used for countable noun. In

option B, 'disappear' has been used in its past tense which is incorrect. In option C, 'has' has been incorrectly

used since the sentence is in past tense. In option E, 'expensive' has been incorrectly added. The correct

answer is option D.

40. Ans. A

In option B, 'dog' has been used instead of 'dogs'.

'Common' doesn't have the same meaning as 'often' so it is incorrectly used in option C.. In option D, 'on' has been used instead of 'in' since arena isn't an elevated place. In

option E, 'sometime' has been used instead of

'sometimes'. The correct answer is option A.

41. Ans. C

The pattern is: 256, 176, 216, ?, 206, 201, 203.5  
 $176 = 256 - 80$   
 $216 = 176 + 40$  (i.e.  $80/2$ )  
 $? = 216 - 20$ , i.e.  $? = 196$  (i.e.  $40/2$ )  
 $206 = 196 + 10$  (i.e.  $20/2$ )  
 $201 = 206 - 5$  (i.e.  $10/2$ )  
 $203.5 = 201 + 2.5$  (i.e.  $5/2$ )

42. Ans. B

The pattern followed is: 100, 51, 53, 109, ?, 3525  
 $51 = 100 * 0.5 + 1$   
 $53 = 51 * 1 + 2$   
 $109 = 53 * 2 + 3$   
 $? = 109 * 4 + 4$ , i.e.  $? = 440$   
 $3525 = 440 * 8 + 5$

43. Ans. A

The pattern followed is: 2, 4, 10, 32, ?, 652  
 $4 = 2 * 1 + 2$   
 $10 = 4 * 2 + 2$   
 $32 = 10 * 3 + 2$   
 $? = 32 * 4 + 2$ , i.e.  $? = 130$   
 $652 = 130 * 5 + 2$

44. Ans. D

The pattern of given series is:  
→ 24,  
→  $31 = 24 + 7$ ,  
→  $59 = 31 + 28$ , ( $7 + 21 = 28$ )  
→  $106 = 59 + 47$ , ( $28 + 19 = 47$ ), ( $21 - 2 = 19$ )  
→  $? = 106 + 64$ , ( $47 + 17 = 64$ ), ( $19 - 2 = 17$ )  
→  $? = 170$   
→  $249 = 170 + 79$ , ( $64 + 15 = 79$ ), ( $17 - 2 = 15$ )  
→  $341 = 249 + 92$ , ( $79 + 13 = 92$ ), ( $15 - 2 = 13$ )  
Thus, the missing number is 170.

45. Ans. B

$15 \times 1 + 2 = 17$   
 $17 \times 2 + 2 = 36$   
 $36 \times 3 + 2 = 110$   
 $110 \times 4 + 2 = 442$   
 $442 \times 5 + 2 = 2212$

46. Ans. B

Total products sold by A and B in 2013 =  $280 + 360 = 640$   
Total products sold by A and B in 2016 =  $460 + 400 = 860$   
Difference =  $860 - 640 = 220$   
Hence, option B.

47. Ans. D

Total products sold by A from 2011 to 2016 =  $180 + 320 + 280 + 420 + 220 + 460 = 1880$   
Non-defective =  $100 - 25 = 75\%$   
So,  $1880 * 75/100 = 1410$   
Hence, option D.

48. Ans. A

The number of product sold by A in 2012 = 320  
The number of product sold by B in 2015 = 180  
According to the question,  
 $(320 - 180) * 100/180 = 77.77\%$   
Hence, option D.

49. Ans. C

The number of product sold by A in 2016 = 460  
The number of product sold by A in 2017 (remains same) = 460  
The number of product sold by B in 2016 = 400  
The number of product sold by B in 2017 =  $400 * 130/100 = 520$   
Total product sold by A and B together in 2017 =  $460 + 520 = 980$   
Hence, option C.

50. Ans. B

Total products sold by A and B in 2013 =  $280 + 360 = 640$   
Total products sold by A and B in 2014 =  $420 + 540 = 960$   
Ratio =  $640/960 = 2:3$   
Hence, option B.

51. Ans. E

**From I:**  
No. of students studying in A and B are  $3x$  and  $4x$  respectively.

**From III:**  
No. of students studying in B who got placement =  $(4x \times 80) \div 100 = 16x/5$

**From II:**  
No. of students studying in B who got placement =  $120\%$  of No. of students studying in A who got placement  
Hence

$16x/5 = 120\%$  of  $y$

$y = 8x/3$

Hence Question cannot be answered even with the information in all the three statements.

52. Ans. D

From I, total weight of 60 students =  $60 * 45 = 2700$   
From III, total weight of all boys = 1250 kg  
So from I and III, total weight of all the girls =  $2700 - 1250 = 1450$

So from II, average wt. of girls = 50 kg

So I, II and III, number of girls =  $1450/50 = 29$

So No. of boys =  $60 - 29 = 31$

So Average wt. of boys =  $1250/31 = 40$

Hence, all are necessary for answer.

53. Ans. E

Let two digit number be =  $10x + y$

Reversed number =  $10y + x$

**From I:**

Difference = 27

Hence,

$9x - 9y = 27$

or

$$9y - 9x = 27$$

$$x - y = 3$$

$$\text{or } y - x = 3$$

**From II:**

$$x - y = 3 \text{ or}$$

$$y - x = 3$$

**From III:**

$$y = x - 3$$

Hence,

$$x - y = 3$$

Hence, Even by using (I) + (II) + (III) together, we cannot obtain the number.

54. Ans. E

From I and II,

$$\text{Length} = 3x = 48 \text{ m}$$

$$\therefore x = 16$$

$$\text{Breath} = 2x = 32 \text{ m}$$

$$\text{Hence, Area of floor} = 48 \times 32$$

$$\text{Cost of flooring} = 48 \times 32 \times 850 = ₹ 1305600$$

$$\text{From I and III, } 2(l + b) = 160$$

$$2(3x + 2x) = 160$$

$$10x = 160$$

$$\therefore x = 16$$

$$\therefore \text{Length} = 3 \times 16 = 48 \text{ m}$$

$$\text{Breadth} = 2x = 32 \text{ m}$$

$$\text{Cost of flooring} = (48 \times 32) \times 850 = ₹ 1305600$$

Similarly, from II and III, we can find

$$l = 48 \text{ m}$$

$$b = 32 \text{ m}$$

$$\text{and Total cost of flooring} = ₹ 1305600$$

55. Ans. E

From I, Sonu's income can be obtained. But

Monu's income can't be obtained even with the help of II and III together.

56. Ans. D

Let the population of village B=x

$$x * 45/100 * 20/100=36$$

$$x=36*100*100/45*20=400$$

hence, option D.

57. Ans. A

Let the population of village D=x

Let the population of village E=2x

$$\text{Operative account in village D} = x * 40/100 * (100 - 20)/100$$

$$= x * 40/100 * 80/100$$

$$= 8x/25$$

$$\text{Operative account in village E} = 2x * 55/100 * (100 - 40)/100$$

$$= 2x * 55/100 * 60/100$$

$$= 33x/50$$

According to the question,

$$= 8x/25 * 50/33x = 16/33$$

Hence, option A.

58. Ans. B

Let the population of village C=x

$$x * 35/100 * (100 - 80)/100 = 56$$

$$x * 35/100 * 20/100 = 56$$

$$x = 800$$

59. Ans. C

$$\text{Required percentage} = (70 - 30) * 100/30$$

$$= 133.33\%$$

60. Ans. D

$$\text{Required percentage} = (1 * 0.50 + 2 * 0.45 + 3 * 0.35) * 100/1 + 2 + 3 = 2.80 * 100/6 = 67\%$$

$$100/1 + 2 + 3 = 2.80 * 100/6 = 67\%$$

Hence, option D.

61. Ans. B

$$\text{I. } 49x^2 - 84x + 36 = 0$$

$$\Rightarrow (7x - 6)(7x - 6)$$

$$\Rightarrow x = 6/7, 6/7$$

$$\text{II. } 25y^2 - 30y + 9 = 0$$

$$\Rightarrow (5y - 3)(5y - 3)$$

$$\Rightarrow y = 3/5, 3/5$$

So  $x > y$

62. Ans. A

$$\text{I. } x^2 - \sqrt{36}x + \sqrt[3]{512} = 0$$

$$\Rightarrow (x - 2)(x - 4)$$

$$\Rightarrow x = 2, 4$$

$$\text{II. } y^2 - \sqrt[3]{125} + 4 = 0$$

$$\Rightarrow y = \pm 1$$

So  $x > y$

63. Ans. C

Equation I:

$$7x^2 + (10^2 - 2^3)x + 33\sqrt{25} = 0$$

$$\Rightarrow 7x^2 + (100 - 8)x + (33 \times 5) = 0$$

$$\Rightarrow 7x^2 + 92x + 165 = 0$$

$$\Rightarrow 7x^2 + 15x + 77x + 165 = 0$$

$$\Rightarrow x(7x + 15) + 11(7x + 15) = 0$$

$$\Rightarrow (7x + 15)(x + 11) = 0$$

$$\Rightarrow x = -11, -15/7$$

Equation II:

$$y^2 + (22\sqrt{4})y + (22)^2 = 0$$

$$\Rightarrow y^2 + (22 \times 2)y + 484 - 1 = 0$$

$$\Rightarrow y^2 + 44y + 483 = 0$$

$$\Rightarrow y^2 + 21y + 23y + 483 = 0$$

$$\Rightarrow y(y + 21) + 23(y + 21) = 0$$

$$\Rightarrow (y + 21)(y + 23) = 0$$

$$\Rightarrow y = -21, -23$$

Now comparing

$$-11 > -21$$

$$-11 > -23$$

$$-15/7 > -21$$

$$-15/7 > -23$$

Hence,  $x > y$

64. Ans. E

$$\text{I. } x^2 - 23x + 130 = 0$$

-13
-10

Now after changing the sign we get  $x = 13, 10$

$$y^2 - 169 = 0$$

$$y^2 = 169 \Rightarrow y = \pm 13$$

$$x = y, x < y, x > y$$

The relationship cannot be established

65. Ans. B

Equation I:

