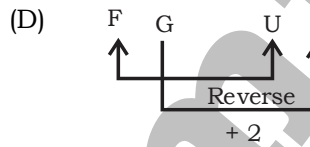
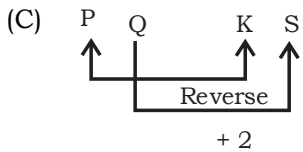
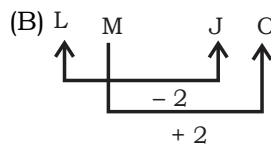
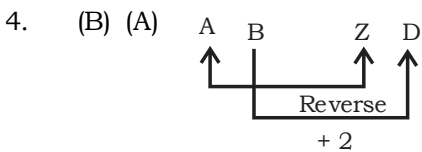


**SSC MOCK TEST - 351 (SOLUTION)**

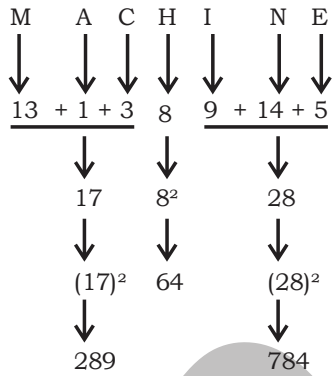
1. (B) As,  $\Rightarrow 5 + 2 + 5 = 12 \Leftrightarrow 21 \Rightarrow (21)^2 = 441$   
 Similarly,  $435 \Rightarrow 4 + 3 + 5 = 12 \Rightarrow 21 \Rightarrow (21)^2 = 441$

2. (C) First is antonym of second.

3. (D) (A)  $21 \Leftrightarrow 12 \Rightarrow (12)^2 = 144$   
 (B)  $13 \Leftrightarrow 31 \Rightarrow (31)^2 = 961$   
 (C)  $44 \Leftrightarrow 44 \Rightarrow (44)^2 = 1936$   
 (D)  $25 \Leftrightarrow 52 \Rightarrow (52)^2 = 2704 \neq 625$

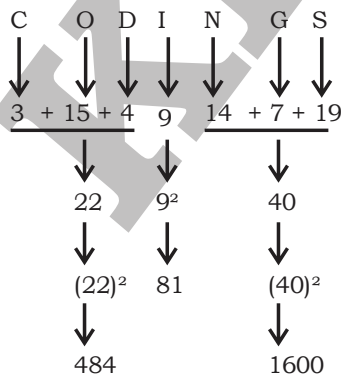


5. (C) As,



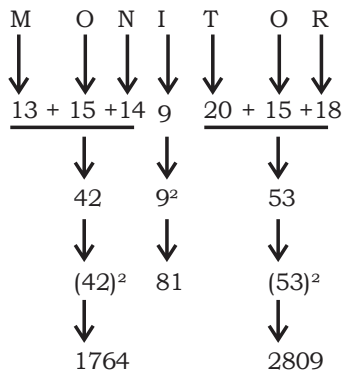
Code  $\Rightarrow$  28964784

And,



Code  $\Rightarrow$  484811600

Similarly,



Code ⇒ 1764812809

6. (B)  $52 \times 2 = 104$

$104 + 3 = 107$

$107 \times 4 = 428$

$428 + 5 = 433$

$433 \times 6 = 2598$



8. (B) After removing one-fourth milk i.e. 10 litres from 40 litres of milk and mixing with 10 litres of water.

Final mixture = 30 litres of milk and 10 litres of water

2nd case: Removing half the mixture, i.e. 20 litres out of 40 litres mixtures, 15 litres of milk and 5 litres of water will be removed and 20 litres of water will be added.

