English Language

Directions (1 - 5): Read the passage carefully and answer the questions.

India's much-vaunted demographic dividend makes it a young country, with the bulk of the population under the age of 25 years, and expected to remain so for the next couple of decades. As per United Nations (UN) population estimates, almost 90% of the population was below the age of 60 years, and the proportion of working age population stood at 44% as of 2015. But behind this youthful façade, the population has been ageing by the day. The share of the elderly in total population has risen to 8.6% in 2011 compared with 5.6% in 1961. According to the 'Population Projections for India and States 2001-2026', this would increase to 12.4% by 2026.

Further, by 2050, every fifth Indian will be a sexagenarian compared with one in 12 now, bringing India to a position similar to today's developed world in terms of the share of the elderly in population. This comes at a time when India's joint family structure – the traditional old age support and one of the five pillars of pension planning as defined by the World Bank – is disintegrating. Ensuring the elderly have sustenance thus becomes an urgent imperative. The government has a window of opportunity to address this, with the demographics still favourable. Should this opportunity be lost, the fiscal cost of providing a basic pension to those without such a cover say three decades on would turn staggering indeed.

The situation the developed world faces today on social security for the elderly is due to two main factors – an increase in life expectancy and a decline in total fertility

rate (TFR). India, too, is slowly moving this way. Life expectancy in India stood at 68.3 for 2015 (up from 62.5 in 2000) as against the global average of 71.4 and the highest life expectancy of 83.7 for Japan. Also, the life expectancy at age 60 was up at 17.9 in 2015 vis-à-vis 16.5 in 2000. The country's TFR, which refers to the number of children born or likely to be born to a woman in her lifetime, has decreased drastically over the years. The UN Population Division considers a TFR of 2.1 children per woman as the replacement-level fertility rate. As per the latest UN projections, India is expected to reach this TFR level by 2025-30.

The combined effect of life expectancy and total fertility rates can be seen through the old age dependency ratio, or the total number of elderly aged 60 years and above to the total population aged 15-59 years (multiplied by 1,000). For India, the old age dependency ratio as per 2011 census data stood at 142 -- or one elderly person for 7 people of working age. As per population projections, the old age dependency ratio will rise to 192 by 2026, implying we would have only 5 people of working age for each elderly. What's more, the ratio varies across states – it is the highest for Kerala at 196. Higher fertility rate and lower life expectancy reduces the old age dependency ratio in some states.

To avoid the pitfalls of having an underdeveloped pension industry when the population is ageing, it is important that the government takes steps to develop the industry from now. Given the variations in terms of income groups and states, it is important that the government take a multipronged approach. For the elderly among indigent poor, the government could evaluate a targeted pension scheme (TPS). Using the Jan-

Dhan, Aadhar and Mobile – the JAM trinity, in place of the current structure of sparing and varied pension. Several factors have a bearing on the fiscal spending the government would need to incur. For instance, since females have been mostly dependent on their male counterparts, and have a longer life expectancy (69.9) – versus 66.9 for males – it is implied that they would need increased social support from the exchequer.

- 1. What does the data given in the first paragraph indicate?
- a) Population of India is increasing.
- b) The percentage of the elderly in the total population will rise.
- c) Majority of the Indian population belongs to the working age group.
- d) India is not in a position to exploit its demographic dividend.
- e) None of the above
- 2. Why does the author emphasises the need to safeguard the sustenance of the elderly?
- a) The elderly living in rural areas do not have access to quality medical services.
- b) The sedentary lifestyle of the elderly has made them vulnerable to many diseases.
- c) The cost of medical treatment is going to rise exponentially.
- d) Disintegration of joint family structure has made the future of the elderly vulnerable.
- e) None of the above
- 3. Which of the following is NOT a factor which has contributed to the problems related to social security in developed countries?

- 1. A decline in infant mortality rate
- 2. A decline in total fertility rate
- 3. An increase in life expectancy
- a) Only 1
- b) Only 2 and 3
- c) Only 1 and 3
- d) Only 1 and 2
- e) All 1, 2 and 3
- 4. As per the passage, which of the following statements is NOT true?
- a) The old age dependency ratio in India is uniform across all states.
- b) A TFR of 2.1 is called the replacement-level fertility rate.
- c) The life expectancy of Indians was higher in 2015 as compared to 2000.
- d) The old age dependency ratio of India is going to rise.
- e) None of the above
- 5. What are the steps suggested by the author to strengthen the pension industry?
- 1. Using the help of the private sector to improve the quality of rural healthcare.
- 2. Using JAM trinity to deliver pension.
- 3. Using a targeted pension scheme for the elderly among the poor.
- a) Only 1
- b) Only 2 and 3
- c) Only 1 and 3

d) Only 1 and 2	e) e		
e) All 1, 2 and 3	9. We killed loads of frogs by accident(a)/ but w subjected them(b)/ to the extreme (c)/ cold too fast.(d No error (e)		
Directions $(6-10)$: The given sentence has four parts. One part has an error. Choose the part with an error			
as the answer. If all are correct choose 5 [no error] as	a) a		
your answer.	b) b		
6. After the brief appearance before the waiting crowd, (a)/ he was taken (b)/ to the Governor chamber (c)/ for	c) c		
the swearing-in ceremony. (d)/ No error(e)	d) d		
a) a	e) e		
b) b	10. The mechanism helps explaining the mystery of some of the (a)/ massive ancient salt deposit found in the Earth's crust (b)/, such as the thick salt layer (c) underneath the Mediterranean Sea.(d)/ No error (e)		
c) c			
d) d			
e) e	a) a		
7. Building biogas plants will help to reduce (a)/	b) b		
greenhouse gas emissions by reducing (b)/ the consuming of conventional fuels (C)/ such as firewood	c) c		
and kerosene. (d) No error (e)	d) d		
a) a	e) e		
b) b	Directions (11 – 15): A sentence with one blank i		
c) c	given, indicating that something has been omitted Choose the word that best fits the blank		
d) d	appropriately.		
e) e	11. The board members have concerns about		
8. While I am (a)/ doing the houseworks, (b)/ I like to	the efficiency of the programme.		
listen to (c)/ music on the radio. (d) No error (e)	a) elevate		
a) a	b) prefer		
b) b	c) turning		
c) c	d) raised		
d) d	e) sorts		

