

**IIFT 2016
(PAPER SET C)**

Answer key

1.	(2)	11.	(3)	21.	(1)	31.	(3)	41.	(1)	51.	(4)	61.	(4)	71.	(2)	81.	(2)	91.	(1)	101.	(2)	111.	(1)	121.	(3)
2.	(3)	12.	(3)	22.	(3)	32.	(2)	42.	(2)	52.	(1)	62.	(4)	72.	(4)	82.	(1)	92.	(2)	102.	(4)	112.	(2)	122.	(3)
3.	(2)	13.	(2)	23.	(4)	33.	(3)	43.	(1)	53.	(1)	63.	(3)	73.	(1)	83.	(2)	93.	(*)	103.	(4)	113.	(4)	123.	(2)
4.	(2)	14.	(3)	24.	(1)	34.	(3)	44.	(3)	54.	(2)	64.	(4)	74.	(2)	84.	(3)	94.	(1)	104.	(1)	114.	(1)		
5.	(1)	15.	(3)	25.	(2)	35.	(1)	45.	(4)	55.	(4)	65.	(4)	75.	(4)	85.	(1)	95.	(1)	105.	(4)	115.	(1)		
6.	(3)	16.	(2)	26.	(4)	36.	(3)	46.	(3)	56.	(2)	66.	(4)	76.	(3)	86.	(2)	96.	(3)	106.	(3)	116.	(1)		
7.	(4)	17.	(3)	27.	(4)	37.	(4)	47.	(1)	57.	(4)	67.	(3)	77.	(3)	87.	(3)	97.	(2)	107.	(2)	117.	(1)		
8.	(3)	18.	(2)	28.	(3)	38.	(3)	48.	(4)	58.	(2)	68.	(1)	78.	(2)	88.	(3)	98.	(1)	108.	(4)	118.	(2)		
9.	(2)	19.	(1)	29.	(1)	39.	(4)	49.	(3)	59.	(3)	69.	(1)	79.	(4)	89.	(2)	99.	(4)	109.	(2)	119.	(3)		
10.	(4)	20.	(3)	30.	(2)	40.	(3)	50.	(1)	60.	(2)	70.	(1)	80.	(3)	90.	(2)	100.	(2)	110.	(1)	120.	(2)		

SOLUTION

- Refer to the line 'The stagnation stems from the failures of the state to build functioning ports and power plants and to create an environment in which the rules governing labour, land and capital are designed and enforced in a way that encourages entrepreneurs to invest, particularly in factories.' It clearly points at choice (2) **Choice (2)**
- Regular the sentence 'Between 1989 and 2010 India generated about ten million news jobs in manufacturing, but nearly all those jobs were created in enterprises that are small and informal and thus better suited to dodge India's bureaucracy and its extremely restrictive rules regarding firing workers.' It clearly points at choice (3) **Choice (3)**
- The sentence 'In India only about two million people work in IT services, or less than 1 percent of the workforce' implies only a fraction of the total workforce is employed in the service sector. Again, the sentence 'Workers who have moved into IT service jobs have generally come from a pool of relatively better educated members of the urban middle class, who speak English and have at least some facility with computers' indicates only small section of the population speak English and have access to quality education. Thus, the correct answer is choice (2) **Choice (2)**
- Refer to the sentence 'Instead of growing richer by exporting even more advanced manufactured products, India could grow rich by exporting the services demanded in this new information age.' It completely goes in favour of choice (2) **Choice (2)**
- Refer to the sentence 'The renown of even the most potent global brands wear thin when the offered product is neither designed expressly for local markets nor priced for local means.' It clearly points at choice (1) **Choice (1)**
- Refer to the sentence 'Consumers interact with our products on three levels; the neurological level, the gut level and the metabolic level. Traditionally food and beverage companies have focussed only on the first.' It clearly points at choice (3) **Choice (3)**
- Refer to the line 'The company will tackle this problem much more readily if reverse innovation is part of its repertoire.' It clearly points at choice (4) **Choice (4)**
- Refer to the sentences 'For example, PepsiCo is finding that some long popular ingredients in emerging economies such as lentils in India have healthy profiles that suggest new dimensions for snacking across geographies' and 'Nonetheless, PepsiCo saw that there was enormous opportunity for impact in creating options for healthier snacking.' Both these lines clearly point at choice (3) **Choice (3)**
- Refer to the lines 'In a 2014 survey of 143 emerging countries, the World Bank found that 90 percent have at least one law that limits the economic opportunities available to women' and 'The hurdles to working women often involve a combination of written laws and cultural norms.' These lines imply that the primary focus of the passage is on legal and cultural hindrances that working women face. It is because of these hindrances the women who are willing to work find themselves respected and confined. **Choice (2)**
- Refer to the sentence 'The OECD recently estimated that eliminating the gender gap would lead to an overall increase in GDP of 12 percent in its member nations between 2015 and 2030.' It is clearly points at choice (4). **Choice (4)**
- Refer to the sentence 'The IMF says that even a small step such as countries granting women the right to open a bank account can lead to substantial increase in female labour force participation over the next seven years.' It clearly indicates choice (3). **Choice (3)**
- Refer to sentence 'According to data available with the International Labour Organization (ILO), between 2004 and 2011, when the Indian economy grew at a healthy average of about 7 percent, there was a decline in female participation in the country's labour force from over 35 percent to 25 percent.' It clearly indicates choice (3) **Choice (3)**
- The given passage deals with the numerous methods that have been put in place and can also be adjusted in creating more efficient self-directing robots more