$$12x^2 - 43.2x + 21.6 = 0$$

$$\Rightarrow 12x^2 - \frac{432}{10}x + \frac{216}{10} = 0$$

$$\Rightarrow 120x^2 - 432x + 216 = 0$$

$$\Rightarrow 2(60x^2 - 216x + 108) = 0$$

$$\Rightarrow 24(5x^2 - 18x + 9) = 0$$

$$\Rightarrow 5x^2 - 18x + 9 = 0$$

$$\Rightarrow 5x^2 - 3x - 15x + 9 = 0$$

$$\Rightarrow x(5x - 3) - 3(5x - 3) = 0$$

$$\Rightarrow (5x - 3)(x - 3) = 0$$

$$\Rightarrow x = 3, 3/5$$

Equation II:

$$10.5y^2 + 17.5y - 7 = 0$$

$$\Rightarrow \frac{105}{10}y^2 + \frac{175}{10}y - 7 = 0$$

$$\Rightarrow 105y^2 + 175y - 70 = 0$$

$$\Rightarrow 21y^2 + 35y - 14 = 0$$

$$\Rightarrow 7(3y^2 + 5y - 2) = 0$$

$$\Rightarrow 3y^2 + 5y - 2 = 0$$

$$\Rightarrow 3y^2 + 6y - 1y - 2 = 0$$

$$\Rightarrow 3y(y + 2) - 1(y + 2) = 0$$

$$\Rightarrow (3y - 1)(y + 2) = 0$$

$$\Rightarrow y = 1/3, -2$$

Now, comparing

$$3/5 > 1/3$$

$$3/5 > -2$$

$$3 > 1/3$$

$$3 > -2$$

Hence,  $x > y$

66. Ans. C

Given, the average marks obtained by the girls was equal to the number of boys in class and the average marks obtained by the boys was equal to the number of girls in class.

Let the average marks obtained by girls be 'a' and average marks obtained by boys be 'b'.

Thus, number of girls = b and number of boys = a

Total marks scored by students =  $a \times b + b \times a = 2ab$

Class average =  $2ab/(a + b)$

Given, class average marks is 5 less than the average of both girls and boys average marks.

$$\Rightarrow \frac{2ab}{a + b} = \frac{a + b}{2} - 5$$

$$\Rightarrow 4ab = a^2 + b^2 + 2ab - 10a - 10b$$

$$\Rightarrow 10(a + b) = a^2 + b^2 - 2ab$$

$$\Rightarrow 10(a + b) = (a - b)^2$$

Now, 'a' and 'b' both are integers thus,  $(a - b)^2$  is a perfect square.

Thus, LHS:  $10(a + b)$  should be a perfect square.

Option A:  $(a + b) = 45$ ,  $10 \times 45 = 450$  is not a perfect square

Option B:  $(a + b) = 60$ ,  $10 \times 60 = 600$  is not a perfect square

Option C:  $(a + b) = 90$ ,  $10 \times 90 = 900$  which is perfect square.

Thus, strength of class is 90.

67. Ans. D

Let v be boat's speed in still water and u be stream's speed

Let t be the time we are required to find

$$(v - u) \times 84 = L \text{ --- eq(1)}$$

$$(v + u)t = L \text{ --- eq(2)}$$

$$L = v(t + 9) \text{ --- eq(3)}$$

By adding both equation (1) and (2):

$$2v = \frac{L}{84} + \frac{L}{t}$$

From eq(3) putting the value of v

$$t^2 - 75t + 756 = 0$$

$$t^2 - 63t - 12t + 756 = 0$$

$$t(t - 63) - 12(t - 63) = 0$$

$$(t - 63)(t - 12) = 0$$

$$t = 63 \text{ or } 12 \text{ min}$$

68. Ans. A

Let the amount invested in the scheme returning compound interest = p.

Let the amount invested in the scheme returning simple interest = Q

According to question,

$$P[(1 + 12\%)^2 - 1] = Q * 8 * 4/100$$

$$P/Q = 75/184$$

69. Ans. D

Let a, b, c and d are integers such that  $a < b < c < d$

$$\text{Given: } a + d = 21 \text{ --- eq(1)}$$

$$b + c = 19 \text{ --- eq(2)}$$

$$a^2 + b^2 + c^2 + d^2 = 442 \text{ --- eq(3)}$$

Squaring equation 1 and 2 and subtracting the sum with equation 3

$$2ad + 2bc = 360 \text{ --- eq(4)}$$

$$\text{Eq(3)} - \text{eq(4)}$$

$$(d - a)^2 + (c - b)^2 = 82$$

In above equation 82 has to be some of perfect squares

$$82 = 81 + 1 \Rightarrow d - a = 9 \text{ and } c - b = 1$$

From this and eq(1) and (2) we get  $a = 6$ ,  $b = 9$ ,  $c = 10$ ,  $d = 15$

70. Ans. C

Let the bottle contains liquid A = 5X and liquid B = 3X  
The quantity of liquid A in the bottle = 5X - 6\*5/8 = 5X - 15/4 .....eq1.

And liquid B in bottle after replacing 6 liters mixture by 6 liters of liquid B

$$= 8X - (5X - 15/4) = 3X + 15/4 \dots\dots\dots \text{eq2.}$$

According to question

$$(5X - 15/4) / (3X + 15/4) = 5/9$$

$$(20X - 15) / (12X + 15) = 5/9$$

$$120X = 210$$

$$X = 21/12$$

The bottle contains liquid A = 5X = 5\*21/12 = 8.75 liters

71. Ans. B

Let the speed of train A and train B be x km/hr and y km/hr respectively.

Total distance between P and Q = 80 km

If the two trains travel in opposite direction, they meet each other in 1 hour.

When two train travel towards each other, the relative speed = (x + y) km/hr.

So, we can write,

$$80 / (x + y) = 1$$

$$\Rightarrow x + y = 80 \dots \text{eq.(i)}$$

If they travel in same direction from P to Q, they meet after 8 hours.

When two train travel in same direction, the relative speed = (x - y) km/hr.

So, we can write again,

$$80 / (x - y) = 8$$

$$\Rightarrow 8x - 8y = 80$$

$$\Rightarrow x - y = 10$$

Adding eq.(i) and eq.(ii), we get,

$$x + y + x - y = 80 + 10$$

$$\Rightarrow 2x = 90$$

$$\Rightarrow x = 45$$

∴ The speed of the train A = 45 km/hr.

72. Ans. B

X, Y, and Z invested Rs. 14000 in total in a business.

Let Y invested Rs. x in the business.

X invested Rs. 3120 more than Y and Z, Rs. 1720 less than Y.

So, we can write now,

$$(x + 3120) + x + (x - 1720) = 14000$$

$$\Rightarrow 3x + 3120 - 1720 = 14000$$

$$\Rightarrow 3x = 14000 - 1400$$

$$\Rightarrow x = 12600/3$$

$$\Rightarrow x = 4200$$

So, the investment of Y = Rs. 4200

The investment of X = Rs. 4200 + 3120 = Rs. 7320

And, the investment of Z = Rs. 4200 - 1720 = Rs. 2480

Then, the ratio of their shares = X : Y : Z = 7320 : 4200 : 2480 = 183 : 105 : 62

The total profit was Rs. 35000.

∴ The share of Z = Rs. 35000 × (62/350) = Rs. 6200

73. Ans. D

Let Rakesh's salary be '100x'.

Salary spent in PPF = 12x

Remaining Salary = 88x

So, Salary spent on clothes = 3/8 of 88x = 33x

As per the question,

$$33x - 12x = 10500$$

$$21x = 10500,$$

$$\text{i.e. } x = 500$$

So, Rakesh's Salary = Rs. 50000/-

Amount spent on Remaining expenses = 50000 -

$$((12*500) + (33*500))$$

$$= 50000 - (6000 + 16500) = 50000 - 22500 = 27500.$$

Now, let House rent be 'a'

Other expenses = a + 1500

As per question,

$$a + (a + 1500) = 27500$$

$$2a = 26000$$

$$a = \text{Rs. } 13000/-$$

74. Ans. B

Given, pipe X fills the tank in 14 minutes and pipe Y in 20 minutes.

Therefore, in 1 minute:

X fills 1/14 of the tank and Y fills 1/20 of the tank.

When X and Y are kept open for 3 minutes, total tank filled =

$$\Rightarrow 1/14 \times 3 + 1/20 \times 3$$

$$\Rightarrow (30 + 21) / 140$$

$$\Rightarrow 51/140 \text{ of the tank}$$

$$\therefore \text{Amount of tank left to be filled} = 1 - 51/140$$

$$= 89/140$$

∴ Time pipe X will take to fill 89/140th of the tank =

$$89/140 \div \text{Amount of tank filled by pipe X in 1 minute}$$

$$= 89/140 \div 1/14$$

$$= 89/140 \times 14$$

$$= 8.9 \text{ minutes}$$

$$\sim 9 \text{ minutes}$$

∴ Total time for which pipe X was open = 3 minutes + 9 minutes

$$= 12 \text{ minutes}$$

75. Ans. D

Rohit's present age is when squared and added to 3 times of his present age gives 3190 years

Let Rohit's present age be x years

$$\Rightarrow x^2 + 3x = 3190$$

$$\Rightarrow x^2 + 3x - 3190 = 0$$

$$\Rightarrow x^2 + 58x - 55x - 3190 = 0$$

$$\Rightarrow x(x + 58) - 55(x + 58) = 0$$

$$\Rightarrow (x - 55)(x + 58) = 0$$

$$\Rightarrow x = 55, - 58$$

Age can't be negative.