12. Pollution in areas the railway station is	d) cleaner
much higher than areas around busy roads.	e) cleanses
a) surrounding	Directions $(16 - 22)$: In the following passage, some of
b) approach	the words have been left out and replaced by a blank
c) next	represented by an alphabet. Against each blank, five words are suggested, one of which fits the blank
d) away	grammatically and contextually. Choose the option providing the correct word that fits into the blank.
e) alone	Product managers are the glue that(A)
13. Industrial agriculture contributes to environmental	the many functions that touch a product: engineering,
devastation as animals in livestock climate	design, customer success, sales, marketing, operations,
warming methane.	finance, legal and more. Unlike product managers of the
a) built	past, who were(B) focused on execution and were measured by the on-time delivery of
b) creating	engineering projects, today's product manager is increasingly the mini-CEO of the product. They wear
c) construct	many hats, using abroad knowledge base to make trade-
d) emit	off decisions, and bring together cross-functional teams, ensuring(C) between diverse functions.
e) makes	The emergence of the mini-CEO product manager is(D) by changes in technology, development
14. Schools are being encouraged to set a target of eliminating their on 'single- use' plastic.	methodologies and how consumers purchase. While software-as-a-service products are becoming simpler for
a) reliance	customers, with modular features, they are increasingly
b) usage	(E) for product managers. Managers must now(F) multiple bundles, pricing
c) provisioned	tiers, dynamic pricing, upsell paths and pricing strategy. Life cycles are also becoming more complex, with
d) depend	expectations of new features, frequent improvements and upgrades after purchase. Further, the value of the
e) supports	surrounding ecosystem is growing: modern products are
15. Australia's beaches are more than those in many other parts of the world.	increasingly just one element in an ecosystem of related services and businesses. This has led to a (G) in responsibilities from business development and
a) cleared	marketing to product managers.
b) pristine	16. A
c) unspoiled	a) together

	b)	bind		c)	reflex
	c)	shows		d)	perplex
	d)	elaborate		e)	complex
	e)	hastens	21. F		
17. B				a)	overstate
	a)	sequentially		b)	oversee
	b)	mannerly		c)	overrate
	c)	quietly		d)	expected
	d)	primarily		e)	none of the above
	e)	liberally	22. G		
18. C				a)	hover
	a)	alignment		b)	grant
	b)	cordial		c)	distortion
	c)	relation		d)	shift
	d)	respective		e)	yet
	e)	speculative			23 – 26): A sentence is given in which
19. D					s are highlighted. Choose the option with words that need to be interchanged to
	a)	shown			sentence grammatically correct and If no change is required, mark E as your
	b)	produced	respon	_	ir no change is required, mark 2 as your
	c)	driven			fordability (A) has increased in the last
	d)	out			nd is expected to become better (C) due to tagnant (D) prices and higher (E) growth
	e)	grieved	in inco	omes.	
20. E			a)	C-D	
	a)	sophisticated		b)	A-B
	b)	simple		c)	B-C
			I		

- d) A-E
- e) No change required

24. If **technology** (**A**) magazines are to be **believed** (**B**), Artificial Intelligence (AI) **moral** (**C**) have to make **would** (**D**) choices in the very near **future** (**E**).

- a) A-B
 - b) C-D
 - c) A-C
 - d) B-D
 - e) No change required

25. While income **support** (**A**) to farmers is a welcome **waivers** (**B**), it is, like in the case of farm loan **relief** (**C**), not a **solution** (**D**) to the structural crisis **impacting** (**E**) Indian agriculture.

- a) C-E
 - b) A-D
 - c) B-C
 - d) D-E
 - e) No change required

26. For the last two **decades** (A), the Supreme Court has been **proactive** (B) in **empowering** (C) voters and in **infusing** (D) transparency in the **system** (E).

- a) C-D
 - b) A-E
 - c) B-C
 - d) A-B
 - e) No change required

Directions (27 – 30): In the following questions two columns are given containing three sentences/phrases each. In first column, sentences/phrases are A, B and C and in the second column the sentences/phrases are D, E and F. A sentence/phrase from the first column may or may not connect with another sentence/phrase from the second column to make a grammatically and contextually correct sentence. Each question has five options, four of which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. If none of the options given forms a correct sentence after combination, mark (e), i.e. "None of these" as your answer.

27.

Column A	Column B
(A) The company can afford to splurge because	(D) they have become more fluent and fun.
(B) Reading comprehension has improved as	(E) it has become increasingly prosperous.
(C) Entitlements established in a host of federal	(F) statutes may now become mandatory.

- a) A-F and B-D
 - b) B-E and C-F
 - c) B-F and C-D
 - d) A-D and C-E
 - e) None of these

28.

	T	1
Column A	Column B	e) None of these
(A) It was when Brian was a toddler that Connie	(D) who still live at home.	30. Column 1
(B) Her husband will watch their five children	(E) which live in poverty.	A. High out-of-pocket expenditure incurred during treatment keeps
(C) The real issue is the low scores posted by students	(F) decided to live healthier.	people in poverty
a) A-F and B-D b) B-E and C-F		B. Forest fire will make the ecosystem susceptible to exotic species,
c) B-F and C-D		C. In 1993, the Revised National TB Control
d) A-D and C-Ee) None of these		Programme (RNTCP) was launched,
29.		

umn 1	Column 2
enditure incurred	D. offering free diagnosis and treatment for patients rescuing them from otherwise sure death.
Forest fire will make	

the

vegetation.

E. for seven years

completing treatment.

F. which is detrimental to

natural

existing

- Column A Column B (A) People should hear about (D) cuts from a student's the schools' budget point of view. (B) I think one in 100 in 10 worrying about lemonade. years from that points (F) will still be living (C) If life fails to give you lemons, there's no point in that way.
- a) CE
 - AF b)

- c) AD and CE
- d) AE and BF
- CD and BE e)

Quantitative Aptitude

Direction (31 - 40): What will come in place of the question mark (?) in the following question?

- 31. $6/35 \times 17/48 \div 4/7 = ?$
- a) 11/36

- A-F and B-D a)
 - b) B-E and C-F
 - c) B-F and C-D
 - d) A-D and C-E

b) 7/33

c) 16/39

d) 11/32

e) 18/37

32.39.94 + 48.36 - 21.76 = ?

a) 63.64

b) 66x.54

c) 68.74

d) 69.59

e) 63.34

 $33.3 \times 4 + 18 \div 6 - 10 = ?$

a) 4

b) 5

c) 7

d) 6

e) 3

 $34.468 \div 4 \times 5 - 285 = ?$

a) 200

b) 300

c) 400

d) 45

e) 100

35.4/5 + 7/10 - 1/2 = ?

a) 2

b) 1

c) 3/10

d) 9/10

e) None of these

 $36. (36 + 16 \times 36 \div 9)/2 = ?$

a) 40

b) 50

c) 80

d) 100

e) None of these

37. $(24 \times 16 \div 15 + 32.4) \div ? = 4$

a) 18

b) 14.5

c) 12

d) 16.5

e) 15.5

38. $(21 \div 5) \times (12 \div 5) \div (42 \div 5) = ?$

a) 15/14

b) 5/8

c) 3/10

d) 8/25

e) 6/5

39. (0.3 + 0.9 + 0.06)(0.1 + 0.4 + 0.05) = ?

a) 0.936

b) 0.693

c) 0.369

d) 0.963

e) 0.639

40. $(4 \times 4 \times 4 \times 4)^4 \times (4 \times 4)^6 \div (4)^2 = (16)^7$

a) 12

b) 13

c) 16

d) 14

e) 18

Directions (41 - 45): What will come in place of the question mark (?) in the following series?