- efficient. Thus, the most appropriate alternative to this idea is 'To discuss techniques for increasing efficiency of self-guided robots' i.e. choice (2) **Choice (2)**
14. As per mythology, one-eyed joints were mentioned as stupid and ill-tempered. **Choice (3)**
15. Refer to the lines 'The shape of the world pops out easily from laser data because it represents a direct contour map of the surrounding area. A camera captures this geometry indirectly and so needs more (and smarter) computation if it is to generate something good enough for a self-directing robot.' They clearly support choice (3). **Choice (3)**
16. Refer to the sentence 'With enough measurements of the same set of features from different viewpoints, it is possible if you have a fast enough computer program to estimate their positions and thus by inference the location of the moving camera.' It clearly points at choice (2). **Choice (2)**
17. "Endemic" means belonging exclusively or confined to a particular place and fits in blank 1 across. "Equipose" means balance of forces or interests and fits in blank 1 down. "Dogmatic" means inclined to lay down principles as undeniably true and fits in blank 2. "Encomium" means a speech or piece of writing that praises someone or something highly and fits in blank 4. Hence, the correct answer is Choice (3). **Choice (3)**
18. "Encomium" means a speech or piece of writing that praises someone or something highly. "Espouse" means to adopt or support a cause, belief, or way of life. Hence, the correct answer is Choice (2) **Choice (2)**
19. "Tedious" means long and tiresome. "Tenacity" means the quality or fact of being very determined, stubborn or relentless. Hence, the correct answer is Choice (1). **Choice (1)**
20. "Emollient" means having the quality of softening or soothing the skin. "Obloquy" means strong public condemnation. Hence, the correct answer is Choice (3). **Choice (3)**
21. "Apogee" means in astronomy means the point in the orbit of the moon or a satellite at which it is furthest from the earth but in a general sense it means the highest point in the development of something; a climax or culmination and "nadir" means "the lowest or most unsuccessful point in a situation." Thus they are antonyms of each other. "Warranted" means a justified or necessary course of action whereas "unjustified" is an antonym to it. "Epiphany" means "a moment of sudden and great revelation or realization" but "secret" means kept hidden or separate from the knowledge of others. Thus they are antonyms of each other. "Archetypal" means very typical of a certain kind of person or thing whereas "unique" means being the only one of its kind. These are antonyms of each other. Hence, the correct answer is Choice (1). **Choice (1)**
22. "Vexation" means the state of being annoyed, frustrated, or worried whereas "happiness" is a clear antonym of it. "Baleful" means threatening or harmful and "benevolent" means well meaning and kindly. These are antonyms to each other. "Recluse" indicates a person who leads a solitary life and tends to avoid other people however "extrovert" means an outgoing, socially confident person. "Itinerant" means travelling from place to place and "static". Thus, these are antonyms to each other. Hence, the correct answer is choice (3). **Choice (3)**
23. The origin of the word "Debutante" (a rich young woman who, went to a number of social events as a way of being introduced to other young people of high social rank) is the word "debutant". **Choice (4)**
24. The origin of the word "Obvious" is Latin. It comes forth from the Latin term "obvious" (presenting itself readily, open, exposed, commonplace). **Choice (1)**
25. "Soccer", an English word, comes from an abbreviation for Association (from Association Football, the 'official' name for the game) plus the addition of the suffix -er. This suffix was appended to 'shortened' nouns, in order to form jocular words. **Choice (2)**
26. The only correctly spelt choice is "Danseuse" i.e. "a female ballet dancer." **Choice (4)**
27. The only correctly spelt choice is "Acoustic" which means "related to sound or sense of hearing." **Choice (4)**
28. The words "hot" and "muggy" are used to describe the weather and they bear a negative connotation. Hence, choices (2) and (4) can be eliminated as they have positive connotation. Choice (1) should also be eliminated as "traumatic" too strong a word to be used in the context. Also it is seldom or never used to describe weather conditions. "Sultry" is apt as it is often used to describe the weather. **Choice (3)**
29. Choice (2) is "moot" which as a verb means to raise (a question or topic) for discussion; suggest (an idea or possibility). Thus it is quite out of context. Choice (3) is "invite" which does not make any sense either. Choice (4) is "boycott" which means to withdraw from commercial or social relations with (a country, organization, or person) as a punishment or protest. This word is also quite out of context. The word "herald" as a verb means be a sign that (something) is about to happen or begin. This is an apt expression for the upcoming festivals. **Choice (1)**
30. Use of the word "drawing" i.e. choice (1) in the sentence would make the sentence incomplete and grammatically incorrect. Thus, it can be eliminated. In the same manner inclusion of the word "fascinating" i.e. choice (3) in the sentence would make the sentence illogical. "Pursuing" i.e. choice (4) means to follow or chase and quite clearly, colourfully decorated showrooms cannot pursue a passerby. Thus, it can be eliminated. The word "exhorting" means to strongly encourage and