∴ Rohit's present age is 55 years

Gagan is 3 years elder than Rohit

⇒ Gagan's present age = 58 years

Eva is 20 years younger than Gagan

⇒ Eva's present age = 58 - 20 = 38 years

The ratio of present ages of Divya and Eva is 12: 19 respectively

$$\Rightarrow \text{Divya's present age} = \frac{38 \times 31}{19} - 38 = 24 \text{ years}$$

Shivam's present age is five years less than Divya's age after nine years.

$$\Rightarrow \text{Shivam's present age} = (24 + 9) - 5 = 28 \text{ years}$$

Now, difference between Rohit's and Shivam's present age = 55 - 28 = 27 years

Hence, the difference between Rohit's and Shivam's present age is 27 years.

76. Ans. B

Selling Price of two cars = 75800 + 75800 = 1,51,600

One of the cars was sold at a 25% profit.

$$S.P. = C.P. + \frac{25}{100} \times C.P.$$

$$S.P. = 75800 = \frac{125}{100} \times C.P.$$

$$C.P. = 60640$$

In total, the dealer suffered neither a loss nor gained a profit.

Hence, Total Cost Price = Total Selling Price

Total Cost Price = Cost of 1<sup>st</sup> car + Cost of 2<sup>nd</sup> Car = 1,51,600

∴ Cost of 2<sup>nd</sup> Car = 151600 - Cost of 1<sup>st</sup> car

∴ Cost of 2<sup>nd</sup> Car = 151600 - 60640

∴ Cost of 2<sup>nd</sup> Car = 90960

Consider that the second car is sold at a loss of Y%.

Percent loss =  $[(90,960 - 75,800) / 90,960] \times 100$

Percent loss = 16.67%

77. Ans. A

Given, A, B, C and D are employed to finish a work. C takes 4 day less than A to finish the work while D takes 1/4<sup>th</sup> of the time taken by D to finish the work.

Let the number of days in which A can alone finish the work be 'a' and number of days in which B alone can finish the work be 'b'.

Thus, number of days in which C finishes the work = a - 4

Number of days in which D finishes the work = b/4

In 1 day,

A) finishes 1/a of the work,

B) finishes 1/b of the work,

C) finishes 1/(a - 4) of the work,

D) finishes 4/b of the work,

Now, together they can finish the work in 1 day. Due to some illness D was not able to work, so A, B and C started working together without D. After 1 day, C left and the work was finished in 2 more days.

$$\frac{1}{a} + \frac{1}{b} + \frac{1}{a-4} + \frac{4}{b} = 1 \text{ ----- (1)}$$

$$\text{and } \frac{1}{a} + \frac{1}{b} + \frac{1}{a-4} + 2 \left( \frac{1}{a} + \frac{1}{b} \right) = 1 \text{ ----- (2)}$$

$$(1) - (2)$$

$$\Rightarrow 2/b = 2/a$$

$$\Rightarrow a = b$$

Substituting in eq1.

$$\Rightarrow 2/a + 1/(a - 4) + 4/a = 1$$

$$\Rightarrow 6(a - 4) + a = a(a - 4)$$

$$\Rightarrow 7a - 24 = a^2 - 4a$$

$$\Rightarrow a^2 - 11a + 24 = 0$$

$$\Rightarrow a^2 - 8a - 3a + 24 = 0$$

$$\Rightarrow a(a - 8) - 3(a - 8) = 0$$

$$\Rightarrow (a - 3)(a - 8) = 0$$

Now, a can't be 3 thus a = 8

Number of days in which C alone can do the work = 8 - 4 = 4 days.

78. Ans. A

LEARNING

LRNNG EAI

Assuming vowels to be one letter, total letters = 6 out of which N is twice so required number of ways

$$= \frac{6!}{2!} \times 3!$$

$$= 6 \times 5 \times 4 \times 3 \times 2 \times 3$$

$$= 2160$$

79. Ans. C

Either 2 should be red or all 3 should be red. Hence,

$$\rightarrow [({}^5C_2 \times {}^7C_1) + {}^5C_3] / {}^{12}C_3 = (70 + 10) / 220 = 80 / 220 = 4 / 11$$

80. Ans. C

Curved Surface Area of Cylinder = 2πrh

Total Surface Area of Cylinder = 2πr (h+r)

According to question, 2πrh : 2πr (h+r) = 3:5

$$\text{i.e. } h / (h+r) = 3/5$$

$$\text{i.e., } 2h = 3r - (a)$$

Also, Curved surface area of the cylinder = 1848 metre square

$$\text{i.e. } 2\pi rh = 1848$$

$$\text{From (a), } 2\pi (2/3h) * h = 1848$$

$$\text{On solving the above equation, } h = 21m$$

81. Ans. B

In this code language, there are some letter given we have to find the exact code used for them.

Example: Happy

Step I: first we will count the letters of that word that is 5, then we put digit 5 at the right end and remove the last letter.

Step II: Change the first letter to the previous letter according to alphabetical series.

Step III: rest no change in the word, so word like will be-

**Gapp5**

82. Ans. A

In this code language, there are some letter given we have to find the exact code used for them.

Example: Happy

Step I: first we will count the letters of that word that is 5, then we put digit 5 at the right end and remove the last letter.

Step II: Change the first letter to the previous letter according to alphabetical series.

Step III: rest no change in the word, so word like will be-

**Gapp5**

83. Ans. C

In this code language, there are some letter given we have to find the exact code used for them.

Example: Happy

Step I: first we will count the letters of that word that is 5, then we put digit 5 at the right end and remove the last letter.

Step II: Change the first letter to the previous letter according to alphabetical series.

Step III: rest no change in the word, so word like will be-

**Gapp5**

84. Ans. A

In this code language, there are some letter given we have to find the exact code used for them.

Example: Happy

Step I: first we will count the letters of that word that is 5, then we put digit 5 at the right end and remove the last letter.

Step II: Change the first letter to the previous letter according to alphabetical series.

Step III: rest no change in the word, so word like will be-

**Gapp5**

85. Ans. C

The unit belongs to China is an even number unit so it is either unit 2 or unit 4. There are two units gap between the unit belongs to China and the unit belongs to England so England's unit is either 1<sup>st</sup> or 5<sup>th</sup>. The total height of unit 1 is 30"ft. The unit belongs to England is height not 30"ft so England's unit must be unit 5 and China's unit must be unit 2. The total height of boxes in unit 3 is 15"ft.

Unit	Total height	Country	Books +Boxes
5		England	
4			
3			+15"ft
2		China	
1	30"ft		

The unit which belongs to Canada is total height is 65"ft. Canada's unit's total height of books is less than 50"ft so it can't be unit 3 because if its unit 3 then its books heights must be 50"ft which is not possible as it is given. Canada's unit just above the unit which books heights 30"ft so it cannot also be unit 1 now Canada's unit must be unit 4 and unit 3 total books height must be 30"ft.

Unit	Total height	Country	Books +Boxes
5		England	
4	65"ft	Canada	
3	45"ft		30"ft +15"ft
2		China	
1	30"ft		

France's unit's total books height is 20"ft so unit 1 must be France's unit then unit 3 is India's unit. Unit 2 and unit 3 books heights are same so unit 2 total books height is 30"ft.

Unit	Total height	Country	Books +Boxes
5		England	
4	65"ft	Canada	
3	45"ft	India.	30"ft +15"ft
2		China	30"ft +
1	30"ft	France	20"ft + 10"ft

Canada's unit's total boxes height is thrice of France's total boxes height. So Canada's unit's total boxes height is 30"ft and then books height is 35"ft. Unit 2 total heights are 15"ft less than Canada's unit. So unit 2 total height is 50"ft then unit 2 total boxes height is  $(50-30)=20$ "ft. As we know total units height is 265"ft then unit 5 height is  $265-(65+45+50+30)=75$ "ft. The total height of books in unit 4 and unit 5 together is 75"ft. So unit 5 total books height is  $(75-35)=40$ "ft then total books height is 35"ft.

**Here is the final table:**

Unit	Total height	Country	Books +Boxes
5	75"ft	England	40"ft + 35"ft
4	65"ft	Canada	35"ft + 30"ft
3	45"ft	India.	30"ft +15"ft
2	50"ft	China	30"ft +20"ft
1	30"ft	France	20"ft + 10"ft

Total height of unit 5=75"ft.

Hence, option C.

86. Ans. A

The unit belongs to China is an even number unit so it is either unit 2 or unit 4. There are two units gap between the unit belongs to China and the unit belongs to England so England's unit is either 1<sup>st</sup> or 5<sup>th</sup>. The total height of unit 1 is 30"ft. The unit belongs to England is height not 30"ft so England's unit must be unit 5 and China's unit must be unit 2. The total height of boxes in unit 3 is 15"ft.

Unit	Total height	Country	Books +Boxes
5		England	
4			
3			+15"ft
2		China	
1	30"ft		

The unit which belongs to Canada is total height is 65"ft. Canada's unit's total height of books is less than 50"ft so it can't be unit 3 because if its unit 3 then its books heights must be 50"ft which is not possible as it is given. Canada's unit just above the unit which books heights 30"ft so it cannot also be unit 1 now Canada's unit must be unit 4 and unit 3 total books height must be 30"ft.

Unit	Total height	Country	Books +Boxes
5		England	
4	65"ft	Canada	
3	45"ft		30"ft +15"ft
2		China	
1	30"ft		

France's unit's total books height is 20"ft so unit 1 must be France's unit then unit 3 is India's unit. Unit 2 and unit 3 books heights are same so unit 2 total books height is 30"ft.