41. 24, 34, ?, 60, 76, 94

a) 40

b) 46

c) 48

d) 44

e) 42

42. 5, 7, 13, 25, 45, 75, ?

a) 117

b) 142

c) 120

d) 125

e) 104

43. 16, 8, 8, 12, 24, ?

a) 50

b) 70

c) 66

d) 60

e) 54

44. 19, 23, 31, 43, 59, ?

a) 84

b) 79

c) 80

d) 76

e) 72

45. 47, 43, 54, 50, 61, 57, ?

a) 72

b) 70

c) 65

d) 63

e) 68

46. A 100 liter of milk and water mixture contains 75% of milk. 20 liters of this mixture is taken out and replaced by water. If the price of the initial mixture was Rs 45/litre then what is the price of per liter of mixture after this operation? (water is free of cost)

a) Rs 42

b) Rs 36

c) Rs 50

d) Rs 46

e) Rs 40

47. Two partners invested Rs.2000 and Rs.1500 respectively for one year. If they decided to distribute the 60% of the profit such that one partner received Rs.60 more than other and rest of the amount is given to

charity, then what share of profit is received by partner who received large amount?

- a) Rs.400
- b) Rs.320
- c) Rs.240
- d) Rs.215
- e) None of these

48. A headphone was sold for a profit of 20%. The gain would have been 30% if its cost price was 5% less and it was sold for Rs 77 more. The cost price of the headphone is

- a) Rs 2000
- b) Rs 1800
- c) Rs 2200
- d) Rs 2400
- e) Rs 2100

49. Ajit is swimming in a river between two points A and B and he takes 2 hours to complete one round trip between the two points. If the speed of Ajit in still water is 16 km/hr and his upstream speed in the river is 12 km/hr then what is the distance between the points A and B?

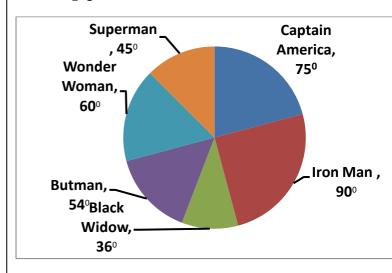
- a) 15 km
- b) 16 km
- c) 14 km
- d) 18 km
- e) 17 km

50. A tank has 5 inlet pipes each of which can fill the tank in 6 hours and 2 outlet pipes each of which can

empty a full tank in 4 hours. If all the pipes are open, how long does it take for the tank to be full?

- a) 100 min
- b) 120 min
- c) 150 min
- d) 180 min
- e) 160 min

Directions (51-55): Pie chart given below represents the number of person(in degrees) who like different superheroes. It is given that one person likes only one superhero unless specified in the question. Read the following instructions carefully and answer the following questions.



51. If the total number of persons who like different superheroes are 11280, then find the difference between number of persons who like Iron man and those who like superman?

- a) 2880
- b) 2820
- c) 1410
- d) 2730

e) 1490

52. If the total number of persons who like different superheroes are 2880, then find those who like black widow is what % less than those who like Butman?

a) 33 1/3%

b) 66 2/3%

c) 25%

d) 50%

e) 16 2/3%

53. If the total number of persons who like different superheroes are 10800, then find the average number of persons who like Wonder Woman, Butman and Captain America?

a) 1800

b) 1690

c) 1990

d) 1890

e) None of these

54. If the total number of persons who like different superheroes are 10800, then find how many do not like Captain America?

a) 2250

b) 8750

c) 6850

d) 6400

e) 8550

55. Find the difference in percentage between those who like Iron man and those who like black widow?

a) 25%

b) 15%

c) 10%

d) 5%

e) 12%

Directions (56-60): In the question, two equations I and II are given. You have to solve both the equations to establish the correct relation between x and y and choose the correct option.

56. I. $x^2 + 23x + 132 = 0$

II. $y^2 + 18y + 77 = 0$

a) x > y

b) x < y

c) x = y or the relationship cannot be established

d) $x \ge y$

e) $x \le y$

57. I. $2x^2 - 17x + 36 = 0$

II. $6y^2 - 43y + 77 = 0$

a) x > y

b) x < y

c) x = y or the relationship cannot be established

d) $x \ge y$

e) $x \le y$

58. I. 5x + 7y = 144

II. 7x + 5y = 144

a) x > y

b) x < y

c) x = y or the relationship cannot be established

d) $x \ge y$

e) $x \le y$

59. I. $x^2 - 40x + 391 = 0$

II. $y^2 = 529$

a) x > y

b) x < y

c) x = y or the relationship cannot be established

d) $x \ge y$

e) $x \le y$

60. I. $x^2 - 13x + 42 = 0$

II. $y^2 - 17y + 72 = 0$

a) x > y

b) x < y

c) x = y or the relationship cannot be established

d) $x \ge y$

e) $x \le y$

61. In an examination, a student scores 6 marks for every correct answer and loses 4 marks for every wrong answer. If he attempted 80 questions and obtained 310 marks, how many questions did he attempt correctly?

a) 59

b) 67

c) 63

d) 65

e) 61

62. Neha scored 1.2 times as many marks in Science as in Sanskrit and in Social Science she scored 20 more marks than Science. If she secured 85.5% marks in these three subjects out of a total 600 marks (in the given three subjects only), how much did she score in Social Science?

a) 194

b) 174

c) 170

d) 185

e) None of these

63. A is 6 year younger than B. The ratio between B's present age and C's present age is 12:5 respectively. If A's present age is twice C's present age, what is B's present age (in years)?

a) 30

b) 36

c) 42

d) 15

e) 24

64. The average height of four girls was recorded as 140 cm. If the average of the heights of three girls out of the four was 137 cm, what was the height of the forth girl?

a) 149 cm

b) 147 cm

c) 152 cm

d) 154 cm

e) none of these

- 65. The average monthly expenditure of a man for the first seven months is Rs. 140 and for the next five months it is Rs. 110. If he saves Rs. 330 in that years, his monthly average income is:
- a) Rs. 140
- b) Rs. 155
- c) Rs. 160
- d) Rs. 175
- e) None of these

Reasoning Ability

Directions (66 - 70): Study the information carefully and answer the questions given below:

- 6 persons A, B, C, D, E and F are standing in row-1 facing north. 6 persons P, Q, R, S, T and U are standing in row-2 facing south. Each person from row-1 is facing one of the persons from row-2. A is standing 2nd to the left of F, who is facing Q. Q is standing 2nd to the right of R. 2 persons are standing between P and S. S is facing C, who is standing 2nd to the left of B. D is facing neither T nor R.
- 66. How many persons are standing between P and T?
- a) 1
- b) 2
- c) 3
- d) 4
- e) 0
- 67. How many persons are standing between Q and R?
- a) 0
- b) 1
- c) 2

- d) 3
- e) 4
- 68. Who is sitting 2^{nd} to the right of D?
- a) A
- b) E
- c) C
- d) None of these
- e) No one
- 69. Who is facing the person standing to the immediate left of D?
- a) No one is standing to the immediate left of D
- b) P
- c) S
- d) T
- e) None of these
- 70. Number of persons standing to the right of __ are same.
- a) A and P
- b) B and S
- c) U and D
- d) R and F
- e) Q and C
- **Directions** (71 73): P is the father in law of U. O is the grandmother of V. R is wife of Q and had a son. T is the mother of R and was married to P. S is the husband of U.
- 71. How is S related to Q?
- a) sister in law

a) F64W

H3P K7R P15T W31V?