Final mixture now: 15 litres milk and 25 litres water

9. (D) As,  $(85 - 25) = 60 \Rightarrow 60 \times 2 = 120$

Similarly,

$(90 - 35) = 55 \Rightarrow 55 \times 2 = 110$

10. (C) d m k r j / d m k r j / d m k r j

11. (A)

12. (B) **In the first row,**

$(18 + 17) - 15 = 20 \Rightarrow (20)^2 = 400$

**In the second row,**

$(21 + 35) - 26 = 30 \Rightarrow (30)^2 = 900$

**In the third row,**

$(44 + 32) - 24 = 52 \Rightarrow (52)^2 = 2704$

13. (D)  $256 \div 16 + 4 \times 3 - 14 = 53$

Change  $\times$  and  $+$  each other,

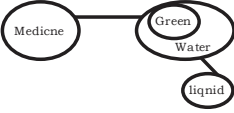
$256 \div 16 \times 4 + 3 - 14 = 53$

$16 \times 4 + 3 - 14 = 53$

$64 + 3 - 14 = 53$

$67 - 14 = 53$

$53 = 53$

14. (C)  $B > D > A$  .....(i)  
 $C > B > D > A > E$  .....(ii)  
Hence, D is the third tallest.
15. (A)  $-K \leftrightarrow H^+$   
 $-S \leftrightarrow R^+$   
 $-Z$
- Z is the daughter of R.
16. (B) 3. Infancy → 1. Childhood → 4. Adolescence → 2. Adulthood → 5. Senility
17. (C) 
- I. True    II. False    III. True  
Hence, conclusions I and III follow.
18. (A)    19. (A)
20. (A) As,  $4 \times 6 + (3 + 8) = 35$   
Similarly,  $3 \times 4 + (7 + 8) = 27$
21. (C) The word 'Solve' cannot be formed using the letters of the given word because the word 'ABSOLUTE' does not have letter 'V'.
22. (A)    23. (D)    24. (C)    25. (D)
26. (C) Paddy is a tropical crop and grown where the average temperature during the growing season is between 22°C and 27°C. Abundant sunshine is essential during its four months of growth. The minimum temperature should not go below 15°C as germination cannot take place below that temperature. o The temperature required for wheat during growing season is around 15.5°C. The weather should be warm and moist during the early stage of growth and sunny and dry in the later stages. The average temperature of the hottest month should not exceed 20°C. A frostfree period of 100 days is usually required but some fast-ripening varieties may mature only in 90 days. o Maize is grown in temperatures between 26°C and 27°C during the day and around 14°C during the night. But the most important factor is the 140 frost-free days. The crop is very susceptible to frost; therefore, its cultivation in temperate latitudes is limited. o Groundnuts grow well in warm areas, below 1500m above sea level. The best temperature requirement is about 30° C. They do not grow below 15° C.
27. (A) The 48th G7 summit was held from 26 to 28 June 2022 in Schloss Elmau, Krün, Bavarian Alps, Germany. Germany previously hosted a G7 summit in 2015 at Schloss Elmau, Bavaria.
28. (C) The Kesavananda Bharathi judgment or His Holiness Kesavananda Bharati Sripadagalvru v/s State of Kerala is a landmark decision of the Supreme Court of India that outlined the Basic Structure doctrine of the Constitution.
29. (A) The Committee on Investor Awareness and Protection, chaired by Mr D. Swaroop from Pensions Fund Regulatory Authority of India (PFRDA), on the need for minimum standards for financial advisers and financial education. The paper states that the twin goals of regulation and making the populace financially able are essential for the healthy growth of the financial service industry.
30. (B) The World Day for International Justice is observed on July 17 every year to sensitise on international justice and to promote the rights of the victims.