Unit	Total height	Country	Books +Boxes
5		England	
4	65"ft	Canada	
3	45"ft	India.	30"ft +15"ft
2		China	30"ft +
1	30"ft	France	20"ft + 10"ft

Canada's unit's total boxes height is thrice of France's total boxes height. So Canada's unit's total boxes height is 30"ft and then books height is 35"ft. Unit 2 total heights are 15"ft less than Canada's unit. So unit 2 total height is 50"ft then unit 2 total boxes height is  $(50-30)=20$ "ft. As we know total units height is 265"ft then unit 5 height is  $265-(65+45+50+30)=75$ "ft. The total height of books in unit 4 and unit 5 together is 75"ft. So unit 5 total books height is  $(75-35)=40$ "ft then total books height is 35"ft.

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4	65"ft	Canada	35"ft + 30"ft
3	45"ft	India.	30"ft +15"ft
2	50"ft	China	30"ft +20"ft
1	30"ft	France	20"ft + 10"ft

Unit 3 is belong to India.  
Hence, option A.

87. Ans. A

The unit belongs to China is an even number unit so it is either unit 2 or unit 4. There are two units gap between the unit belongs to China and the unit belongs to England so England's unit is either 1<sup>st</sup> or 5<sup>th</sup>. The total height of unit 1 is 30"ft. The unit belongs to England is height not 30"ft so England's unit must be unit 5 and China's unit must be unit 2. The total height of boxes in unit 3 is 15"ft.

Unit	Total height	Country	Books +Boxes
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3			+15"ft
2		China	
1	30"ft		

The unit which belongs to Canada is total height is 65"ft. Canada's unit's total height of books is less than 50"ft so it can't be unit 3 because if its unit 3 then its books heights must be 50"ft which is not possible as it is given. Canada's unit just above the unit which books heights 30"ft so it cannot also be unit 1 now Canada's unit must be unit 4 and unit 3 total books height must be 30"ft.

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5		England	
4	65"ft	Canada	
3	45"ft		30"ft +15"ft
2		China	
1	30"ft		

France's unit's total books height is 20"ft so unit 1 must be France's unit then unit 3 is India's unit. Unit 2 and unit 3 books heights are same so unit 2 total books height is 30"ft.

Unit	Total height	Country	Books +Boxes
5		England	
4	65"ft	Canada	
3	45"ft	India.	30"ft +15"ft
2		China	30"ft +
1	30"ft	France	20"ft + 10"ft

Canada's unit's total boxes height is thrice of France's total boxes height. So Canada's unit's total boxes height is 30"ft and then books height is 35"ft. Unit 2 total heights are 15"ft less than Canada's unit. So unit 2 total height is 50"ft then unit 2 total boxes height is  $(50-30)=20$ "ft. As we know total units height is 265"ft then unit 5 height is  $265-(65+45+50+30)=75$ "ft. The total height of books in unit 4 and unit 5 together is 75"ft. So unit 5 total books height is  $(75-35)=40$ "ft then total books height is 35"ft.

**Here is the final table:**

Unit	Total height	Country	Books +Boxes
5	75"ft	England	40"ft + 35"ft
4	65"ft	Canada	35"ft + 30"ft
3	45"ft	India.	30"ft +15"ft
2	50"ft	China	30"ft +20"ft
1	30"ft	France	20"ft + 10"ft

No gap between them.  
Hence, option A.

88. Ans. D

The unit belongs to China is an even number unit so it is either unit 2 or unit 4. There are two units gap between the unit belongs to China and the unit belongs to England so England's unit is either 1<sup>st</sup> or 5<sup>th</sup>. The total height of unit 1 is 30"ft. The unit belongs to England is height not 30"ft so England's unit must be unit 5 and China's unit must be unit 2. The total height of boxes in unit 3 is 15"ft.

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1	30"ft		

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Unit	Total height	Country	Books +Boxes
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France's unit's total books height is 20"ft so unit 1 must be France's unit then unit 3 is India's unit. Unit 2 and unit 3 books heights are same so unit 2 total books height is 30"ft.

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5		England	
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Canada's unit's total boxes height is thrice of France's total boxes height. So Canada's unit's total boxes height is 30"ft and then books height is 35"ft. Unit 2 total heights are 15"ft less than Canada's unit. So unit 2 total height is 50"ft then unit 2 total boxes height is  $(50-30)=20$ "ft. As we know total units height is 265"ft then unit 5 height is  $265-(65+45+50+30)=75$ "ft. The total height of books in unit 4 and unit 5 together is 75"ft. So unit 5 total books height is  $(75-35)=40$ "ft then total books height is 35"ft.

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3	45"ft	India.	30"ft +15"ft
2	50"ft	China	30"ft +20"ft
1	30"ft	France	20"ft + 10"ft

Unit 2+ unit 3= $50+45=95$ "ft

Hence, option D.

89. Ans. B

The unit belongs to China is an even number unit so it is either unit 2 or unit 4. There are two units gap between the unit belongs to China and the unit belongs to England so England's unit is either 1<sup>st</sup> or 5<sup>th</sup>. The total height of unit 1 is 30"ft. The unit belongs to England is height not 30"ft so England's unit must be unit 5 and China's unit must be unit 2. The total height of boxes in unit 3 is 15"ft.

Unit	Total height	Country	Books +Boxes
5		England	
4			
3			+15"ft
2		China	
1	30"ft		

The unit which belongs to Canada is total height is 65"ft. Canada's unit's total height of books is less than 50"ft so it can't be unit 3 because if its unit 3 then its books heights must be 50"ft which is not possible as it is given. Canada's unit just above the unit which books heights 30"ft so it cannot also be unit 1 now Canada's unit must be unit 4 and unit 3 total books height must be 30"ft.

Unit	Total height	Country	Books +Boxes
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France's unit's total books height is 20"ft so unit 1 must be France's unit then unit 3 is India's unit. Unit 2 and unit 3 books heights are same so unit 2 total books height is 30"ft.

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height of books in unit 4 and unit 5 together is 75"ft. So unit 5 total books height is  $(75-35)=40$ "ft then total books height is 35"ft.

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2	50"ft	China	30"ft +20"ft
1	30"ft	France	20"ft + 10"ft

The total height of boxes in unit 1 is 10"ft.

Hence, option B.

90. Ans. C

The unit belongs to China is an even number unit so it is either unit 2 or unit 4. There are two units gap between the unit belongs to China and the unit belongs to England so England's unit is either 1<sup>st</sup> or 5<sup>th</sup>. The total height of unit 1 is 30"ft. The unit belongs to England is height not 30"ft so England's unit must be unit 5 and China's unit must be unit 2. The total height of boxes in unit 3 is 15"ft.

Unit	Total height	Country	Books +Boxes
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1	30"ft		

The unit which belongs to Canada is total height is 65"ft. Canada's unit's total height of books is less than 50"ft so it can't be unit 3 because if its unit 3 then its books heights must be 50"ft which is not possible as it is given. Canada's unit just above the unit which books heights 30"ft so it cannot also be unit 1 now Canada's unit must be unit 4 and unit 3 total books height must be 30"ft.

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1	30"ft		

France's unit's total books height is 20"ft so unit 1 must be France's unit then unit 3 is India's unit. Unit 2 and unit 3 books heights are same so unit 2 total books height is 30"ft.

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Canada's unit's total boxes height is thrice of France's total boxes height. So Canada's unit's total boxes height

is 30"ft and then books height is 35"ft. Unit 2 total heights are 15"ft less than Canada's unit. So unit 2 total height is 50"ft then unit 2 total boxes height is  $(50-30)=20$ "ft. As we know total units height is 265"ft then unit 5 height is  $265-(65+45+50+30)=75$ "ft. The total height of books in unit 4 and unit 5 together is 75"ft. So unit 5 total books height is  $(75-35)=40$ "ft then total books height is 35"ft.

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Unit	Total height	Country	Books +Boxes
5	75"ft	England	40"ft + 35"ft
4	65"ft	Canada	35"ft + 30"ft
3	45"ft	India.	30"ft +15"ft
2	50"ft	China	30"ft +20"ft
1	30"ft	France	20"ft + 10"ft

India's unit's total height is 45"ft which is 2<sup>nd</sup> lowest.

Hence, option C.

91. Ans. E

From I and II

A must be at extreme left end and C second to the left of it. B sits second to the right of G and E is third to the left of G. Using further clues, we get

A B C G H \_ E D

Hence, we can find the answer.

From II and III

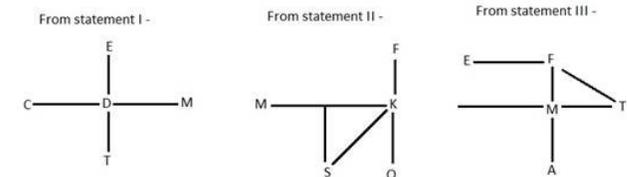
A sits third to the right of G and G sits second to the left of B. D sits fourth to the left of G and third to the left of V. Using the subsequent data, we get

A B C G H F E D

92. Ans. C

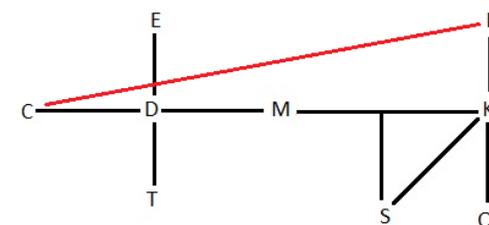
From Statement I and either II or III, we can conclude that - F is to the North - East of C

Solution figure



Second Figure

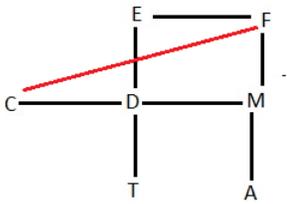
By combining statement I & II



F is to the North - east direction from C

**Third figure -**

By combining statement I & III



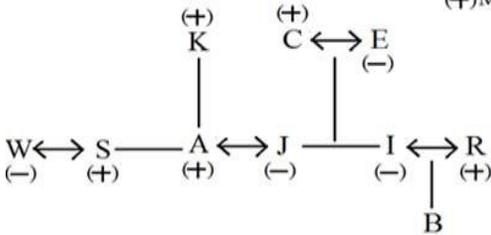
F is to the North - East direction from C

Thus, Option C is the right answer.