b) brother

c) brother in law

d) cousin b) E63W e) none of these c) F61U 72. What is the relation of O with R? d) G64Y a) mother e) F63X b) mother in law Direction (76 - 78): Read the following information carefully to answer the questions based on it. c) father Zara moved 65 km towards west then turned right and d) aunt moved 56 km. She then turned to east and moved 25 km then she took a right turn and moves 60 km. After that e) cannot be determined she turned left and moves 22 km and finally she turned 73. What is the relation of T with V? right and moves 76 km. a) mother in law 76. What is the shortest distance between starting and end point? b) grandson a) 65 km c) grand mother b) 72 km d) mother c) 76 km e) cannot be determined d) 82 km 74. If in a certain code language, 'BRAVADO' is coded as 'SZERENF', then how will 'RESPECT' be coded in the e) None of these same code language? 77. What is the total distance travelled by Zara in east a) VAWLIYX direction during the entire journey? b) XYLIWBV a) 47 km c) VAULIYX b) 112 km d) XYILWGV c) 87 km e) XYILWAV d) 90 km 75. Which of the following will be the next term of given e) None of these series?

- 78. What is the direction of end point with respect to the starting point?
- a) South-East
- b) North-West
- c) South-West
- d) North-East
- e) None of these
- 79. How many such pairs of letters are there in the word 'WOODCUTTER' each of which has as many letters between them in the word as in the English alphabet (Both forward and backward)?
- a) 4
- b) 6
- c) 5

d) 7

- e) None of these
- **Directions** (80 84): Answer the questions based on the information given below:

Nine persons live on different floors of a nine storey building. The bottommost floor is numbered 1 and topmost floor is numbered 9.

- T lives four floors above V. There are four floors below X. Number of floors below V is same as the number of floors above W. U is two floors above Q. S neither lives on an odd number floor nor above U. P and R live above S.
- 80. Who lives on the topmost floor?
- a) R
- b) T
- c) P

- d) None of these
- e) Can't be determined
- 81. How many persons live between S and W?
- a) Two
- b) Four
- c) Three
- d) Five
- e) None of these
- 82. Who lives immediately below X?
- a) V
- b) U
- c) W
- d) R
- e) None of these
- 83. If R lives below P, which among the following doesn't form a group?
- a) Q, V
- b) U, W
- c) X, T
- d) W, P
- e) T, W
- 84. Which among the following statement(s) is/are true?
- a) Q lives five floors below W.
- b) X live two floors below T.
- c) S lives on fourth floor.
- d) W lives below U.

- 87. Who joined the company on 12th June? e) None is true.
- 85. 6 persons A, B, C, D, E and F have different heights. A is taller than only B and C. only 1 person is taller than B but shorter than F. E is not the tallest then who is the
- 2nd shortest person?
- a) B
- b) C
- c) D
- d) E
- e) F

Directions (86 - 90): Study the following information and answer the questions followed:

8 persons A, B, C, D, E, F, G and H joined the company in different months of the same year among January, April, June and August, not necessarily in the same order. Each one joined on different dates and joined either on 12th or 23rd of the month.

Only three persons joined the company between A and F, who joined on 23rd of the month having even number of days. A and D joined the company in the same month. Only two persons joined the company between F and B. B and E joined the company in the same month. Neither C nor H joined the company in June. G and H joined the company on different dates.

- 86. Who joined the company in the same month as that of F?
- a) C
- b) D
- c) E
- d) G
- e) H

- a) A
- b) C
- c) B
- d) E
- e) G
- 88. How many persons joined the company after G?
- a) 5
- b) 2
- c) 1
- d) 3
- e) 4
- 89. Who joined the company in the same month as that of H?
- a) A
- b) C
- c) F
- d) E
- e) D
- 90. How many persons joined the company between C and D?
- a) 5
- b) 2
- c) 1
- d) 4

Directions (91 - 95): In each question below, some statements are given followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows/follow from the given statements, disregarding commonly known facts.

91. Statements:

No litchi is banana.

Only a few dates are litchi.

No apple is banana.

Conclusions:

- I. Some apple are dates.
- II. Some dates are not banana.
- a) If only conclusion I follows.
- b) If only conclusion II follows.
- c) If either conclusion I or II follows.
- d) If neither conclusion I nor II follows.
- e) If both conclusions I and II follow.
- 92. Statements:

No litchi is banana.

Only a few dates are litchi.

No apple is banana.

Conclusions:

- I. Some banana are dates.
- II. Some litchi are not dates.
- III. All litchi are apple.

- a) Only I follows
- b) Only I and II follows
- c) Only III follows
- d) None of these follows
- e) All of these follows
- 93. Statements:

All cats are running.

Only a few rats are tiger.

No tigers are running.

Conclusions:

- I. All rats are running.
- II. The rats which are tiger can never be running.
- a) If only conclusion I follows.
- b) If only conclusion II follows.
- c) If either conclusion I or II follows.
- d) If neither conclusion I nor II follows.
- e) If both conclusions I and II follow.
- 94. Statements:

All cats are running.

Only a few rats are tiger.

No tigers are running.

Conclusions:

- I. All tigers are cats.
- II. Some rats are cats.
- a) If only conclusion I follows.

b) If only conclusion II follows. c) 1 c) If either conclusion I or II follows. d) 0 d) If neither conclusion I nor II follows. e) 5 e) If both conclusions I and II follow. 97. How many persons live below N? 95. Statements: a) Two A few bikes are motors. b) Three Only few motors are bicycles. c) Four No bicycles are buses. d) Five Conclusions: e) Six 98. Who lives in between E and S? I. No buses are motors. a) A and N II. Some bikes can be bicycles. a) Only conclusion II follows b) T b) Neither conclusion I nor conclusion II follows c) H c) Only conclusion I follows d) T and H d) Both conclusion I and conclusion II follow. e) None of the above e) None of the above 99. Who lives on the floor immediately above N? Directions (96 - 100): Study the following information a) H and answer the questions given below: b) S There are eight floors in a building from numbered from c) T 0 to 7 from ground floor to the top floor respectively. A lives on floor no. 4. There are two floors in between A d) G and B. G lives immediately below B. There are two e) B floors in between G and E. There is one floor in between E and N. There are two floors in between N and T. S 100. Which of the following is true? lives immediately below T. H lives below N. a) S lives on floor no. 2. 96. On which floor does H live? b) N lives below floor no. 5. a) 3

b) 2

c) T lives below floor no. 5.

d) G lives above floor no. 6.

e) All the statements are true.

Answer and Explanation

English Language

1. Answer: B)

(b) is the right answer. Refer to the lines: *The share of the elderly in total population has risen to* 8.6% *in* 2011 compared with 5.6% in 1961. According to the 'Population Projections for India and States 2001-2026', this would increase to 12.4% by 2026. The first paragraph states that the percentage of elderly in the total population will rise to 12.4% by 2026.

