

20. (B) 1023 1020 1026 1017 **1029** 1014

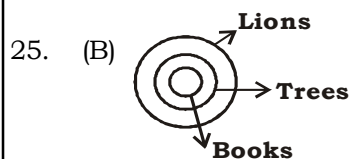
$$\begin{array}{ccccccccc} & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright & & \curvearrowright & \\ & -3 & & +6 & & -9 & & +12 & & -15 & \end{array}$$

21. (C) $20 \div 20 + 20 - 25 \times 25 = 419$
 After changing the signs we have,
 $20 \times 20 + 20 - 25 \div 25 = 419$
 $400 + 20 - 1 = 419$
 $419 = 419$

22. (C)

23. (D) EMAIL
 MAIL
 AIM
 LIE
 LIME
 MILE

24. (D)



- I. True II. False III. False IV. True

Hence, only conclusions I and IV follow.

27. (C) Gibbon, Gorilla and Orangutan are apes, but Langur is not an ape, it is prosimians.

29. (B) Pitcher plant is an insectivorous plant. It feeds on living creatures including insects and small mammals. These plants attract the prey with a smell of rotting meat. The victim is dissolved by some enzymes.

30. (B) The Confederation of Indian Industry (CII) is an association of Indian businesses which works to create an environment conducive to the growth of industry in India. The headquarters of CII is located at New Delhi. It is in news because CII has launched a unique platform "Startup Mentorship Circle" in Mumbai to help in connecting start-ups with the global marketplace. The platform is truly a strong eco-system for nurturing innovation and startup to drive sustainable economic growth and generate large scale employment opportunities.

31. (D) The first-ever World Tsunami Awareness Day (WTAD) has been observed on November 5, 2016 to spread awareness among people across the world in matters related to the dangers of tsunami and shall stress on the importance of early warning systems in order to mitigate damage from the often devastating natural hazard. It also aims at reviving traditional knowledge about tsunamis. The 2016 theme of WTAD is "Effective Education and Evacuation Drills".

33. (C) The book "An Era of Darkness: The British Empire in India" has been authored by Dr. Shashi Tharoor, the Lok Sabha MP. The book recalls in some detail misdeeds of the British in looting India and making it suffer an agonizing and violent death. In it, author has rightly points out that British rule in India was effectively and regularly supplemented by famine, forced migration and brutality - the three examples of why British rule over India was despotic and anything but enlightened. The book has recently released by the Vice President of India M. Hamid Ansari.

34. (C) After the 3rd century AD Roman Empire came to an end. Indian merchants meanwhile had begun to rely more heavily on the south-east Asian Trade.
39. (B) The red data book contains only 8 lists of threatened plant and animal species.
41. (B) Milk is a mixture of lactose and milk-sugar.
43. (B) The Northern Fertile Plain which is also called the Gangetic Plain lies to the south of Himalayan Region. The soil of this plain is built of the sediments and brought down by the rivers from Himalayas. Such plain is called an alluvial plain and it is very fertile. This plain is one of the largest and most fertile plains of the World. Aggradation is the term used in geology for the increase in land elevation due to the deposition of sediment which includes lowland alluvial rivers, river deltas and alluvial fans.
45. (B) The man who is suffering from myopia has a vision condition where he can see close objects very clearly, but objects farther away appear blurred. Nearsightedness occurs if the eyeball is too long.
46. (B) Inventory refers to raw materials, work-in-process goods and completely finished goods that are considered to be the portion of a business's assets that are ready or will be ready for sale. Inventory are also represented as one of the most important assets that most businesses possess because the turnover of inventories represents one of the primary sources of revenue generation and subsequent earnings for the company's shareholders/owners.
47. (C) Devaluation in modern monetary policy is a reduction in the value of a currency with respect to those goods, services or other monetary units with which that currency can be exchanged. It means official lowering of the value of a country's currency within a fixed exchange rate system.
48. (D) An uninterruptable power supply (UPS) is a backup power supply, such as a battery that provides emergency power in the event when power is lost from the main supply
49. (C) An amphoteric oxide is a molecule or ion that can react as an acid as well as a base. Many metals such as zinc, tin, lead, aluminium, beryllium and most metalloids form amphoteric oxides or hydroxides.
51. (A) Required percentage = $\frac{10 + 5 + 4 + 3}{9 + 15 + 18 + 22 + 14 + 10 + 5 + 4 + 3} \times 100$
 $= \frac{22}{100} \times 100 = 22\%$
52. (C) Required percentage = $\frac{4 + 3}{9 + 15 + 18 + 22 + 14 + 10 + 5 + 4 + 3} \times 100$
 $= \frac{7}{100} \times 100 = 7\%$
53. (B) Required percentage = $\frac{18 + 22}{9 + 15 + 18 + 22 + 14 + 10 + 5 + 4 + 3} \times 100$
 $= \frac{40}{100} \times 100 = 40\%$
54. (C) Let the salary of B = 100
 A's salary = $100 \times \frac{80}{100} = 80$
 C's salary = $100 \times \frac{100}{80} = 125$
 Required% = $\frac{125 - 80}{125} \times 100\% = 36\%$