since the stores were colourfully decorated, they are urging the passersby to splurge. **Choice (2)**

31. "To let someone's hair down" is an old-fashioned informal expression which means to allow someone to behave much more freely than usual and enjoy himself. The expression "splurge" signifies spending (money) freely or extravagantly. Both these expressions clearly point out "bagful" i.e. a large assortment. **Choice (3)**

32. After correct re-arrangement the sentence should read, "Nelson Mandela shifted the beliefs of the people so they could heal the racial conflict and could run a new modern country in a modern way." **Choice (2)**

33. After correct re-arrangement the sentence should read, "The difference in the relationship between death and birth-rates on the one hand and development on the other affects not just the rate of population growth but the age structure of the population." **Choice (3)**

34. "A chip on somebody's shoulder" comes from the days when there was a formal declaration for a fight, punch-up etc. When a person disagreed strongly with someone over a personal belief, they would place a chip of wood on their shoulder and dare the other to knock it off. Once the other person did this signaled the beginning of the fight and thus punches were thrown.

We use this idiom to say that someone has a deeply held feeling or conviction about something (whether it annoys them or that they won't listen to any other opinion about it) and thus if you disagree then they will vehemently challenge you.

It is the choice that completes the given sentence in the most appropriate fashion. **Choice (3)**

35. "doozy" : It is a slang that indicates something Excellent i.e. the plot's a doozy.

"Whooper": It is in two ways. Firstly, a thing that is extremely or unusually large i.e. the novel is a 1,079 page whopper. Secondly, a gross or blatant lie i.e. he's telling whoppers.

"Carp": As a verb - To complain or find fault in a petty or disagreeable way: She carped about the poor service at the restaurant. As a Noun- A freshwater cyprinid fish (Cyprinus carpio) native to Eurasia that is widely bred in ponds for food.

"Snafu": As a Noun- a confused or chaotic state; a mess: An enormous amount of my time was devoted to untangling snafus. As an Adjective-in utter confusion or chaos: our refrigeration plant is snafu. As a Verb-throw (a situation) into chaos: you ignored his orders and snafued everything.

Only the expression "doozy" completes the sentence in an appropriate manner. **Choice (1)**

36. "Runt": a small pig or other animal, especially the smallest in a litter. In a derogatory sense it indicates an undersized or weak person.

"Beanpole": a stick for supporting bean plants. In an informal sense it refers to a tall, thin person.

"Doughboy": a boiled or deep-fried dumpling. However, in American informal English it refers to a United States infantryman, especially one in the First World War.

"Punk" : It is a slang that indicates a loud, fast-moving,

and aggressive form of rock music, popular in the late 1970s.

It is also for a worthless person (often used as a general term of abuse).

In the given sentence the word "Doughboy" has been used figuratively to refer to a person who is plump or fat like a boiled or deep-fried dumpling. **Choice (3)**

62. Given that $\frac{x-7}{(x-4)(x+9)} > 0$

$$\Rightarrow x > 7 \text{ or } -9 < x < 4$$

Thus smallest integer x is -8

Choice (4)

63. Total distance covered by the ball is :

$$350 + 2 \left(350 \times \frac{4}{5} + 350 \times \left(\frac{4}{5} \right)^2 + \dots + \infty \right)$$

$$= 350 + 2 \times 350 \left(\frac{\frac{4}{5}}{1 - \frac{4}{5}} \right) = 3150 \text{ m.}$$

Choice (3)

64. Since $\log_3 81 = 4$,

$$\text{hence } 4 \log_7 (x-8) = 4 \text{ or } x-8 = 7 \Rightarrow x = 15$$

Choice (4)

65. Number of ways of selecting 5 students

$$= {}^4C_3 \times {}^yC_2 + {}^4C_4 \times {}^4C_1$$

Total number of balls distributed is

$${}^4C_3 \times {}^yC_2 \times 3 + {}^4C_4 \times {}^yC_1 \times 4 = 368$$

$$\Rightarrow y = 8$$

Choice (4)

66. In the given word RIYADH, there are 2 vowels I & A

Statement (1) : Two vowels are arranged together, let A I = X where X represents a combination of 2 vowels together which can be arranged in 2! ways.