A is incorrect. The first paragraph does not talk about Indian population.

C is incorrect. Refer to the lines: As per United Nations (UN) population estimates, almost 90% of the population was below the age of 60 years, and the proportion of working age population stood at 44% as of 2015. 44% does not constitute majority.

D is incorrect. The paragraph does not comment on India's position to leverage its demographic dividend.

2. Answer: D)

(d) is the right answer. Refer to the lines: *This comes at a time when India's joint family structure – the traditional old age support and one of the five pillars of pension planning as defined by the World Bank – is disintegrating. Ensuring the elderly have sustenance thus becomes an urgent imperative.* The second paragraph of the passage states that the joint family structure was the traditional old age support of the elderly and it is disintegrating. This makes it necessary to safeguard the sustenance of the elderly. The other options have not been stated in the passage.

3. Answer: A)

(a) is the right answer. Refer to the lines: *The situation* the developed world faces today on social security for the elderly is due to two main factors — an increase in life expectancy and a decline in total fertility rate (TFR). India, too, is slowly moving this way. The passage does not state that a decline in infant mortality rate is also a factor.

4. Answer: A)

(a) is the right answer. Refer to the lines: *What's more,* the ratio varies across states – it is the highest for Kerala at 196. Thus, the ratio is not uniform.

B is true. Refer to the lines: *The UN Population Division* considers a TFR of 2.1 children per woman as the replacement-level fertility rate.

C is true. Refer to the lines: Life expectancy in India stood at 68.3 for 2015 (up from 62.5 in 2000) as against the global average of 71.4 and the highest life expectancy of 83.7 for Japan.

D is true. Refer to the lines: As per population projections, the old age dependency ratio will rise to 192 by 2026, implying we would have only 5 people of working age for each elderly.

5. Answer: B)

(b) is the right answer.

2 is correct. Refer to the lines: *Using the Jan-Dhan, Aadhar and Mobile – the JAM trinity, in place of the current structure of sparing and varied pension.*

3 is correct. Refer to the lines: Given the variations in terms of income groups and states, it is important that the government take a multipronged approach. For the elderly among indigent poor, the government could evaluate a targeted pension scheme (TPS).

1 is incorrect. The passage does not comment on the role of the private sector.

6. Answer: C)

It should be Governor's chamber- as possession is denoted using an-- apostrophe.

7. Answer: C)

Consumption will be used in place of **consuming** as we need a noun after the verb **reduce.**

Here the word **Consumption** fulfils the desired purpose.

8. Answer: B)

housework should be used in place of **houseworks** as it is an uncountable noun, it remains as a singular.

9. Answer: B)

In the second part of the sentence the word 'but' should be replaced with the word 'because' as the reason of the action is mentioned in the later part.

10. Answer: B)

In the second part of the sentence the plural form of the word 'deposit', i.e. 'deposits' should have been written as the word 'some' is used to express 'more than one'.

11. Answer: D)

To raise a concern means to state those things that you believe could become problems. Since the phrase appropriately fits in the context of the sentence, "raised" is the correct answer. Also, note that the blank is preceded by the verb 'have', and only a verb in the past

participle form can be used after it to form a present perfect tense. Thus, option D is the correct answer.

12. Answer: A)

We need a word in the blank which describes an area with relation to the railway station where the pollution can be observed. "Next" would require the preposition 'to' after it, hence can be eliminated. Similarly, "away" would require the preposition "from" after it. Only "surrounding" fits perfectly in the blank, implying the sense of areas encircling the railway station. Thus, option A is the correct answer.

13. Answer: D)

Methane is a gas. So, the most appropriate words that could be used with it are "release" or emit. Cattle do not built, construct or make gas, they emit it. Thus, option D is the correct answer. The present participle verb "creating" would be grammatically incorrect in the blank

14. Answer: A)

As the name suggests, "single- use" plastic is the one which can be used only once, i.e. the disposable plastics. Logically speaking, schools should encourage to eliminate their dependency on such plastics. "Usage" does not fit as it would take the preposition "of" after it. "Depend" is a verb and we would require the noun form "dependency" to make the sentence correct. Thus, "reliance", which means dependency, is the correct answer.

15. Answer: B)

The usage of "more" before the blank and "than" after it indicates comparison. We, thus, need an adjective which can be made comparative by adding "more" before it. This eliminates options E and D. "Cleaner" itself is a comparative adjective and cannot take "more" before it. Among rest of the options, "pristine" is the most

appropriate as it means clean and fresh. Thus, option B is the correct answer.

16. Answer: B)

A verb is required in its plural form in the given blank. Therefore, options a), c) and e) are eliminated. The sentence compares the managers to glue and hence, 'bind' would be the right choice. The answer is option b).

17. Answer: D)

The given options are all adverbs and the adjective 'focused' can be modified with the adverb 'primarily' which would then refer to the main task a product manager was 'mainly' concerned with. None of the other options can lend a suitable meaning to the sentence when used in the blank. Hence, the answer is option d).

18. Answer: A)

The sentence given here talks about the various roles or functions a manager performs. A noun is required in the blank; hence, options b), d) and e) are eliminated. The word 'alignment' will fit in the blank as it points to the balance between the functions performed. Hence, the answer is option a).

19. Answer: C)

The sentence talks about the emergence of a "mini-CEO" product manager. Driven- cause to happen or develop; grieve- feel intense sorrow. The word 'driven' would fit well in the blank, both contextually and grammatically. It would refer to what caused the emergence to happen. Hence, the answer is option c).

20. Answer: E)

The sentence starts with 'while' and thus compares the software with respect to the user and the manager; for the user it is simpler, so, for the manager it should be 'complex'. Hence, the answer is option e).

21. Answer: B)

The sentence prior to the concerned sentence, talks about the complex nature of the products for a manager. This sentence now elaborates on what the complexities and the responsibilities are. Overstate- exaggerate; oversee-supervise, especially in an official capacity; overrate-have a higher opinion of (someone or something) than is deserved. The word that fits in the blank is 'oversee'; it fits both grammatically and contextually. Hence, the answer is option b).

22. Answer: D)

The phrase 'this has led' hints that the sentence brings to light the effect of some activity or event. The word 'shift' would fit in the blank as this would refer to the transfer of responsibilities from business development and marketing to product managers. Other words do not fit into the context of the sentence. Hence, the answer is option d).

23. Answer: E)

The sentence is grammatically correct and meaningful in the given form. Option E is the right answer.

24. Answer: B)

Since a noun 'choices' follows D, it needs to be preceded by an adjective. 'Would' is not an adjective. 'Moral' is the right fit here, to indicate the type of choices to be made by Artificial Intelligence in the future. 'Would' can be placed at C to make the sentence grammatically correct. Option B is the right answer.