31. (B) Naujawan Bharat Sabha was a leftwing Indian association that sought to foment revolution against the British Raj by gathering together worker and peasant youths. It was founded by Bhagat Singh in March 1926 and was a more public face of the Hindustan Republican Association.
33. (C) Hygrometers is instruments used for measuring humidity. A simple form of a hygrometer is specifically known as a "psychomotor" and consists of two thermometers, one of which includes a dry bulb and the other of which includes a bulb that is kept wet to measure wet-bulb temperature. 36. (C) Muller's work contributed to the developing interest in Aryan culture, which often set Indo-European ('Aryan') traditions in opposition to Semitic religions. For Müller the discovery of common Indian and European ancestry was a powerful argument against racism, arguing that "an ethnologist who speaks of Aryan race, Aryan blood, Aryan eyes and hair, is as great a sinner as a linguist who speaks of a dolichocephalic dictionary or a brachycephalic grammar" and that "the blackest Hindus represent an earlier stage of Aryan speech and thought than the fairest Scandinavians".
37. (A) The Nile is a major north-flowing river in north-eastern Africa. It is generally regarded as the longest river in the world. Egyptian civilization and Sudanese Kingdoms have depended on the river since ancient times. Most of the population and cities of Egypt lie along those parts of the Nile valley north of Aswan, and nearly all the cultural and historical sites of Ancient Egypt are found along river banks. o Java is an island of Indonesia. With a population of over 141 million (the island itself) or 145 million (the administrative region) as of 2015 Census released in December 2015, Java is home to 56.7 percent of the Indonesian population and is the most populous island on Earth. The Indonesian capital city, Jakarta, is located on western Java.
38. (D) Article 75(3) of the Indian Constitution makes the council of ministers collectively responsible to the house of people or the Lok Sabha. This means that if the Ministry loses the confidence of the "Lok Sabha", all ministers including those who are from Rajya Sabha have to go. The entire ministry is obliged to resign. This means that ministers fall and stand together. This is called "Rule of Collective Responsibility".
40. (B) In India, at present, there are 6 Zonal Council. Originally five councils were created as per the States Reorganization Act 1956 as follows: Northern Zonal Council, Central Zonal Council, Eastern Zonal Council, Southern Zonal Council, and Western Zonal Council. The North East Council was set up in 1971.
42. (A) National Programme of Nutritional Support to Primary Education, popularly known as the Mid-Day Meal Scheme (MDM) was started in 1995. The Midday Meal Scheme is covered by the National Food Security Act, 2013.
43. (B) India Ace shuttler PV Sindhu defeated China's Wang Zhi Yi in the final match of women's singles at the Singapore Open 2022.
45. (A) Rank Country Uranium Reserves (metric tons) 1. Australia 1,706,100 2. Kazakhstan 679,300 3. Russian Fed 505,900 4. Canada 493,900
46. (B) In chemistry, the term transition metal (or transition element) has three possible meanings; o The IUPAC definition defines a transition metal as "an element whose atom has a partially filled d sub-shell, or which can give rise to cations with an incomplete d sub-shell" o Many scientist describe a "transition metal" as any element in the d-block of the periodic table, which includes groups 3 to 12 on the periodic table. In actual practice, the f-block lanthanide and actinide series are also considered transition metals and are called "inner transition metals". o Cotton and Wilkinson expand the brief IUPAC definition by specifying which elements are included. As well as the elements of groups 4 to 11, they add scandium and yttrium in group 3 which have a partially filled d sub shell in the metallic state. These last two elements are included even though they do not (so far) seem to possess the catalytic properties which are so characteristic of the transition metals in general. Lanthanum and actinium in Group 3 are however classified as lanthanides respectively.