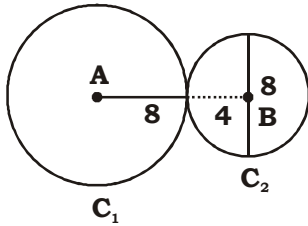
55. (B) Difference in percentage = Difference in marks

$$(36 - 24)\% = 9$$

$$12\% = 9$$

$$\text{Total marks} = \frac{9}{12} \times 100 = 75$$

56. (A)



Radius of first circle = 8 cm

Radius of second circle = 4 cm

Diameter of new circle = $(8 + 4) = 12$ cm

Radius = 6 cm

Area of new circle = $\pi r^2 = 36 \pi \text{ cm}^2$

57. (B) $l = 15 + 15 = 30$ cm

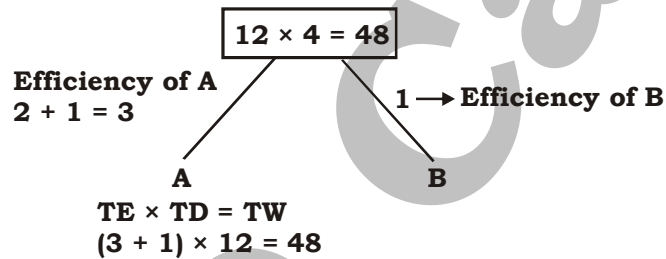
$b = 15$ cm, $h = 15$ cm

Total surface area = $2(lb + bh + hl)$

$$= 2(30 \times 15 + 15 \times 15 + 30 \times 15)$$

$$= 2(450 + 225 + 450) = 2250 \text{ cm}^2$$

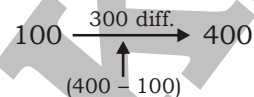
58. (D)



$$\therefore \text{Required number of days} = \frac{48}{3} = 16 \text{ days}$$

59. (C) Let the sum be 100.

As it become four times



$$\therefore \text{Required rate} = \frac{300}{15} = 20\%$$

60. (A) Sum of interior angle = 1440°

Sum of exterior angle = 360°

$$\text{The number of sides of regular polygon} = \frac{1440^\circ + 360^\circ}{180^\circ} = 10$$

61. (B) Remainder $[1421 \times 1423 \times 1425]/12$

$$\left[\because \frac{1421}{12} = 5, \frac{1423}{12} = 11, \frac{1425}{12} = 118 \right]$$

$$= \text{Remainder } \frac{[5 \times 11 \times 9]}{12} = 3 \text{ as remainder}$$

62. (B) $\frac{7 + \sqrt{5}}{7 - \sqrt{5}} - \frac{7 - \sqrt{5}}{7 + \sqrt{5}} = a + \frac{7}{11}\sqrt{5}b$

$$\frac{(7 + \sqrt{5})^2 - (7 - \sqrt{5})^2}{49 - 5} = a + \frac{7}{11}\sqrt{5}b$$

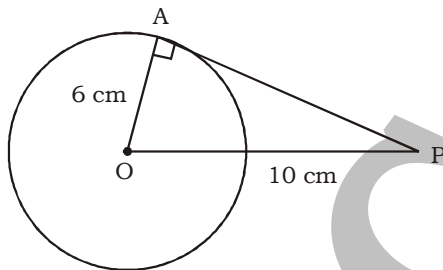
$$\frac{49 + 5 + 14\sqrt{5} - 49 - 5 + 14\sqrt{5}}{44} = a + \frac{7}{11}\sqrt{5}b$$

$$\frac{28\sqrt{5}}{44} = a + \frac{7}{11}\sqrt{5}b$$

$$\frac{7}{11}\sqrt{5} = a + \frac{7}{11}\sqrt{5}b$$

$$\therefore a = 0 \text{ and } b = 1$$

63. (D)



$$\text{So, length} = PA = \sqrt{(PO)^2 - (OA)^2} = \sqrt{(10)^2 - (6)^2} = 8 \text{ cm}$$

64. (C) $\tan \theta = \frac{p}{q}$ [given]

$$\frac{p \sin \theta - q \cos \theta}{p \sin \theta + q \cos \theta} = \frac{\frac{p}{q} \tan \theta - 1}{\frac{p}{q} \tan \theta + 1} = \frac{\frac{p}{q} \times \frac{p}{q} - 1}{\frac{p}{q} \times \frac{p}{q} + 1} = \frac{p^2 - q^2}{q^2 + p^2}$$