Now the number of ways in which we can arrange the letters are $5! \times 2! = 240$

Thus, statement 1 is not true.

Statement (2) : No two vowels occur together,

Total ways = $6! = 720$ ways

Total number of ways in which the letters can be arranged such that the two vowels are together = 240.

Thus, total number of ways in which the letters can be arranged when no two vowels are together = $720 - 240 = 480$

Thus statement (2) is not true

Choice (4)

67. Let the land (in hectares) with A be x thus, the land (in hectares) with B will be $(x + 15)$.

Production of farmer A = $20x$

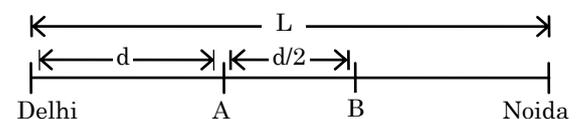
Production of farmer B = $30(x + 15)$

Now it is given that the difference in production is 530 thus, $30x + 450 - 20x = 530 \Rightarrow 10x = 80 \Rightarrow x = 8$

So, the number of bushes cultivated by A = $20 \times 8 = 160$

Choice (3)

68.



Let the distance between Delhi and Noida is L KM, when Shruti meets Krishna after one hour at point A, Krishna travels distance 'd' and Shruti travels distance $2L - d$.

So, the ratio of their speeds is $d : 2L - d$.

After half an hour Krishna travels distance $\frac{d}{2}$ as Krishna travels d k.m. in first one hour and Shruti travels $2L - \frac{5d}{2}$

$$\text{So, } \frac{d}{2L - d} = \frac{\frac{d}{2}}{2L - \frac{5d}{2}} \Rightarrow L = 2d$$

So, the time taken by Krishna to travel the distance between Delhi to Nodia is 2 hrs. **Choice (1)**

69. Let the selling price of each soap be Rs. 100 so, the cost price of first soap will be $\frac{100}{87} \times 100 \approx$ Rs. 115, the cost price of second soap will be $\frac{100}{123} \times 100 \approx$ 81 Rs. and that of third soap will be $\frac{100}{74} \times 100 \approx$ 35 Rs.

$$\text{Now average cost price} = \frac{115 + 81 + 35}{3} = \frac{331}{3} \approx 110 \text{ Rs.}$$

and average selling price = 100 Rs.

$$\text{Required percentage} = \frac{110 - 100}{100} \times 100 = 10\% \text{ (approx)}$$

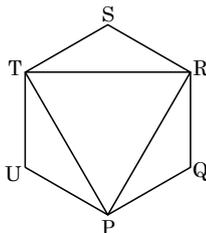
Choice (1)

70. Me and my roommate together can complete the assignment in 30 days and since, I am twice as efficient as my roommate then my roommate will take twice as much time as I do. Suppose time taken by me is x days and time taken by, my roommate will be 2x days,

$$\text{Now } \frac{1}{x} + \frac{1}{2x} = \frac{1}{30} \Rightarrow 90 = 2x \Rightarrow x = 45.$$

Thus, I will take 45 days & my roommate will take 90 days. **Choice (1)**

71. In the given figure let the side of the Hexagon be 'a' thus side PR is $\sqrt{3}a$.



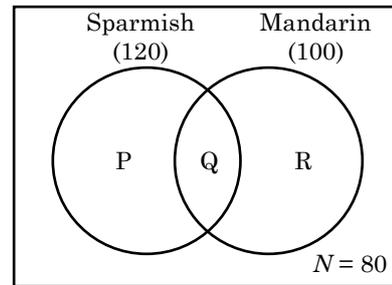
Now the area of hexagon = $6 \times \frac{\sqrt{3}}{4} a^2$ and the area

$$\text{triangle PRT} = \frac{\sqrt{3}}{4} (\sqrt{3}a)^2$$

$$\text{Thus the required ratio} = \frac{\frac{\sqrt{3}}{4} (\sqrt{3}a)^2}{6 \frac{\sqrt{3}}{4} a^2} = \frac{1}{2} = 0.5.$$

Choice (2)

72.



$$P + Q + R + N = 290$$

$$\& N = 80, Q + R = 100$$

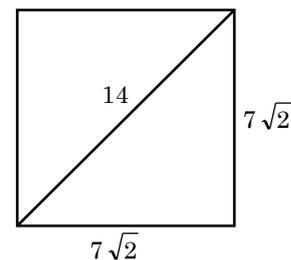
$$\text{Thus } P = 110$$

$$\text{Now if } P = 110, Q = 10 \& R = 90$$

So, the maximum people who study Spanish is 110 and the minimum people who study spanish will be $120 - 100 = 20$ **Choice (4)**

73. Volume of cylinder is $\pi r^2 h = 49\pi \times 15$

Rectangular solid is placed in cylinder in such a way that each of the corner of solid is tangent to cylindrical wall.