93. Ans. E

as none of the statement is sufficient to answer the question, and if we take all the statements together, then also it is not sufficient to answer the question as gender of person B is not known. So, neither of the statement is sufficient to answer the question.

(-) Female  
(+) Male



94. Ans. D

From I: Meena is taller than Reena but shorter than Rahul.

Reena > Meena > Rahul

From II: -->--> Renu

From III: Reshu > Roma -->-->-->

From I, II and III: Reshu > Roma > Renu > Reena > Meena > Rahul

Hence all I, II and III are required to answer the question. So answer is 4).

95. Ans. D

From I: S > R > P, Q

From II: P > S > Q, R

From III: R > P > Q

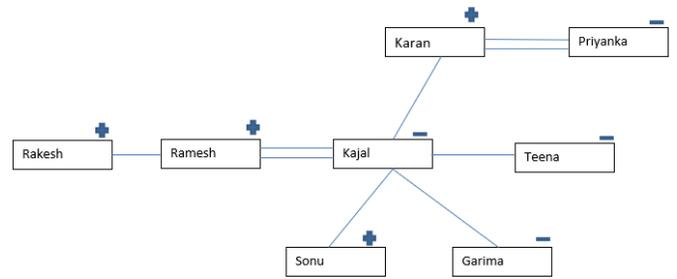
From I and III: S > R > P > Q

Hence, Q is the youngest.

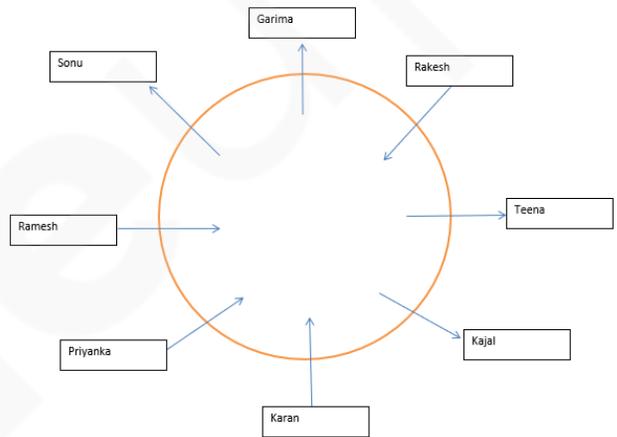
96. Ans. C

Rakesh is sitting second to the left of Kajal.

Step 1:- Finding blood relation using statements, Ramesh is son-in-law of Priyanka. Rakesh is brother-in-law of Kajal. Teena is sister-in-law of Ramesh. Sonu is grandson of Ramesh. Garima is sister of Sonu.



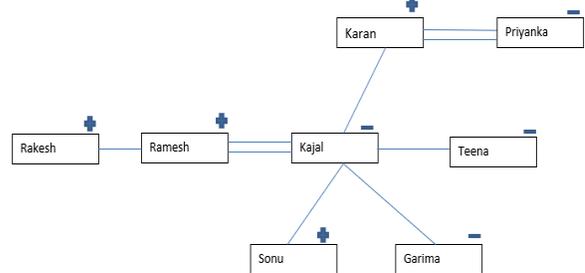
Step 2:- Finding sitting arrangement using statements, Teena is sitting second to the right of her father who is facing inside. Garima is second to the left of her aunt. Ramesh is second to the left of her daughter. Kajal is facing outside and sitting between her sister and her father. Sonu is sitting to the left of his sister and facing outside. Priyanka is not sitting adjacent to her d



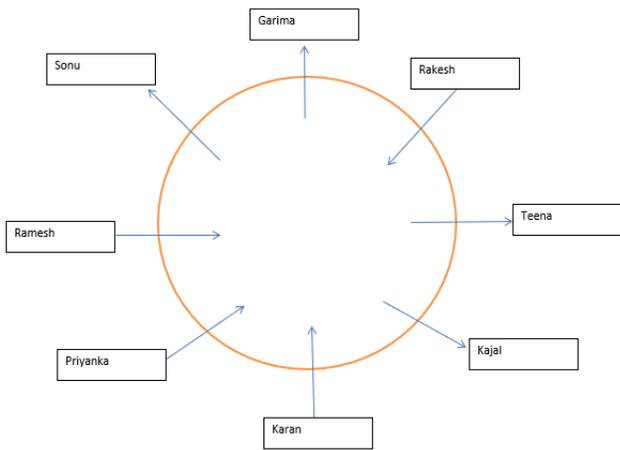
97. Ans. B

Rakesh is uncle of Sonu.

Step 1:- Finding blood relation using statements, Ramesh is son-in-law of Priyanka. Rakesh is brother-in-law of Kajal. Teena is sister-in-law of Ramesh. Sonu is grandson of Ramesh. Garima is sister of Sonu.



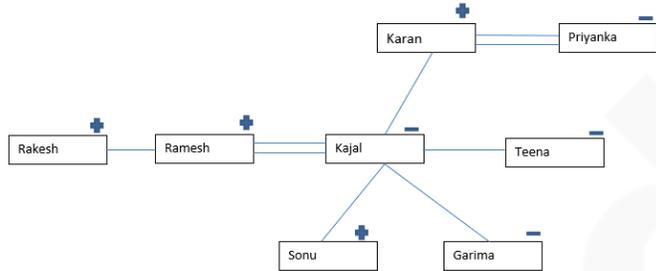
Step 2:- Finding sitting arrangement using statements, Teena is sitting second to the right of her father who is facing inside. Garima is second to the left of her aunt. Ramesh is second to the left of her daughter. Kajal is facing outside and sitting between her sister and her father. Sonu is sitting to the left of his sister and facing outside. Priyanka is not sitting adjacent to her d



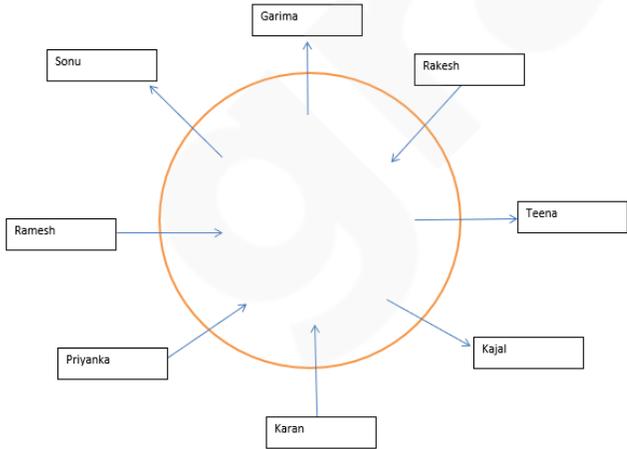
98. Ans. C

Rakesh sitting opposite to Priyanka.

Step 1:- Finding blood relation using statements, Ramesh is son-in-law of Priyanka. Rakesh is brother-in-law of Kajal. Teena is sister-in-law of Ramesh. Sonu is grandson of Ramesh. Garima is sister of Sonu.



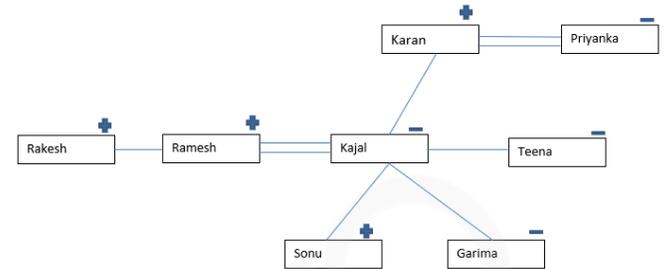
Step 2:- Finding sitting arrangement using statements, Teena is sitting second to the right of her father who is facing inside. Garima is second to the left of her aunt. Ramesh is second to the left of her daughter. Kajal is facing outside and sitting between her sister and her father. Sonu is sitting to the left of his sister and facing outside. Priyanka is not sitting adjacent to her d



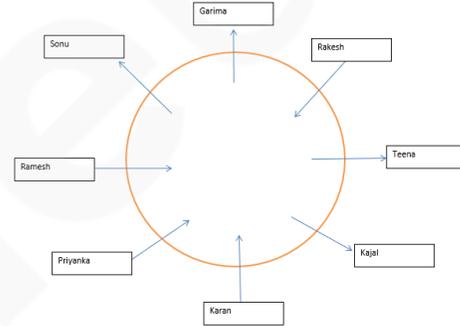
99. Ans. A

Kajal is wife of Ramesh.

Step 1:- Finding blood relation using statements, Ramesh is son-in-law of Priyanka. Rakesh is brother-in-law of Kajal. Teena is sister-in-law of Ramesh. Sonu is grandson of Ramesh. Garima is sister of Sonu.