25. Answer: C)

The sentence tells us that income support to farmers is not a solution to the crisis in Indian agriculture. At B, 'waivers' is incorrect as a singular noun is needed due to the use of the article 'a'. 'Waivers' is better suited at C, to complete the 'farm loan waivers' - another measure directed towards farmers - to fit in the context of the sentence. 'Relief' can fit at B, as it can mean 'help' or 'aid'. Option C is the right answer.

26. Answer: E)

The sentence is grammatically correct and meaningful in the given form. Option E is the right answer.

27. Answer: E)

Out of all the given options, combination of sentences (A) and (E) together as well as combination of sentences (C) and (F) together makes a grammatically and contextually correct sentence. (B) and (D) would have formed a correct pair if (D) had started with the phrase 'it has' instead of 'they have'; using 'they have' violates the subject-verb-agreement rule. Since no option contains the correct pairs (AE) & (CF), option (e) would be the correct answer.

The correct sentences will be as follows:

The company can afford to splurge because it has become increasingly prosperous.

Reading comprehension has improved as <u>it has</u> become more fluent and fun. ('they have' is incorrect)

Entitlements established in a host of federal statutes may now become mandatory.

28. Answer: A)

Out of all the given options, combination of sentences (A) and (F) together as well as combination of sentences (B) and (D) together makes a grammatically and contextually correct sentence. (C) & (E) would have formed a correct pair if 'who' was used in place of 'which' in (E); for referring to people we use 'who' and avoid using the pronoun 'which'. Option a) contains the correct pairs; hence, option (a) is the correct answer.

The correct sentences will be as follows:

It was when Brian was a toddler that Connie decided to live healthier.

Her husband will watch their five children who still live at home.

The real issue is the low scores posted by students who live in poverty. ('which' is incorrect)

29. Answer: D)

Out of all the given options, combination of sentences (A) and (D) together as well as combination of sentences (C) and (E) together makes a grammatically and contextually correct sentence. (C) & (F) would have formed a correct pair if 'points' was replaced with 'point on'. As, option d) contains the correct pairs, it is the correct answer.

The correct sentences will be as follows:

People should hear about the schools' budget cuts from a student's point of view.

I think one in 100 in 10 years from that <u>point on</u> will still be living that way. ('points' is incorrect)

If life fails to give you lemons, there's no point in worrying about lemonade.

30. Answer: D)

AE, BF and CD are the correct pairs. AE - A tells us that the expenditure of treatment keeps people in poverty; E tells us how long. BF - B tells us that forest fire makes the ecosystems vulnerable to exotic species; F tells us the effect on existing natural vegetation. CD - C tells us when a TB control programme was launched; D tells us what the program did. Option D is the right answer.

Quantitative Aptitude

31. Answer: D)

$$\frac{6}{35} \times 1\frac{7}{48} \div \frac{4}{7} = ?$$

$$? = \frac{6}{35} \times \frac{55}{48} \times \frac{7}{4}$$

$$? = \frac{11}{32}$$

32. Answer: B)

$$39.94 + 48.36 - 21.76 = ?$$

$$? = 88.30 - 21.76$$

$$? = 66.54$$

33. Answer: B)

$$3 \times 4 + 18 \div 6 - 10 = ?$$

$$? = 3 \times 4 + \frac{18}{6} - 10$$

$$? = 12 + 3 - 10$$

$$? = 15 - 10 = 5$$

34. Answer: B)

$$468 \div 4 \times 5 - 285 = ?$$

$$? = \frac{468}{4} \times 5 - 285$$

$$? = 117 \times 5 - 285$$

$$? = 585 - 285 = 300$$

35. Answer: B)

$$? = \frac{4}{5} + \frac{7}{10} - \frac{1}{2}$$
$$? = \frac{8 + 7 - 5}{10}$$

$$? = \frac{8+7-5}{10}$$

$$? = \frac{10}{10} = 1$$

36. Answer: B)

$$\frac{36+16\times36\div9}{2}=?$$

$$? = \frac{36 + 16 \times 36 \times \frac{1}{9}}{2}$$

$$? = \frac{36+16\times4}{2}$$

$$? = \frac{36 + 64}{2}$$

$$? = \frac{100}{2} = 50$$

37. Answer: B)

$$(24 \times 16)/15 + 32.4 \div ? = 4$$

$$25.6 + 32.4 \div ? = 4$$

$$58 \div ? = 4$$

$$? = 58/4 = 14.5$$

38. Answer: E)

$$(21/5 \times 12/5) / 42/5 = 21/5 \times 12/5 \times 5/42 = 6/5$$

39. Answer: B)

$$(0.3 + 0.9 + 0.06)(0.1 + 0.4 + 0.05) = ?$$

 \Rightarrow 1.26 × 0.55 = 0.693

40. Answer: B)

Tricks:- In case of multiplication power added but in case of division power subtracted

$$(4)^{16} \times (4)^{12} \div (4)^2 = 4^{16+12-2} ---> (4)^{26} = (4^2)^{13} = 16^{13}$$

41. Answer: B)

$$5^2 - 1 = 24$$

$$6^2 - 2 = 34$$

$$7^2 - 3 = 46$$

$$8^2 - 4 = 60$$

$$9^2 - 5 = 76$$

$$10^2 - 6 = 94$$

42. Answer: A)

$$5 + 1 \times 2 = 7$$

$$7 + 2 \times 3 = 13$$

$$13 + 3 \times 4 = 25$$

$$25 + 4 \times 5 = 45$$

$$45 + 5 \times 6 = 75$$

$$75 + 6 \times 7 = 117$$

43. Answer: D)

$$16 \times 0.5 = 8$$

$$8 \times 1 = 8$$

$$8 \times 1.5 = 12$$

$$12 \times 2 = 24$$

$$24 \times 2.5 = 60$$

44. Answer: B)

$$19+1\times 4=23$$

$$23 + 2 \times 4 = 31$$

$$31 + 3 \times 4 = 43$$

$$43 + 4 \times 4 = 59$$

$$59 + 5 \times 4 = 79$$

45. Answer: E)

$$47 - 4 = 43$$

$$43 + 11 = 54$$

$$54 - 4 = 50$$

$$50 + 11 = 61$$

$$61 - 4 = 57$$

$$57 + 11 = 68$$

46. Answer: B)

Volume of water in the initial mixture = 25 liter

Volume of milk in the initial mixture = 75 liter

Volume of milk in 20 liter of mixture = (20 X 3/4) liter = 15 liter

Volume of milk in the mixture after replacing 20 liters of mixture with water = (75 - 15) liter = 60 liter

Volume of water in the mixture = 40 liter

Now water is free of cost, so value of mixture is proportional to percentage of milk available in the solution.

So, new price = $45 \times 60/75 = \text{Rs } 36/\text{litre}$

47. Answer: C)

Let a and b are two partners and p is total profit.

Investment ratio, a: b = 2000: 1500 = 4: 3

Profit ratio, a: b = 4: 3

According to the question,

$$60 = ((4 - 3)/7) \times (60/100) \times p$$

$$p = 700$$

Share of $a = (4/7) \times (60/100) \times 700 = Rs.240$

48. Answer: C)

Let the cost price of headphone be Rs P. then, selling price = 1.2P

New CP = 0.95P, new SP = 1.2P + 77

New profit =
$$1.2P + 77 - 0.95P = 0.25P + 77$$

According to the question, the new profit is 30%.