Diameter of Base is 14 thus, side of square is $7\sqrt{2}$

$$\text{So, the volume of rectangular solid is} = 12 \times 7\sqrt{2} \times 7\sqrt{2} = 12 \times 98$$

$$\text{Volume liquid is} = 49\pi \times 15 - 12 \times 98$$

$$= 147(5\pi - 8)$$

Choice (1)

74. Total number of arrangements of winners are = ${}^{15}P_3 = 15 \times 14 \times 13 = 2730$ **Choice (2)**

75. Sum of integers from 54 through 196 = sum of all integers from 1 to 196 - sum of all integers from 1 to 53

$$= \frac{196 \times 197}{2} - \frac{53 \times 54}{2}$$

$$19306 - 1431 = 17875$$

Choice (4)

76. Probability that committee has both sexes,

$$P = 1 - \frac{1}{2^n} - \frac{1}{2^n}$$

Probability there is at most one female student in the

$$\text{Committee} = \frac{1}{2^n} + n \left(\frac{1}{2} \right)^n$$

Probability that P and Q happen together means there is 1

$$\text{girl and } n - 1 \text{ boys in the committee} = n \left(\frac{1}{2} \right)^n$$

Given that P and Q are independent, hence probability that P and Q happen together = $P \times Q$

$$\text{Or } \left(1 - \frac{1}{2^n} - \frac{1}{2^n} \right) \left(\frac{1}{2^n} + n \left(\frac{1}{2} \right)^n \right) = n \left(\frac{1}{2} \right)^n$$

$$\Rightarrow 2^{n-1} = n + 1 \text{ or } n = 3. \quad \text{Choice (2)}$$

77. Total number of parking spaces are = $2d + 21 + 23 + 25$

$$+ \dots = 20 + \frac{16}{2} [42 + 15 \times 2]$$

$$= 20 + 576 \text{ k} = 596 \quad \text{Choice (3)}$$

78. It is a direct result that $3^{1/3}$ is the highest number.

We can write

$$\sqrt{2}, \sqrt[3]{3} \text{ \& } \sqrt[4]{4}$$

$$\text{as } (2)^{\frac{12}{2}}, (3)^{\frac{12}{3}} \text{ \& } (4)^{\frac{12}{4}} \Rightarrow 2^6, 3^4, 4^3$$

$$\Rightarrow 2^6 = 64, 3^4 = 81 \text{ \& } 4^3 = 64$$

clearly, the highest among these is 3^4 i.e. $\sqrt[3]{3}$

Choice (2)

79. No. of ways a candidate clears the cut off in all the sections is 1 and the no. of ways the candidate may or may not clean the cut of in 6 sections is 2^6 .

Thus the number of ways in which he fails to clean the cut off in at least are section is $64 - 1 = 63$ **Choice (4)**

80. $S = 4 + 44 + 444 + \dots$ n terms

$$S = \frac{4}{9} [9 + 99 + 999 + \dots]$$

$$S = \frac{4}{9} [(10 - 1) + (10^2 - 1) + (10^3 - 1) + \dots]$$

$$S = \frac{4}{9} [10 + 10^2 + 10^3 + \dots - n]$$

$$S = \frac{4}{9} \left[10 \frac{(10^4 - 1)}{9} - n \right]$$

$$S = \frac{40}{81} (10^n - 1) - \frac{4n}{9} \quad \text{Choice (3)}$$

81. The given two lines $6x - 8y = 15$ and $6x - 8y = -4$ are

$$\text{parallel lines } \therefore \frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$$

So, the distance between two parallel lines is side of

$$\text{square} = \frac{|c_2 - c_1|}{\sqrt{a^2 + b^2}} = \frac{|15 - (-4)|}{\sqrt{6^2 + 8^2}} = \frac{19}{10}$$

$$\therefore \text{Area of square is} = \left(\frac{19}{10} \right)^2 = 3.61 \quad \text{Choice (2)}$$

Solutions for questions 82 to 85:

82. CDB is two triangles ahead of GHF in clockwise direction and both GHF and CDB have alphabets in clockwise direction in their respective triangles. Following the same pattern EFD will be related to ABJ. **Choice (1)**