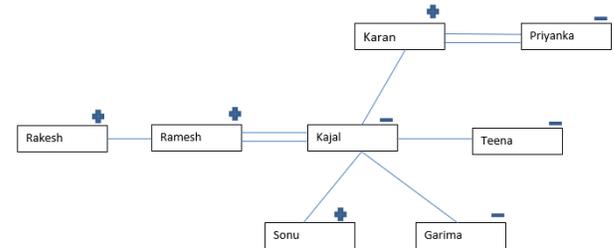
Step 2:- Finding sitting arrangement using statements, Teena is sitting second to the right of her father who is facing inside. Garima is second to the left of her aunt. Ramesh is second to the left of her daughter. Kajal is facing outside and sitting between her sister and her father. Sonu is sitting to the left of his sister and facing outside. Priyanka is not sitting adjacent to her d



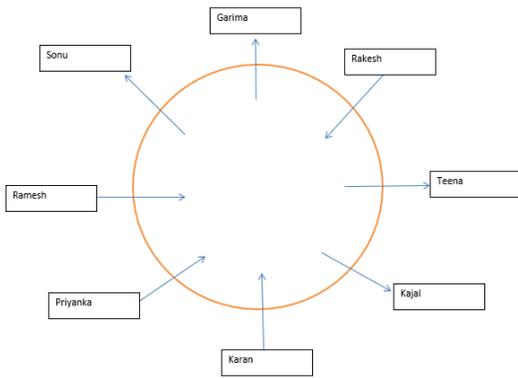
100. Ans. B

Garima is sitting opposite to Karan.

Step 1:- Finding blood relation using statements, Ramesh is son-in-law of Priyanka. Rakesh is brother-in-law of Kajal. Teena is sister-in-law of Ramesh. Sonu is grandson of Ramesh. Garima is sister of Sonu.



Step 2:- Finding sitting arrangement using statements, Teena is sitting second to the right of her father who is facing inside. Garima is second to the left of her aunt. Ramesh is second to the left of her daughter. Kajal is facing outside and sitting between her sister and her father. Sonu is sitting to the left of his sister and facing outside. Priyanka is not sitting adjacent to her d



101. Ans. A

The immediate action is training. Firing people and hiring new people is increased cost and extreme action. The trainers can be given extra training at much lesser cost and can be retained. So I follow.

102. Ans. C

In the context of the question, III and IV seem like the answers. However, III makes more sense as it explains why the government has not drawn flak despite increasing the minimum tax percentage.

103. Ans. D

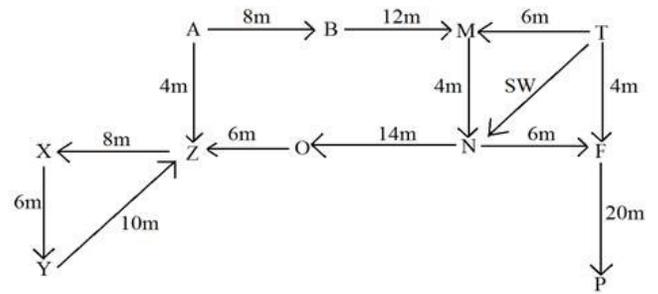
The interest rate reduction can be due to several reason like to manage inflation, to increase cash flow in economy or as a part of elaborate monetary policies of RBI. It do not have anything to do with parents' agitation against education system. Now students are forced to take loans due to increase in fees not because of reduction in interest rates. It's stated in the statement II. As fees are hiked, the students who are unable to pay have to depend on education loans regardless of the interest rate fluctuation. So both are effects of independent causes.

104. Ans. A

After harvest, around 19.7 million tonnes of paddy straw is left on the fields and has to be disposed of to make way for wheat and burning of paddy is the quickest and cheapest way of getting rid of the residue. Hence, option A is the correct option.

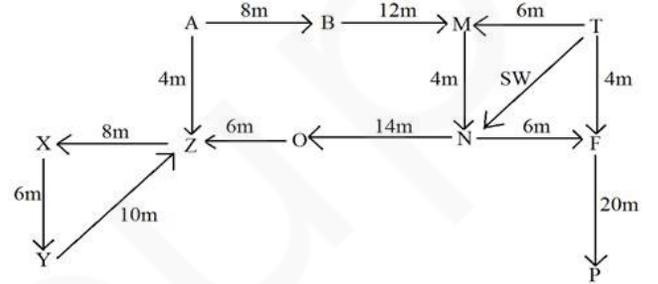
105. Ans. B

by given sol figure, it is clear that the direction of scooter N with respect to scooter T is south west.



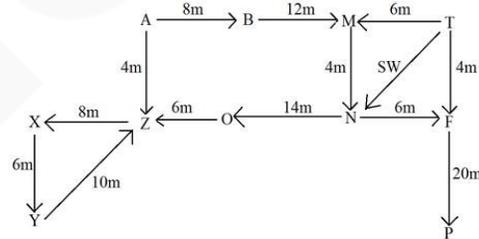
106. Ans. D

by given sol figure, it is clear that the distance between the scooter Z and O is 6m in the west direction.



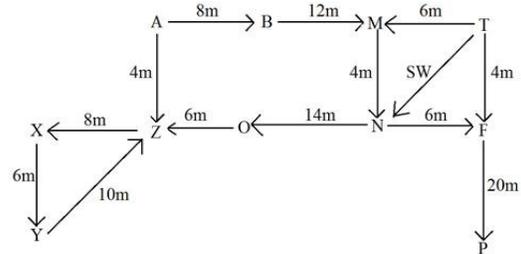
107. Ans. C

by given sol figure, it is clear that the shortest distance between the scooter Z and scooter Y is 10m  $((\text{hypotenuse})^2 = (\text{base})^2 + (\text{perpendicular})^2)$  i.e.  $6^2 + 8^2 = 10^2$ .



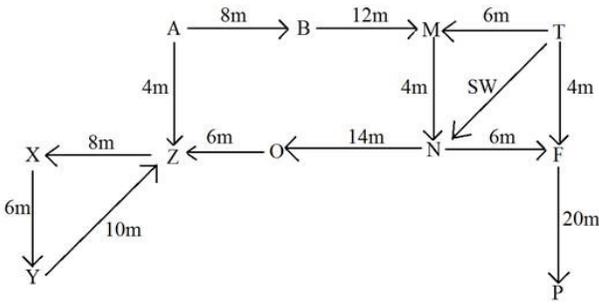
108. Ans. A

by given sol figure, it is clear that the 'x' distance between the scooter T and scooter F is 4m.



109. Ans. E

by given sol figure, it is clear that the distance between the scooter P and F is 20m, and half the distance is 10m.



110. Ans. E

Both 72 years and 70 years.

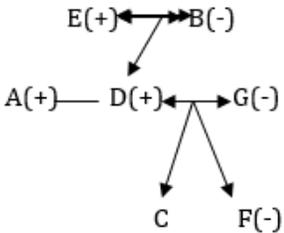
Hence, option E.

D is father of C. C is elder to F. D is married to G so G is wife of D. F is sister of C. D's mother age is 68 years. B is elder to A and married to E but not the eldest it means B is mother of D and E is father of D and A is brother of D because E has two sons. B is elder to A. D is elder to G but younger to A.

The one who is 3<sup>rd</sup> eldest is 50 years old and the one who is 2<sup>nd</sup> youngest is 18 years old.

So according to the age,

$$E > B(68) > A(50) > D > G > C(18) > F$$



111. Ans. B

D is brother of A.

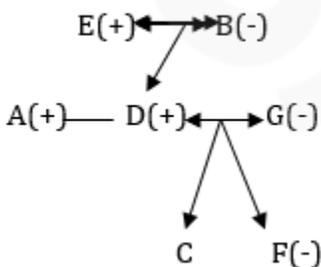
Hence, option B.

D is father of C. C is elder to F. D is married to G so G is wife of D. F is sister of C. D's mother age is 68 years. B is elder to A and married to E but not the eldest it means B is mother of D and E is father of D and A is brother of D because E has two sons. B is elder to A. D is elder to G but younger to A.

The one who is 3<sup>rd</sup> eldest is 50 years old and the one who is 2<sup>nd</sup> youngest is 18 years old.

So according to the age,

$$E > B(68) > A(50) > D > G > C(18) > F$$



112. Ans. C

F is the youngest person in the family.

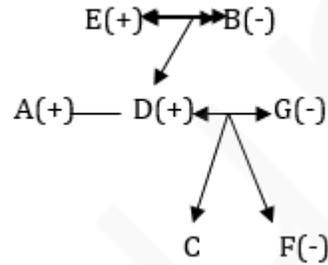
Hence, option C.

D is father of C. C is elder to F. D is married to G so G is wife of D. F is sister of C. D's mother age is 68 years. B is elder to A and married to E but not the eldest it means B is mother of D and E is father of D and A is brother of D because E has two sons. B is elder to A. D is elder to G but younger to A.

The one who is 3<sup>rd</sup> eldest is 50 years old and the one who is 2<sup>nd</sup> youngest is 18 years old.

So according to the age,

$$E > B(68) > A(50) > D > G > C(18) > F$$



113. Ans. A

A is 50 years old.

$$A + D = 92$$

$$D = 92 - 50 = 42 \text{ years}$$

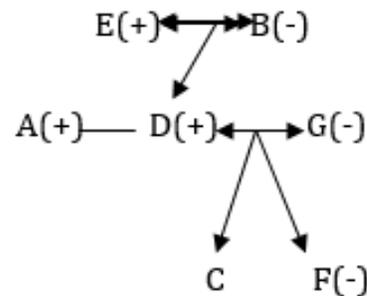
Hence, option A.

D is father of C. C is elder to F. D is married to G so G is wife of D. F is sister of C. D's mother age is 68 years. B is elder to A and married to E but not the eldest it means B is mother of D and E is father of D and A is brother of D because E has two sons. B is elder to A. D is elder to G but younger to A.

The one who is 3<sup>rd</sup> eldest is 50 years old and the one who is 2<sup>nd</sup> youngest is 18 years old.