47. (D) The hepatic portal vein is a blood vessel that carries blood from the gastrointestinal tract and spleen to the liver. This blood is rich in nutrients that have been extracted from food.
48. (A) Calcium is a mineral that helps you build and maintain strong bones and teeth. Good calcium intake throughout your life can help to prevent osteoporosis. When you have osteoporosis your bones are weak and thin from loss of calcium. Weak bones can break more easily than strong bones. Calcium is also used in other parts of your body. It helps your muscles work and your heart beat. Skimmed milk, ragi, Egg and fish such as sardines and canned salmon are great sources of calcium.
49. (B) In India, the Ombudsman is known as the Lokpal or Lokayukta. An Administrative Reforms Commission (ARC) was set up on 5 January 1966 under the Chairmanship of Shri Morarji Desai. It recommended two tier machinery : Lokpal at the Centre (Parliamentary commissioner, as in New Zealand) and one Lokayukta each at the State level.
50. (C) Megasthenes was an ancient Greek historian, diplomat and Indian ethnography and explorer in the Hellenistic period, author of the work Indica. He was born in Asia Minor and became an ambassador of Seleucus Nicator of the Seleucid dynasty possibly to Chandragupta Maurya in Pataliputra, India.
51. (D) Total of 4 terms =  $40 \times 4 = 160$   
 Let the first term =  $x$   
 Sum of the remaining terms =  $3x$   
 ATQ,  
 $x + 3x = 160$   
 $4x = 160$   
 $x = \frac{160}{4} = 40$
52. (A) Let the distance travelled on the bicycle be  $x$  km.  
 Distance travelled on foot =  $(50 - x)$  km  
 ATQ,  
 $\frac{x}{10} + \frac{50 - x}{5} = 9$   
 $\frac{x + 100 - 2x}{10} = 9$   
 $-x + 100 = 90$   
 $x = 10$  km
53. (B) Let  $n = 7$ , then condition satisfied.  
 Hence,  $7n = 7 \times 7 = 49$   
 Now,  $49 \div 5$ , then remainder is 4.  
 Let the number be  $5x$ .  
 Then, The integer  $n = 5x + 2$   
 Take  $x = 1$   
 Then,  $n = 7$   
 The value of  $7n = 49$   
 49 divided by 5 leaves the remainder 4  
 $\therefore$  4 is the remainder, if  $7n$  is divided by 5.
54. (A)  $a + b = 9$  and  $ab = 8$   
 $(a + b)^3 = a^3 + b^3 + 3ab(a + b)$   
 $9^3 = a^3 + b^3 + 3 \times 8(9)$   
 $729 = a^3 + b^3 + 216$   
 $\therefore a^3 + b^3 = 729 - 216 = 513$

55. (B)  $(\operatorname{cosec} 60^\circ - \tan 45^\circ) \cot 30^\circ \tan 60^\circ$

$$= \left( \frac{2}{\sqrt{3}} - 1 \right) \sqrt{3} \times \sqrt{3}$$

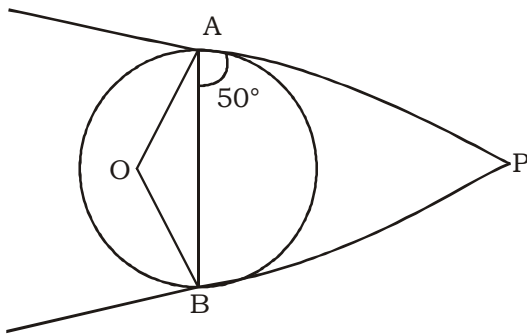
$$= \frac{2 - \sqrt{3}}{\sqrt{3}} \times 3 = \frac{6 - 3\sqrt{3}}{\sqrt{3}} = 2\sqrt{3} - 3$$

56. (C)  $(26 - 13 \times 2) \div 2 + 1 \times 4 + 5 \div 15 + 4$

$$= 0 \div 2 + 1 \times 4 + \frac{5}{15} \times 4$$

$$= 4 + \frac{4}{3} = \frac{16}{3}$$

57. (A)



$PA = PB$  and  $\angle PAB = 50^\circ$

$\angle PBA = \angle PAB$  (Angle opposite sides are equal)

$\angle PBA = 50^\circ$

In  $\triangle PAB$ ,

$\angle PBA + \angle PAB + \angle APB = 180^\circ$  (Angle sum property of triangle)

$\angle APB = 180^\circ - 100^\circ$

$\angle APB = 80^\circ$

$\angle AOB + \angle APB = 180^\circ$  (Supplementary angles)

$\angle AOB = 180^\circ - 80^\circ$

$\therefore \angle AOB = 100^\circ$

58. (C) 12 men can complete in 12 days.

1 work 1 man can complete in 1 day  $\frac{1}{12 \times 12}$  part of the work.