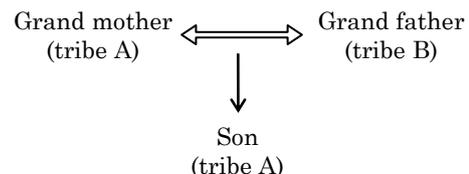
83. By observation, HNP & DLP are vertices of 2 different triangles. We are moving anti clock wise from HNP to DLP. Thus, we have to move anti clockwise from DLP. Also the answer has to start from P. Now only one option satisfies the pattern i.e. PJG. **Choice (2)**

84. The correct option will be EMDL. **Choice (3)**

85. By observation, BPM is not a triangle. Thus, correct answer will not form a triangle. Further BPM is almost opposite to GN. Similarly, FP is almost opposite to AK. Hence, the answer is FPO. **Choice (1)**

Solutions for questions 86 to 88:

86. Since it is mentioned in the question that a female will always remains in the same tribe. Thus, a female who is born in tribe B must have a mother in tribe B and if mother is from tribe B than the maternal grand mother will also be from tribe B. Thus, a female born in tribe B cannot have a maternal grand mother born in tribe B. But, A female born in tribe B can have a paternal grand mother born in tribe A.



Now when this son will be married to a female from tribe B, they will have a daughter, and her tribe will be B. Thus, only (b) statement is true. **Choice (2)**

87. If a boy is born in tribe B that means his wife must be from tribe A, thus his daughter will also be from tribe A. Hence, option (1) is rejected.

Similarly, his son will be from tribe A therefore his daughter-in-law will be from tribe (B), so option (2) is also rejected.

Now this boy's uncle will be from tribe B before marriage (same as that of his mother) but will become a member of tribe A if married.

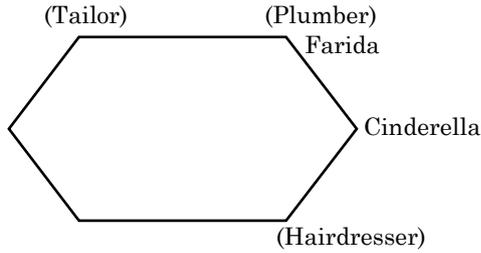
Thus, the uncle can be from any tribe. Hence option (3) is correct.

Option (4) is also incorrect \therefore if his son is divorced than he will again become a member of his mother's tribe i.e. tribe A. **Choice (3)**

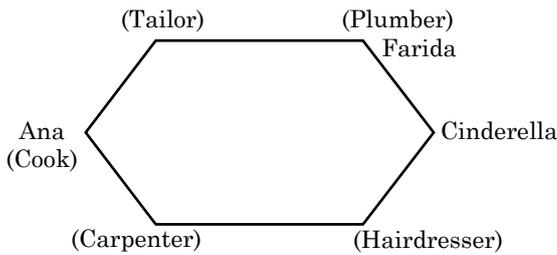
88. **Choice (3)**

Solutions for questions 89 to 92: As it is mentioned in the question Hairdresser and Cinderella are adjacent to each

other and Plumber is in the middle of Tailor and Cinderella in clockwise direction so, we can make the initial arrangement as follows:

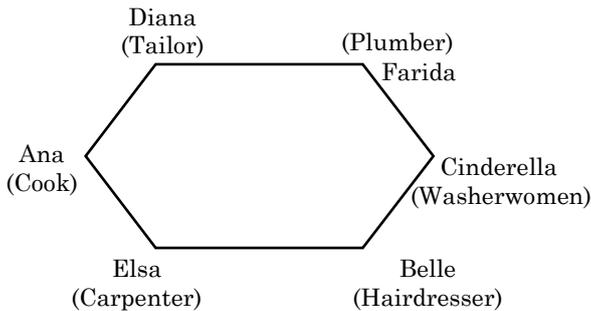


Further Ana is adjacent to Tailor and Cook is adjacent to Carpenter who is adjacent to Belle in an anticlockwise direction, Thus, using this information we can further complete the arrangement as follows.



Now as Elsa is adjacent to cook and since it is mentioned that Tailor is not adjacent to Elsa it means Tailor and Elsa are different identities.