So according to the age,

$$E > B(68) > A(50) > D > G > C(18) > F$$



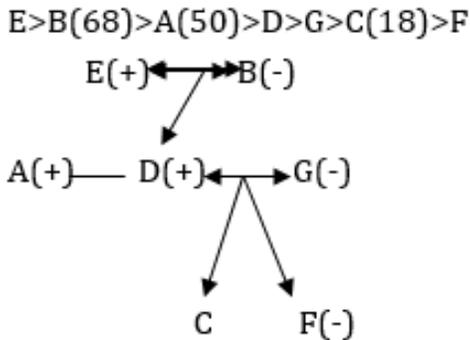
114. Ans. D

Four persons are elder to G.

Hence, option D.

D is father of C. C is elder to F. D is married to G so G is wife of D. F is sister of C. D's mother age is 68 years. B is elder to A and married to E but not the eldest it means B

is mother of D and E is father of D and A is brother of D because E has two sons. B is elder to A. D is elder to G but younger to A.  
 The one who is 3<sup>rd</sup> eldest is 50 years old and the one who is 2<sup>nd</sup> youngest is 18 years old.  
 So according to the age,



115. Ans. B  
 Anti- Romeo squad is the special wing of state police which ensures that a girl/ ladies should go to any place without fear of eve-teasing. It has nothing to do with moral policing.

116. Ans. C

Years	Age	Person
2005	12	D
2000	17	A
1995	22	F
1991	26	B
1990	27	C
1982	35	G
1980	37	E
1976	41	H

117. Ans. B

Years	Age	Person
2005	12	D
2000	17	A
1995	22	F
1991	26	B
1990	27	C
1982	35	G
1980	37	E
1976	41	H

118. Ans. A

Years	Age	Person
2005	12	D
2000	17	A
1995	22	F
1991	26	B
1990	27	C
1982	35	G
1980	37	E
1976	41	H

119. Ans. B

Years	Age	Person
2005	12	D
2000	17	A
1995	22	F
1991	26	B
1990	27	C
1982	35	G
1980	37	E
1976	41	H

120. Ans. B

Years	Age	Person
2005	12	D
2000	17	A
1995	22	F
1991	26	B
1990	27	C
1982	35	G
1980	37	E
1976	41	H

121. Ans. B

Here P stands for Point.  
 EFTPOS stands for **Electronic Funds Transfer at Point of Sale**. It is an electronic payment system involving electronic funds transfers based on the use of payment cards, such as debit or credit cards, at payment terminals located at points of sale.

122. Ans. E

**Bank rate** is the rate of interest implemented by **RBI** when it lends money to a public sector bank on a **long term basis**, i.e. from a period ranging from **90 days to 1 year**

123. Ans. D

Micro ATM works with minimal power and connects to central banking servers through a GPRS network. It enables the un-banked rural population to access banking services in their villages or towns. It offers facilities of deposit, withdrawal, balance enquiry, issuance of mini-statement and funds transfer.

124. Ans. E

Only b, c and d is correct  
Commercial Paper (CP) is an unsecured money market instrument introduced in 1990 which are issued in the form of a promissory note. Corporate, Primary Dealers and All India Financial Institutions are eligible to issue CP.

125. Ans. D

Mangalampalli Balamurali Krishna was an Indian Carnatic vocalist, musician, multi-instrumentalist, playback singer, composer, and character actor. He has garnered two National Film Awards, the Sangeet Natak Akademi Award in 1975, the Padma Vibhushan, India's second-highest civilian honor in 1991, for his contribution towards arts.

126. Ans. D

Hand in Hand' is a joint military exercise between India and China held in Pune, Maharashtra in 2016.

- Factual information

127. Ans. C

In one of the historic moves India has signed a deal with the US for importing 145 M777 lightweight Howitzers for Indian Army, the deal will cost Rs 5,000 crore to the country.

128. Ans. A

Kehkashan Basu, a UAE-based Indian environmental activist, has won the 2016 prestigious International Children's Peace Prize for her fight for climate justice and combating environmental degradation. Kehkashan, based in the UAE was presented the award by Bangladesh's Nobel peace laureate Mohammad Yunus at a ceremony in The Hague, Netherlands.

129. Ans. D

Incorporated as a Public Sector Bank under the Department of Posts with 100% GOI equity, IPPB has launched on January 30th, 2017 in Ranchi and Raipur with the objective of being present in all corners of India by the end of the year.

130. Ans. B

Manoj Bajpayee has won the best actor at Asia Pacific Screen Awards.

**Note:** The Asia Pacific Screen Awards (APSA) is an international cultural initiative of the Brisbane City Council, Australia.

131. Ans. D

As per the RBI guidelines, the NBFCs are allowed to accept/renew public deposits for a **minimum period of 12 months and maximum period of 60 months.** They cannot accept deposits repayable on demand.

132. Ans. B

Irom Sharmila was on a 16 year hunger strike for the revocation of Armed forces (Special Powers) Act which gives wide powers to the armed forces like arresting anyone and detention without magisterial order etc. She belongs to the state of Manipur

133. Ans. E

Mobile Money Identifier or **MMID is a 7 digit number of a bank customer.** This number is used when you try to send or receive money using the IMPS method. Every bank account has only one MMID. This MMID would be unique to the bank account. Along with the mobile number, MMID identifies a bank account.

134. Ans. A

The book "The Immortals of Meluha" has been authored by Amish Tripathi.

**Note:** The book is based on the land of Meluha and starts with the arrival of the Shiva. The Meluhans believe that Shiva is their fabled saviour Neelkanth.

135. Ans. E

**The sixth edition of 'Heart of Asia- Istanbul** Process of Aghanistan' conference, an annual regional gathering of Asian and other countries was held in Amritsar, Punjab (India).

136. Ans. B

The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN). It was established in June 1945 by the Charter of the United Nations and began work in April 1946. The seat of the Court is at the Peace Palace in The Hague (Netherlands).

137. Ans. B

According to the RBI circular, no OTP will be required for payments under Rs 2,000. The RBI has relaxed two-factor authentication for online payments below Rs 2,000.

This move by RBI was made to make things easier for cab aggregators like Uber and Ola and other online merchants to accept cards.

138. Ans. B

Bandhan Bank Ltd. is an Indian banking and financial services company headquartered in Kolkata, West Bengal. Bandhan, which started as a **micro-finance company in 2001**, received banking licence by Reserve Bank of India in 2014.

139. Ans. C

As per the RBI guidelines, it is mandatory that 25% of the small finance banks' branches should be in the rural areas within the first year of operation.

140. Ans. A

It was designed, **developed** and deployed by the Institute for **Development** and Research in Banking Technology (IDRBT) in 2004, with the goal of inter-connecting the ATMs in the country and facilitating convenience banking. It is run by the **National Payments Corporation of India (NPCI)**.

Note: With a view to inter-connect the ATMs in the country and facilitate easy banking for the common man, the Institute for Development and Research in Banking Technology (**IDRBT**), Hyderabad conceptualized, developed and **implemented the National Financial Switch**.

141. Ans. C

The Reserve Bank of India (RBI) constituted an inter regulatory Working Group (WG) to study the entire gamut of regulatory issues relating to Fin Tech (financial technology) and Digital Banking in India.

The 13-member working group will be headed by **Sudarshan Sen**, the executive director of RBI. It has been asked to submit its report within six months from the date of its first meeting.

142. Ans. D

International Day of Persons with Disabilities has been observed across the world on 3 December 2016. The theme for 2016 is "**Achieving 17 Goals** for the Future We Want". This **theme** notes the recent adoption of the **17 Sustainable Development Goals (SDGs)** and the role of these **goals** in building a more inclusive and equitable world for persons with disabilities.

143. Ans. B

The government has decided to increase the **foreign direct investment (FDI)** limit in **private banks** to **100 per cent** from the existing **74 per cent**.

144. Ans. B

**Dormant means inactive** and inoperative means which is not being operated i.e. no transactions have been undertaken recently. In terms of RBI guidelines "A savings as well as current account should be treated as inoperative/dormant if there are no transactions in the account for over **a period of two years**".

145. Ans. B

For a BSBDA (Basic Savings Bank Deposit Account),  
(a) Total credits in such accounts should not exceed one lakh rupees in a year.

(b) Maximum balance in the account should not exceed fifty thousand rupees at any time

(c) The total of debits by way of cash withdrawals and transfers will not exceed ten thousand rupees in a month.

146. Ans. C

National Payments Corporation of India (NPCI) has implemented "**National Automated Clearing House (NACH)**" for Banks, Financial Institutions, Corporates and Government a web based solution to facilitate interbank, high volume, electronic transactions which are repetitive and periodic in nature.

NACH System can be used for making bulk transactions towards distribution of subsidies, dividends, interest, salary, pension etc. and also for bulk transactions towards collection of payments pertaining to telephone, electricity, water, loans, investments in mutual funds, insurance premium etc.

147. Ans. D

SHG is a holistic programme of micro-enterprises covering all aspects of self-employment, organization of the rural poor into self Help groups and their capacity building, planning of activity clusters, infrastructure build up, technology, credit and marketing.

148. Ans. A

NEFT settles fund transfers in half-hourly batches with 23 settlements occurring between 8:00 AM and 6:30 PM on week days and the 1st, 3rd and 5th Saturday of the calendar month. Transfers initiated outside this time period are settled at the next available window. No settlements are made on the second and fourth Saturday of the month, or on Sundays, or on public holidays.

149. Ans. B

Asia's longest cycle highway has been inaugurated in Uttar Pradesh.

**Note:** The 207 km cycle highway connects the Taj City Agra and the Lion Safari at Etawah, constructed by the UP public works department.

150. Ans. C

India's first banking robot "Lakshmi" has been launched by the Kumbakonam-based City Union Bank, which will become the first on-site bank helper in India.