Men can complete in 6 days  $\frac{6 \times 6}{12 \times 12}$  part of work =  $\frac{1}{4}$  th of the work

Number of remaining men = 6

Remaining work =  $\frac{3}{4}$

12 men can complete 1 work in 12 days

6 men can complete  $\frac{3}{4}$  work in  $\frac{12 \times 12 \times 3}{6 \times 4} = 18$  days

$\therefore$  Number of extra days =  $18 - 6 = 12$  days

59. (D) Let the two numbers are  $x$  and  $(25 - x)$ .  
 LCM  $\times$  HCF = Multiplication of two numbers

$$30 \times 5 = x \times (25 - x)$$

$$30 \times 5 = 25x - x^2$$

$$x^2 - 25x + 150 = 0$$

$$x^2 - 10x - 15x + 150 = 0$$

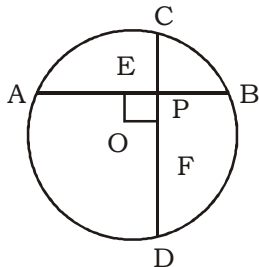
$$x(x - 10) - 15(x - 10) = 0$$

$$(x - 10)(x - 15) = 0$$

$$x = 10 \text{ and } 15$$

$$\therefore \text{Required difference} = 15 - 10 = 5$$

60. (C)



As we can see from the diagram

$$OE^2 = OA^2 - AE^2$$

$$\text{Here, } OA = 15 \text{ cm and } AE = \frac{AB}{2} = \frac{20}{2} = 10 \text{ cm}$$

$$OE^2 = 15^2 - 10^2 = 125 \text{ cm}$$

$$\text{Similarly, } OF^2 = OD^2 - DF^2$$

$$= 225 - 144 = 81 \text{ cm}^2$$

Since, OEFP forms a rectangle

$$\therefore OP = \sqrt{125 + 81} = \sqrt{206} \text{ cm}$$

61. (B) Let the cost price of TV be ₹ 100.

$$\text{Marked price} = 100 \times \frac{130}{100} = ₹ 130$$

$$\text{Selling price} = 130 \times \frac{75}{100} = ₹ 97.50$$

$$\text{Loss} = 100 - 97.50 = ₹ 2.50$$

$$\therefore \text{Loss}\% = \left( \frac{2.50}{100} \times 100 \right)\% = 2.5\%$$

62. (D) Perimeter of rectangular plot =  $2 \times (40 + 25) = 2 \times 65 = 130 \text{ m}$

$$\text{Perimeter of square plot} = 4 \times \text{side}$$

$$4 \times \text{side} = 130$$

$$\therefore \text{Side} = \frac{130}{4} = 32.5 \text{ m}$$

63. (A) Side of a cube = HCF of 6, 42, 45 = 3 cm

$$\therefore \text{Least possible number of cubes} = \frac{6 \times 42 \times 45}{3 \times 3 \times 3} = 420$$

64. (C) Filling Pipe  $\frac{6}{42}$   
Filling Pipe + leakage  $\frac{7}{6}$

$$\therefore \text{Time taken by leakage to empty the tank} = \frac{42}{1} = 42 \text{ hours}$$

65. (D) Percentage discount =  $\left( \frac{MP - SP}{MP} \times 100 \right) \%$

$$= \left( \frac{700 - 625}{700} \times 100 \right) \% = 10.71\%$$

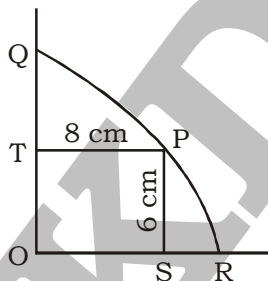
66. (D) Required speed =  $\left( \frac{100 + 120}{40} \right) \text{ m/s}$

$$= \left( \frac{220}{40} \times \frac{18}{5} \right) \text{ km/h} = 19.8 \text{ km/h}$$