∴ Elsa will be carpenter. In addition, Washerwomen is followed by Hairdresser in clockwise direction. Thus, the final arrangement will be:



- 89. The person who is at the same distance from Diana as that of Carpenter & Diana is Cinderella. **Choice (2)**
- 90. The other neighbour of cook is Diana. **Choice (2)**
- 91. The trades of Diana and Elsa are Tailor and Carpenter respectively. **Choice (1)**
- 92. Elsa is sitting opposite to Plumber. **Choice (2)**

Solutions for questions 93 to 95:

B E (brothers → thus males) cannot be selected together, F G will be together and as it is mentioned F and (his) only other colleague G. Thus F will be male and G will be female (∴ these is exactly female in each department). In addition, F & G are the only two people in Admin department. Further ∴ A is the husband of H, A will be male and H will be female also H earns more than A and A more the B & E. Thus, they can be are arranged in decreasing order of there salaries as:

$$G > H > A > F / B / E, > C$$

(max)

(min)

Further, the information can be tabulated as follows:

Name	A	B	C	E	F	G	H
Gender	(+)	(+)		(+)	(+)	(-)	
Department	Finance		Finance		Admin	Admin	
Salary			(Min)			(Max)	

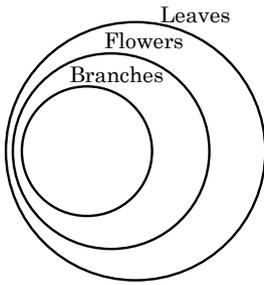
Now the two persons left (C) & (H) will be females and ∴ each department has exactly one female H works in logistics department, B & E do not work in same department.

Thus, the final tabulation is as follows:

Name	A	B	C	E	F	G	H
Gender	(+)	(+)	(-)	(+)	(+)	(-)	(-)
Department	Fin	Fin / log.	Finance	Log / Fin	Admin	Admin	Logistics
Salary			(Min)			(Max)	

- 93. The group of 3 works in finance department (None of the choices is justified)
- 94. Only option (1) is true. **Choice (1)**
- 95. In descending order, H is at the second position. **Choice (1)**
- 96. The diagram best describes the relationship of male's fathers & Doctors. As all fathers will be, males and doctors can be males or females. **Choice (3)**
- 97. In the first figure $6 + 2 = 8$ & $15 - 5 = 10$ Further, $8 \times 10 = 80$. Similarly, in the second figure $7 + 6 = 13$ & $9 - 4 = 5$ & $13 \times 5 = 65$. Following the same patterns in the third figure, $16 + 8 = 24$ & $13 - 11 = 2$, thus, $24 \times 2 = 48$ **Choice (2)**
- 98. Each term is obtained by multiplying the previous term by 3 and subtracting is $10 \times 3 - 4 = 26$, $26 \times 3 - 4 = 74$ $74 \times 3 - 4 = 218$ but 654 does not follow the same pattern as $218 \times 3 - 4 = 650$ Thus 654 is the wrong term in the given sequence **Choice (1)**
- 99. In this question there are three type of characters capital letters numbers and small letters. We can easily match these characters if use look carefully in each columns of the given table.
 - a - 1 - C
 - b - 3 - A
 - d - 2 - B
 - c - 4 - D
 Thus the small letters which will come in place of the "? ? ?" will be d, c, a and a. **Choice (4)**

100.



Choice (2)

Solutions for questions 101 to 103: A family of eight doctors visits a clinic everyday except Monday. There are four male father, mother's brother and two sons and four females mother, father's sister, and two daughters. Q is first and U is last to visit the clinic. Orthodontist visit right after lunch break and followed by R. S comes at 11 am so T comes between father and mother. Hence, Q is the father, T is the Radiologist, and V is the General Physician as V comes before 1 pm, but after the Radiologist. The mother is Gynecologist as gynecologist comes before lunch, so the younger son P who is Neurologist comes third after lunch and Urologist comes second after lunch. Therefore, from the given information following table can be formed:

Doctor	Timing	Specialization	Relation
Q	9 – 10	Cardiologist	Father
T	10 – 11	Radiologist	Mother's Brother
S	11 – 12	Gynecologist	Mother
V	12 – 1	General Physician	Father's Sister
	1 – 2	Lunch – Break	
W	2 – 3	Orthodontist	Elder Son
R	3 – 4	Urologist	Younger Daughter
P	4 – 5	Neurologist	Younger Son
U	5 – 6	Pediatrician	Elder Daughter

101. **Choice (2)**

102. **Choice (4)**

103. **Choice (4)**

Solution for questions 104 to 108:

104. Total number of students who passed from Anga Kingdom = 4760

Total number of students who appeared from Anga Kingdom = 28500

required percentage = $\frac{4760}{28500} \times 100 = 16.7\%$ **Choice (1)**

105. By simple observation, the lowest number of candidates who passed from all the kingdoms is in year 2015. **Choice (4)**

106. Pass percentage of Banga Kingdom in the given years can be calculated as follows:

$$2012 \Rightarrow \frac{640}{4000} \times 100 = 16\%$$

$$2013 \Rightarrow \frac{810}{4000} \times 100 = 18\%$$

$$2014 \Rightarrow \frac{1235}{6500} \times 100 = 19\%$$

$$2015 \Rightarrow \frac{660}{6000} \times 100 = 11\%$$

Thus the pass percentage is highest for year 2014.