151. Ans. B

Systemic risk implies that the failure of the financial system affects other systems such as insurance market or forex market.

152. Ans. B

The Local Area Bank Scheme was introduced in August 1996. The area of operation of an LAB was restricted to a maximum of three geographically contiguous districts. The activities of an LAB were to be focussed on local customers predominantly in rural and semi-urban areas so as to bridge the credit gap in these areas.

153. Ans. C

As per the RBI guidelines on Small Finance Bank a maximum loan size to a single person cannot exceed 10% of total capital funds; cannot exceed 15% in the case of a group.

At least 50% of its loans should constitute loans and advances of up to 25 lakh.

154. Ans. D

Initially RBI was constructed as a Private Share holders' bank with fully paid-up capital of Rs 5 Crores. RBI commenced its operations on 1 April 1935 during the British Rule in accordance with the provisions of the Reserve Bank of India Act, 1934. The original share capital was divided into shares of 100 each fully paid, which were initially owned entirely by private shareholders.

155. Ans. D

Stock Holding Corporation of India Limited is the only Central Record-Keeping Agency (CRA) authorised by Ministry of Finance, Government of India. It's headquarter is located in Mumbai. Central Record Keeping Agency is responsible for User Registration, Imprest Balance Administration and overall E-Stamping Application Operations and Maintenance. CRA will appoint ACC's and Travelling Vendors who will issue Certificates to the clients at their counters.

156. Ans. B

Rabobank is a Dutch multinational banking and financial services company headquartered in Utrecht, Netherlands. It is a global leader in food and agriculture financing and sustainability-oriented banking.

157. Ans. B

A Bollywood based theme park is opened in Dubai, UAE in August 2016.

158. Ans. A

Global Citizen festival 2016 held in Mumbai, India.

159. Ans. C

Kumarakom Bird Sanctuary is situated at Kumarakom in Kottayam taluk of Kottayam district in the Indian state of Kerala, on the banks of Vembanad Lake.

160. Ans. B

Gobind Sagar Dam is situated in Bilaspur district in Himachal Pradesh on Sutlej river.

161. Ans. E

162. Ans. B

Freeware is copyrighted computer software which is made available for use free of charge, for an unlimited time.

163. Ans. A

The scrambling of code is known as **encryption**. It is the process of converting information or **data** into a **code**, especially to prevent **unauthorized** access.

164. Ans. B

A **password** is a word or **string of characters** used for user authentication to prove identity or access **approval** to gain access to a resource, which is to be kept secret from those not allowed access.

165. Ans. B

To connect networks of similar protocols **Bridges** are used.

A **network bridge** is a **network** device that connects multiple **network** segments. In the OSI model, bridging is performed in the first two layers, below the **network** layer.

166. Ans. D

The **digital subscriber line** (DSL) is used for **internet connections** and utilizes existing telephonic lines for broadband services.

167. Ans. C

The computers of the third generation used **integrated circuits** (IC's) in place of **transistors**. A single **IC** has many **transistors**, **resistors**, and **capacitors** along with the associated circuitry.

**Note:** The period of the **third generation** was **1965-1971**.

168. Ans. D

Compilers and translators are one form of Computer Programs. **Compilers** are computer programs that translate a high-level programming language to a low-level programming language.

A **translator** is a computer program that performs the translation of a program written in a given programming language into a functionally equivalent program in a different ways computer language, without losing the functional or logical structure of the original code

169. Ans. B

The main system board of a computer is called the motherboard.

**Note:** A **Motherboard** is the main printed circuit board (PCB) found in computers and other expandable systems. It holds and allows communication between many of the crucial electronic components of a system, such as the central processing unit (CPU) and memory, and provides connectors for other peripherals

170. Ans. D

We can **apply formatting** to text **quickly** and easily by using **styles** in **Word**. We can also change an **existing style**, create new styles, or **delete styles** to suit your needs

**Note:-** Four kinds of styles are available: **paragraph**, **character**, **table** and **list styles**.

171. Ans. B

Most embedded devices contain firmware at more than one level. Subsystems such as CPUs, flash chips, communication controllers, LCD modules, and so on, have their own (usually fixed) program code and / or microcode, regarded as "part of the hardware" by the higher level(s) firmware.

172. Ans. D

MIDI (Musical Instrument Digital Interface) is a technical standard that describes a protocol, digital interface and connectors and allows a wide variety of electronic musical instruments, computers and other related devices to connect and communicate with one another.

173. Ans. C

In computer networks, to download is to **receive data** from a remote system, typically a **server** such as a **web server**, an FTP server, an email server, or other similar systems.

174. Ans. E

**Double-click** on one of the existing **worksheet names**. Right-click on an existing worksheet name, then choose **Rename** from the resulting Context menu. Select the worksheet you want to **rename** (click on the worksheet tab) and then select the Sheet option from the Format menu.

175. Ans. B

Most mail programs automatically complete the 'From: and Date:' two parts in an e-mail.

176. Ans. A

Dynamic HTML (DHTML) is an umbrella term for a collection of technologies used together to create interactive and animated web sites by using a combination of a static markup language (such as HTML), a client-side scripting language (such as JavaScript), a presentation definition language (such as CSS), and the Document Object Model (DOM).

**Note:** The application of DHTML was introduced by Microsoft with the release of Internet Explorer 4 in 1997.

177. Ans. D

A menu bar is a graphical control element which contains drop down menus. The menu bar's purpose is to supply a common housing for window- or application-specific menus which provide access to such functions as opening files, interacting with an application, or displaying help documentation or manuals.

178. Ans. C

**JavaScript** is most commonly used as a client side scripting language. This means that JavaScript code is written into an HTML page.

**Note:** When a user requests an HTML page with JavaScript in it, the script is sent to the browser to do something with it.

179. Ans. A

A **batch file** is a kind of script file in **DOS, OS/2** and Windows. It consists of a series of commands to be executed by the command line interpreter, stored in a plain text file.

180. Ans. E

Data redundancy is one reason for problems of data integrity.

In computer main memory, auxiliary storage and computer buses, data redundancy is the existence of data that is additional to the actual data and permits correction of errors in stored or transmitted data.

181. Ans. E

If you wish to **re-save** the active Module Session using the **same name** and type that you have previously saved the file with, then you can just use the **Save Command** to avoid the File Save Dialog.

182. Ans. C

Advanced word processing features include all except creation of detailed architectural designs.

183. Ans. B

RAM (**Random Access Memory**) is the **internal memory** of the CPU for **storing data, program** and program result.

**Note:-** It is read/write memory which **stores data** until the machine is working. As soon as the machine is **switched off**, data is erased.

In harddisk data remains stored even after the computer is switched off. So B is the not true for RAM hence is the correct option.

184. Ans. B

A "process description" is defined as a general description of how a process happens, step by step. It does not tell the reader what to do; rather, it describes how something happens.

185. Ans. A

**Ruby** is a dynamic, reflective, object-oriented, general-purpose programming language. It was designed and **developed** in the mid-**1990s** by Yukihiro "Matz" Matsumoto in **Japan**.

186. Ans. D

Integrated Services Digital Network (ISDN) is a set of communication standards for simultaneous digital transmission of voice, video, data, and other network services over the traditional circuits of the public switched telephone network.

187. Ans. E

The user can do the **central align** to the **selected text** in Word by pressing "**Ctrl + E**" keys together.

188. Ans. C

An **operating system** (OS) is the system software that manages computer hardware and software resources and provides common services for computer programs. The **operating system** is a component of the system software in a computer system. Application programs usually require an operating system to function.

189. Ans. C

Index sequential files are ordered sequentially on some search key and a primary index is associated with it.

190. Ans. B

A data warehouse is organized around important subject areas.

A **data warehouse** (DW or DWH), also known as an enterprise **data warehouse** (EDW), is a system used for reporting and **data** analysis. DWs are central repositories of integrated **data** from one or more disparate sources.

A data warehouse is a subject-oriented, integrated, time-variant and non-volatile collection of data in support of management's decision making process.

191. Ans. A

**Computer-aided design** (CAD) is the use of computer systems to aid in the creation, modification, analysis, or optimization of a design.

192. Ans. A

Bluetooth is a **wireless technology** standard for **exchanging data** over short distances from fixed and mobile devices and building personal area networks (PANs). Invented by telecom vendor **Ericsson** in 1994.

193. Ans. C

**ERP** is an acronym for '**Enterprise Resource Planning**'.

**Note: Enterprise resource planning** (ERP) is business management software typically a suite of integrated applications that a company can use to collect, store, manage and interpret data from many business activities, including, Product planning, cost. Manufacturing or service delivery. Marketing and sales.

194. Ans. C

In electronics, a multiplexer (or mux) is a device that selects one of several analog or digital input signals and forwards the selected input into a single line. A multiplexer of  $2n$  inputs has  $n$  select lines, which are used to select which input line to send to the output.

195. Ans. D

One way to classify **different types of databases** is by their "**data model**". A data model describes the structure of data & how it accessed on the basis of data model, databases can be **hierarchical, network** or **relational databases**.

196. Ans. B

A **primary key** is a key in a relational database that is **unique for each record**. It is a unique identifier, such as a driver license number, telephone number or vehicle identification number (VIN).

**Note:-** A relational database must always have one and only one primary key.

197. Ans. E

The steps performed by the computer processor for each machine language instruction received. The machine cycle is a 4 process cycle that includes reading and interpreting the machine language, executing the code and then storing that code.

198. Ans. C

A video controller mixing images from frame buffer and video-signal source. There are VLSI chips that implement many of these image display functions.

199. Ans. E

Print preview is a feature that allows you to view what a printed version of the document would look like on the screen before printing a hard copy.

200. Ans. A

Microsoft Windows XP and Microsoft Word are examples of operating system software and application software respectively.

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