67. (D) Average age of the family =  $\frac{67 \times 2 + 35 \times 2 + 6 \times 3}{2 + 2 + 3}$

$$= \frac{222}{7} = 31 \frac{5}{7} \text{ years}$$

68. (B)



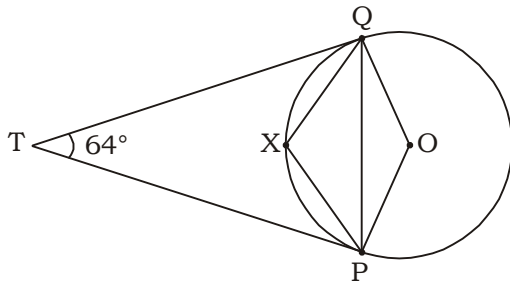
From the figure,

$$OP = \sqrt{6^2 + 8^2} = 10 \text{ cm}$$

$$\text{Length of the Arc OR} = \frac{\pi r \theta}{180} = \frac{\pi \times 10 \times 90}{180} = 5\pi \text{ cm}$$



69. (A)



$$\angle PTQ + \angle POQ = 180^\circ$$

$$\angle POQ = 180 - 64 = 116^\circ$$

$$\therefore \angle PXQ = 180^\circ - \frac{1}{2} \angle POQ$$

$$= 180^\circ - \frac{1}{2} \times 116^\circ = 122^\circ$$

70. (C)  $\frac{a}{b} = \frac{\sqrt{5}+1}{\sqrt{5}-1} \times \frac{\sqrt{5}+1}{\sqrt{5}-1}$

$$\frac{a}{b} = \frac{(\sqrt{5}+1)^2}{(\sqrt{5}-1)^2}$$

$$\frac{a}{b} = \frac{5+1+2\sqrt{5}}{5+1-2\sqrt{5}}$$

$$\frac{a}{b} = \frac{6+2\sqrt{5}}{6-2\sqrt{5}}$$

$$\frac{a}{b} = \frac{3+\sqrt{5}}{3-\sqrt{5}}$$

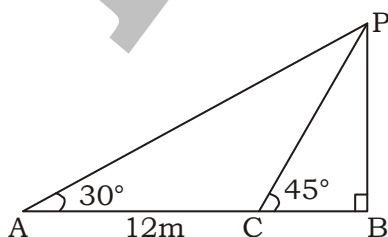
Applying componendo and dividendo, we have

$$\frac{a+b}{a-b} = \frac{3+\sqrt{5}+3-\sqrt{5}}{(3+\sqrt{5})-(3-\sqrt{5})}$$

$$\frac{a+b}{a-b} = \frac{6}{2\sqrt{5}} = \frac{3}{\sqrt{5}}$$

$$\left(\frac{a-b}{a+b}\right)^2 = \left(\frac{\sqrt{5}}{3}\right)^2 = \frac{5}{9}$$

71. (A)



In  $\triangle PBC$ ,

$$\tan 45^\circ = \frac{PB}{BC}$$

$$PB = BC$$

In  $\triangle PBA$ ,

$$\tan 30^\circ = \frac{PB}{AB}$$

$$\frac{PB}{AC + CB} = \frac{1}{\sqrt{3}}$$

$$\frac{PB}{12 + PB} = \frac{1}{\sqrt{3}}$$

$$\therefore PB = \frac{12}{\sqrt{3} - 1} = 6(\sqrt{3} + 1)$$

$$= 6 \times 2.732 = 16.392 \text{ m}$$

72. (C) Expenditure on materials and taxes together =  $(22 + 36)\%$  of 500 = 58% of 500  
=  $0.58 \times 500 = ₹ 290$  crores

73. (C) Required angle =  $\left(\frac{36}{100} \times 360^\circ\right) = 129.6^\circ$