Choice (3)

107. Total number of students who passed in year 2013 = 3570

Total students who appeared in year 2013 = 24000

$$\text{Ref. Percentage} = \frac{3570}{24000} \times 100 = 14.875\% \quad \text{Choice (2)}$$

108. By simple observation highest no. of candidates passed from Dwarka Kingdom. **Choice (4)**

Solution for questions 109 to 113:

Since the visibility of a brand is given by $\frac{\text{T-Shirts of a Brand}}{\text{Total T-Shirts in store}}$ It is wise to calculate the total T-shirts store.

	Store 1	Store 2	Store 3	Store 4	Store 5
Total T-Shirts	(450)	(440)	(280)	(350)	(480)

Now we can tabulate the visibility of each brand as follows:

	Store 1	Store 2	Store 3	Store 4	Store 5
Total	(450)	(440)	(280)	(350)	(480)
Astute	.24	.109	.325	.085	.166
Parament	.15	.26	.170	.280	.218
Smash	.128	.31	.107	.17	.225
Supreme	.28	.125	.28	.317	.135
Ultimate	.126	.19	.107	.137	.25

109. From the above table Supreme has the highest visibility across the stores. **Choice (2)**

110. From the above table Astute has the lowest visibility across the stores. **Choice (1)**

111. Total number of T-shirts owned by T-Nation = 2000, out of which 22% are size-14 i.e. 440.

Now, M-Size T-shirts in each of the stores 1, 2 and 5 are 10% of total T-shirts i.e. $45 + 44 + 48 = 137$

Remaining M-Size T-shirts = $440 - 137 = 303$

Now to minimize M-Size T-Shirts in store 4 we need to maximize the M-Size T-shirts in store 3 which can be 280.

Thus, the minimum M-Size T-Shirts in store 4 can be 23. **Choice (1)**

112. Total number of T-Shirts of Supreme across all stores = 438

Total number of T-Shirts across all stores = 2000

$$\text{Share of Supreme} = \frac{438}{2000} \times 100 = 21.9\% \quad \text{Choice (2)}$$

113. Total number of Smash T-Shirts = 420
 Total number of Ultimate T-Shirts = 341
 Required Percentage = $\frac{420 - 341}{341} \times 100 = 23.16\%$

Choice (4)

Solution for questions 114 to 118:

114. Total investment in Energy sector = 10300
 Total investment in financial services sector = 12100
 Required ratio 103 : 121 (approx.) **Choice (1)**
115. Absolute different between total DI & Total FI for the given sectors is:
 Energy $\Rightarrow 6600 - 3700 = 2900$,
 Financial services $\Rightarrow 7000 - 5100 = 1900$,
 Technology $\Rightarrow 16300 - 8200 = 8100$,
 Healthcare $\Rightarrow 14100 - 7500 = 6600$,
 Basic Materials $\Rightarrow 10000 - 5200 = 4800$,
 Communication services $\Rightarrow 6300 - 5000 = 1300$,
 Consumer cyclical $\Rightarrow 8600 - 4700 = 3900$,
 Consumer defensive $\Rightarrow 7300 - 5500 = 1800$,
 Real estate $\Rightarrow 13500 - 10100 = 2400$,
 Hence the highest difference is in technology sector.
Choice (1)
116. The average investment in DI will be highest for the year which has maximum investment in DI i.e. 2013.
Choice (1)
117. The second lowest investment in DI is in Consumer Cyclical.
Choice (1)
118. Total investment in DI = 66300
 Total investment in FI = 78400
 Thus, the required ratio is 2 : 2.36 (approx.)

Choice (2)

Solution for questions 119 to 123:

119. The average annual expense will be maximum for the company having highest total expense.
 By simple observation, the highest expense is company C.
Choice (3)
120. The average revenue will be highest for the year, which has highest revenue i.e. 2012.
Choice (2)
121. Revenue of C in 2025 = 1,20,000
 Revenue of C in 2012 = 1,80,000
 required percentage = $\frac{60000}{180} \times 100 = 33.33\%$
Choice (3)
122. Average revenue of A in 2011, 2012 and 2013
 $\Rightarrow \frac{(120 + 165 + 135)1000}{3} = 1,40,000$
 Average revenue of D in 2013, 2014 and 2015
 $\Rightarrow \frac{(165 + 150 + 165)1000}{3} = 1,60,000$
 Difference $\Rightarrow 1,60,000 - 1,40,000 = 20,000$ **Choice (3)**
123. Clearly in 2013 the profit is rising from -20 to 35 hence, the percentage change will be maximum in 2013.
Choice (2)