Hence,
$$(0.25P + 77)/0.95P \times 100 = 30$$

$$=> 25P + 7700 = 28.5P$$

$$=> 3.5P = 7700$$

$$=> P = Rs 2200$$

49. Answer: A)

Speed of Ajit in still water = 16 km/hr

And his speed upstream = 12 km/hr

Hence speed of river water = 16 - 12 = 4 km/hr

Therefore his downstream speed = 16 + 4 = 20 km/hr

Let the distance between points A and B = d km

Hence, d/12 + d/20 = 2

$$=> 8d/60 = 2$$

$$=> d = 15 \text{ km}$$

50. Answer: D)

Each inlet pipe can fill $1/6^{th}$ part of the tank in one hour and each outlet pipe can empty $1/4^{th}$ part of tank in one hour.

Since there are 5 inlet pipes and 2 out let pipes hence part of tank filled in one hour = $5 \times 1/6 - 2 \times 1/4 = 1/3$

Hence total tank will be filled in 3 hours.

51. Answer: C)

Number of persons who like Iron man = $\frac{90}{360} \times 11280 = 2820$ Number of persons who like superman = $\frac{45}{360} \times 11280 = 1410$ Required difference = 2820 - 1410 = 1410

52. Answer: A)

Number of persons who like black widow = $\frac{36}{360} \times 2880 = 288$ Number of persons who like batman = $\frac{54}{360} \times 2880 = 432$ Required % = $\frac{432-288}{432} \times 100 = 33\frac{1}{2}$ %

Or

Required
$$\% = \frac{54-36}{54} \times 100 = 33\frac{1}{3}\%$$

53. Answer: D)

Required Average =
$$\frac{1}{3} \left[\frac{60}{360} + \frac{75}{360} + \frac{54}{360} \right] \times 10800$$

 $\frac{1}{3} \left[\frac{189}{360} \right] \times 10800 = 1890$

54. Answer: E)

Number of person who do not like Captain America = $\frac{360-75}{360} \times 10800 = 8550$

55. Answer: B)

% of people who like Iron man = $\frac{90}{360} \times 100 = 25\%$ % of people who like black widow = $\frac{36}{360} \times 100 = 10\%$ Required difference = 25 - 10 = 15%

56. Answer: E)

From I:

$$x^2 + 23x + 132 = 0$$

$$x^2 + 11x + 12x + 132 = 0$$

$$x(x+11)+12(x+11)=0$$

$$(x + 11)(x + 12) = 0$$

$$x = -11, -12$$

From II:

$$y^2 + 18y + 77 = 0$$

$$y^2 + 7y + 11y + 77 = 0$$

$$y(y + 7) + 11(y + 7) = 0$$

$$(y+7)(y+11)=0$$

$$y = -7, -11$$

57. Answer: A)

From I:

$$2x^2 - 17x + 36 = 0$$

$$2x^2 - 8x - 9x + 36 = 0$$

$$2x(x-4) - 9(x-4) = 0$$

$$(2x-9)(x-4)=0$$

$$x = 9/2, 4$$

From II:

$$6y^2 - 43y + 77 = 0$$

$$6y^2 - 21y - 22y + 77 = 0$$

$$3y(2y-7) - 11(2y-7) = 0$$

$$(3y - 11)(2y - 7) = 0$$

y = 11/3, 7/2

58. Answer: C)

From I:

$$5x + 7y = 144$$

$$x = (144 - 7y)/5$$

From II:

$$7x + 5y = 144$$

$$x = (144 - 5y)/7$$

From I and II, we get

$$(144 - 7y)/5 = (144 - 5y)/7$$

$$1008 - 49y = 720 - 25y$$

$$24y = 288, y = 12$$

So,
$$x = (144 - 7 \times 12)/5 = 12$$

59. Answer: C)

From I:

$$x^2 - 40x + 391 = 0$$

$$x^2 - 17x - 23x + 391 = 0$$

$$x(x-17)-23(x-17)=0$$

$$(x-17)(x-23)=0$$

$$x = 23, 17$$

From II:

$$y^2 = 529$$

$$y = 23, -23$$

From I:

$$x^2 - 13x + 42 = 0$$

$$x^2 - 6x - 7x + 42 = 0$$

$$x(x-6)-7(x-6)=0$$

$$(x-6)(x-7)=0$$

$$x = 6, 7$$

From II:

$$y^2 - 17y + 72 = 0$$

$$y^2 - 9y - 8y + 72 = 0$$

$$y(y-9) - 8(y-9) = 0$$

$$(y-9)(y-8)=0$$

$$y = 9, 8$$

61. Answer: C)

Let the correct questions be x

Therefore incorrect questions are (80 - x)

According to the question

$$6x - 4(80 - x) = 310$$

$$6x - 320 + 4x = 310$$

$$10x = 310 + 320$$

$$x = 63$$

62. Answer: A)

Let marks scored in Sanskrit be x

Marks in science = 1.2x

Marks in social science = 20 + 1.2x

Total marks scored by Neha = 85.5% of 600 = 513

Thus x + 1.2x + 20 + 1.2x = 513

$$3.4x + 20 = 513$$

$$x = 145$$

Thus marks scored in social science = 20 + 1.2x = 194

63. Answer: B)

Let the present age of B and C be 12X and 5X respectively.

$$A = 2C$$
(Given)

$$A = 10X$$

According to the question:

$$A = B - 6$$
 (Given)

$$10X = 12X - 6$$

$$X = 3$$

B's present age:

$$B = 12X = 12 \times 3 = 36$$
 years

64. Answer: A)

Total height of 4 girls = 140*4 = 560 cm

Total height of 3 girls = 137*3 = 411 cm

so Height of forth girl = 560-411 = 149 cm

65. Answer: B)

Average expenditure of man for 1^{st} seven months = Rs. 140

Thus, total expenditure of man for 1^{st} seven months = Rs. $(140 \times 7) = \text{Rs}$. 980

Also, average expenditure of man for last five months = Rs. 110

Thus, total expenditure of man for last five months = Rs. $(110 \times 5) = \text{Rs.} 550$

Therefore, total expenditure of that year = Rs. (980 + 550) = Rs. 1530

His annual savings = Rs. 330

Hence, his annual income = Rs. (1530 + 330) = Rs. 1860

: His monthly average income = 1860/12 = Rs. 155

Reasoning Ability

(66-70): Common Explanation:

A is standing 2^{nd} to the left of F, who is facing Q.

Q is standing 2^{nd} to the right of R.

Case 1: -

____ Q_____R_

____ A ____ F ____

Case 2: -

Q R

A F

2 persons are standing between P and S.

S is facing C, who is standing 2nd to the left of B.

Case 1: -

______<u>P</u>_____<u>Q</u>___<u>S</u>____R

___ A __ F C ___

Case 2: -

<u>P Q S R </u>

<u>A</u> <u>F</u> <u>C</u> <u>B</u>

Case 1 is invalid.