74. (D)  $25 = x\%$  of 22

$$\therefore x = \frac{25 \times 100}{22} = 113.64 \approx 114$$

75. (A) Required amount = 13% of 500 – 4% of 500 = ₹ 45 crores

## MEANINGS IN ALPHABETICAL ORDER

Adamant	refusing to be persuaded or to change one's mind	अटल
Attic	a space or room just below the roof of a building	अटारी
Avert	turn away (one's eyes or thoughts)	टालना
Coffin	a long, narrow box, typically of wood, in which a corpse is buried or cremated	ताबूत
Condemn	express complete disapproval of, typically in public; censure	निंदा करना
Deliverance	the action of being rescued or set free	मुक्ति
Eloquent	fluent or persuasive in speaking or writing	सुबक्ता
Hanger	a person who hangs something	कांटा
Insist	demand something forcefully, not accepting refusal	जोर देना
Nuisance	a person, thing, or circumstance causing inconvenience or annoyance	बाधा
Optimist	hopeful and confident about the future	आशावादी
Optimum	most conducive to a favorable outcome; best	अनुकूलतम
Pierce	(of a sharp pointed object) go into or through	प्रवेश करना
Piteous	deserving or arousing pity	दयनीय
Provoke	stimulate or give rise to (a reaction or emotion, typically a strong or unwelcome one) in someone	उकसाना
Pursue	follow (someone or something) in order to catch or attack them	पाने की कोशिश करना
Reticent	not revealing one's thoughts or feelings readily	मौन रहने वाला
Revere	deep respect for someone or something	श्रद्धा
Wardrobe	a large, tall cabinet in which clothes may be hung or stored	अलमारी

**SSC MOCK TEST - 351 (ANSWER KEY)**

- |         |         |         |          |
|---------|---------|---------|----------|
| 1. (B)  | 26. (C) | 51. (D) | 76. (A)  |
| 2. (C)  | 27. (B) | 52. (A) | 77. (B)  |
| 3. (D)  | 28. (C) | 53. (B) | 78. (B)  |
| 4. (B)  | 29. (A) | 54. (A) | 79. (C)  |
| 5. (C)  | 30. (B) | 55. (B) | 80. (A)  |
| 6. (B)  | 31. (B) | 56. (C) | 81. (B)  |
| 7. (A)  | 32. (B) | 57. (A) | 82. (D)  |
| 8. (B)  | 33. (C) | 58. (C) | 83. (C)  |
| 9. (D)  | 34. (B) | 59. (D) | 84. (B)  |
| 10. (C) | 35. (B) | 60. (C) | 85. (B)  |
| 11. (A) | 36. (C) | 61. (B) | 86. (C)  |
| 12. (B) | 37. (A) | 62. (D) | 87. (C)  |
| 13. (D) | 38. (D) | 63. (A) | 88. (D)  |
| 14. (C) | 39. (D) | 64. (C) | 89. (A)  |
| 15. (A) | 40. (B) | 65. (D) | 90. (A)  |
| 16. (B) | 41. (A) | 66. (D) | 91. (B)  |
| 17. (C) | 42. (A) | 67. (D) | 92. (A)  |
| 18. (A) | 43. (B) | 68. (B) | 93. (C)  |
| 19. (A) | 44. (B) | 69. (A) | 94. (C)  |
| 20. (A) | 45. (A) | 70. (C) | 95. (A)  |
| 21. (C) | 46. (B) | 71. (A) | 96. (A)  |
| 22. (A) | 47. (D) | 72. (C) | 97. (A)  |
| 23. (D) | 48. (A) | 73. (C) | 98. (C)  |
| 24. (C) | 49. (B) | 74. (D) | 99. (C)  |
| 25. (D) | 50. (C) | 75. (A) | 100. (A) |

76. (A) Replace 'quarter results' with 'quarterly results'.
77. (B) If the second event occurs immediately after the first, we can express that idea using the structure no sooner ... than. / hardly or scarcely...when./ As soon as , Here in the part (2) 'when' should be replaced with than.
90. (A) The correct spelling of 'Negociate' is 'Negotiate'.
91. (B) The correct spelling of 'Patrner' is 'Partner'.