Continuing with case 2:

D is facing neither T nor R.

Final solution:

P U Q S

<u>A</u> <u>D</u> <u>F</u> <u>C</u> <u>B</u>

66. Answer: D)

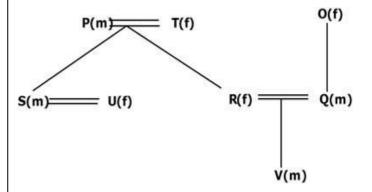
67. Answer: B)

68. Answer: C)

69. Answer: B)

70. Answer: E)

(71-73): Common Explanation:



71. Answer: C)

72. Answer: B)

73. Answer: C)

74. Answer: E)

The code language works in the following way:

$$B + 4 = F$$

$$R - 4 = N$$

$$A + 4 = E$$

$$V - 4 = R$$

$$A + 4 = E$$

$$D - 4 = Z$$

$$O + 4 = S$$

BRAVADO → FNEREZS → SZERENF

Similarly, RESPECT \rightarrow VAWLIYX \rightarrow XYILWAV

75. Answer: E)

We have three different series in above case:

First letters of the series follow the below mentioned pattern:

H, K, P, W,
$$\mathbf{F}$$
 (+3, +5, +7, +9)

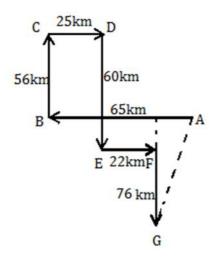
Second position of each term is a numeric value which follows the below mentioned pattern:

Third letters of the series follow the below mentioned pattern:

$$P, R, T, V, X (+2, +2, +2, +2)$$

Thus, required next combination = F63X

(76-78): Common Explanation:



76. Answer: D)

In the Pythagoras Triangle:

Height =
$$76 + (60 - 56) = 80 \text{ km}$$

Base =
$$65 - (25 + 22) = 18 \text{ km}$$

$$AG \times AG = 80 \times 80 + 18 \times 18$$

$$AG \times AG = 6724 \text{ km}$$

$$AG = 82 \text{ km}$$

77. Answer: A)

Total distance travelled by Zara in east direction = 25 + 22 = 47 km

78. Answer: C)

Clearly, point G is to the south-west of point A.

79. Answer: C)

	Letters in the word	Letters in the alphabet
Forward	W <u>O</u> O D C U <u>T</u> T E R	
	W O O D C U T T E R	<u>O</u> P Q R S <u>T</u>
Backward	W O O D C U T <u>T</u> E <u>R</u>	<u>T</u> S <u>R</u>
	WOODC <u>UT</u> TER	∨ <u>⊔ ⊤</u>
	W O O D C U T T E R	EDC

Clearly, there are 5 pairs.

(80 - 84): Common Explanation:

As there are four floors below X, so X live on 5th floor.

T live four floors above V.

Number of floors below V is same as the number of floors above W, so

	Case I	Case II
9		
8	T	W
7		
6	W	T
5	X	X
4	V	
3 2		
2		V
1		

U is two floors above Q.

S neither lives on an odd number floor nor above U.

	Case I(a)	Case I(b)	Case II
9	U		U
8	T	T	W
7	Q		Q
6	W	W	T
5	X	X	X
4	V	V	S
3		U	
2	S	S	V
1		Q	

P and R live above S, this is not possible in case I(a) and case II, so case I(a) and case II are rejected.

	Case I(b)
9	P/R
8	T
7	R/P
6	W
5	X
4	V
3	U
2	S
1	Q

80. Answer: E)

81. Answer: C)

82. Answer: A)

83. Answer: E)

84. Answer: A)

85. Answer: A)

A is taller than only B and C.

$$_> _> _> A > B/C > B/C$$

Only 1 person is taller than B but shorter than F. E is not the tallest.

So, we get: -

B is the 2nd shortest person.

(86-90): Common Explanation:

Only three persons joined the company between A and F, who joined on 23rd of the month having even number of days.

A and D joined the company in the same month.

Case 1: -

Month	12^{th}	$23^{\rm rd}$
January		
April		F
June		
August	D	A

Case 2: -

Month	12^{th}	$23^{\rm rd}$
January	D	A
April		
June		F
August		

Only two persons joined the company between F and B.

B and E joined the company in the same month.

Case 1: -

Month	12 th	23 rd
January	В	E
April		F
June		
August	D	A

Case 2: -

Month	12 th	$23^{\rm rd}$
January	D	A
April	В	Е
June		F
August		

Neither C nor H joined the company in June.

So, case 1 is invalid.

Continuing with case 2;

G and H joined the company on different dates.

Final Solution:

Month	12 th	23 rd
January	D	Α
April	В	Е
June	G	F
August	C	Н

86. Answer: D)

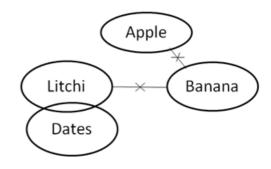
87. Answer: E)

88. Answer: D)

89. Answer: B)

90. Answer: A)

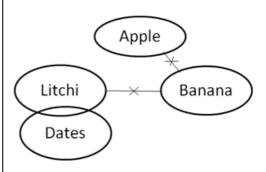
91. Answer: B)



Some apple are dates ====> not follows

Some dates are not banana ====> follows

92. Answer: D)

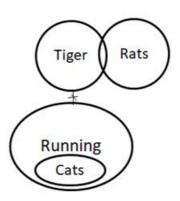


Some banana are dates ====> not follows

Some litchi are not dates ====> not follows

All litchi are apple ====> not follows

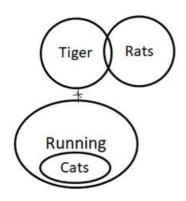
93. Answer: B)



All rats are running ====> not follows

The rats which are tiger can never be running ====> follows

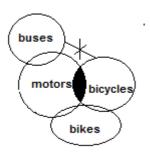
94. Answer: D)



All tigers are cats ====> not follows

Some rats are cats ====> not follows

95. Answer: A)



From the figure, conclusion II follows

(96 – 100): Common Explanation:

A lives on floor no. 4. There are two floors in between A and B.

Floor	Case 1	Case 2
7	В	
6		
5		
4	A	A
3		
2		
1		В

0	

G lives immediately below B. There are two floors in between G and E.

Floor	Case 1	Case 2
7	В	
6	G	
5		
4	A	A
3	Е	Е
2		
1		В
0		G

There is one floor in between E and N.

Floor	Case 1	Case 2
7	В	
6	G	
5	N/	N
4	A	A
3	E	Е
2		
1	/N	В
0		G

There are two floors in between N and T.

Floor	Case 1	Case 2
7	В	
6 5	G	
5	N	N
4	A	A
3	Е	Е
2	T	T
1		В
0		G

S lives immediately below T. So, case 2 is invalid. H lives below N.

Floor	Case 1
7	В
6	G
5	N
4	A
3	E
2	T
1	S

98. Answer: B
99. Answer: D
96. Answer: C
100. Answer: C