65. (D) $\frac{1}{\sqrt{2} + \sqrt{1}} = \frac{1}{\sqrt{2} + \sqrt{1}} \times \frac{\sqrt{2} - \sqrt{1}}{\sqrt{2} - \sqrt{1}} = \sqrt{2} - \sqrt{1}$

$$\frac{1}{\sqrt{1} + \sqrt{2}} + \frac{1}{\sqrt{2} + \sqrt{3}} + \frac{1}{\sqrt{3} + \sqrt{4}} + \dots + \frac{1}{\sqrt{99} + \sqrt{100}}$$

$$= \sqrt{2} - \sqrt{1} + \sqrt{3} - \sqrt{2} + \dots + \sqrt{100} - \sqrt{99}$$

$$= \sqrt{100} - \sqrt{1} = 10 - 1 = 9$$

66. (B) 5 years ago avg. age of husband and wife = 23 years

Present age of husband and wife = $23 + 5 = 28$ years

Sum of age present age of husband and wife = $28 \times 2 = 56$ years

Sum of present age of husband, wife and child = $20 \times 3 = 60$ years

\therefore Age of child = $60 - 56 = 4$ years

67. (B) Diagonals of three faces = x, y and z

Let sides of cuboid = a, b and c

ATQ,

$$a^2 + b^2 = x^2$$

$$b^2 + c^2 = y^2$$

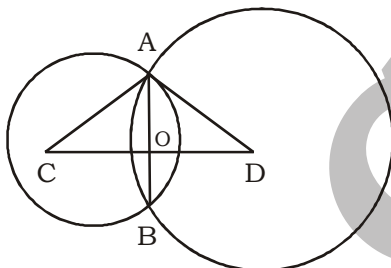
$$c^2 + a^2 = z^2$$

$$abc = \sqrt{a^2 \times b^2 \times c^2}$$

$$\sqrt{\left(\frac{x^2 + z^2 - y^2}{2}\right)\left(\frac{x^2 + y^2 - z^2}{2}\right)\left(\frac{y^2 + z^2 - x^2}{2}\right)}$$

$$= \frac{1}{2\sqrt{2}} [(x^2 + z^2 - y^2)(y^2 + z^2 - x^2)]$$

68. (B)



Here, $AB = 8$ cm

$OA = OB = 4$ cm

In $\triangle AOC$,

$$OC^2 = AC^2 - AO^2$$

$$OC = \sqrt{6^2 - 4^2} = \sqrt{36 - 16} = \sqrt{20} \text{ cm}$$

In $\triangle AOD$,

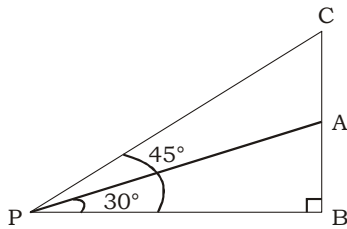
$$OD^2 = AD^2 - AO^2$$

$$OD = \sqrt{8^2 - 4^2} = \sqrt{64 - 16} = \sqrt{48} \text{ cm}$$

Hence, $CD = OC + OD = \sqrt{20} + \sqrt{48}$

$$= 2\sqrt{5} + 4\sqrt{3} = 2(\sqrt{5} + 2\sqrt{3}) \text{ cm}$$

69. (B)



Let AB is the building and AC is the flag.

AB = 15 meters

$\angle APB = 30^\circ$ and $\angle CPB = 45^\circ$

In $\triangle APB$,

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

$$\frac{1}{\sqrt{3}} = \frac{15}{PB}$$

$$PB = 15\sqrt{3} \text{ m}$$

In $\triangle CPB$,

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

$$1 = \frac{BC}{PB} = \frac{AC + AB}{PB}$$

$$PB = AB + AC$$

$$15\sqrt{3} = 15 + AC$$

$$AC = 15\sqrt{3} - 15 = 15(\sqrt{3} - 1) \text{ m}$$

70. (C) Required number of toffees =

$$\frac{1}{12} \times \frac{100}{80} \times \frac{120}{100} = \frac{1}{12} \times \frac{6}{4} = \frac{1}{8} = 8$$

71. (D) $\sin^2 50^\circ + \sin^2 40^\circ - \cos^2 0^\circ$
 $= \cos^2 (90^\circ - 50^\circ) + \sin^2 40^\circ - (1)^2$
 $= \cos^2 40^\circ + \sin^2 40^\circ - 1$
 $= 1 - 1 = 0$

72. (B) A : B = 3 : 2 = 6 : 4

$$B : C = 4 : 3$$

$$\therefore A : B : C = 6 : 4 : 3$$

Total number of books should be multiple of 13.

So, 689 is the required number of books.

73. (A) A(-3, 4) B(5, 6)

$$O(x, y) = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right), \text{ where, } x_1 = -3, x_2 = 5, y_1 = 4 \text{ and } y_2 = 6$$

$$O(x, y) = \left(\frac{-3+5}{2}, \frac{4+6}{2} \right)$$

$$O(x, y) = (1, 5)$$

74. (B) Length of train = $\frac{\text{length of platform} \times \text{time taken to cross boy}}{\text{Diff. in time}}$

$$= \frac{350}{27-9} \times 9 = \frac{350 \times 9}{18} = 175 \text{ m}$$

75. (B) $1 + \frac{1}{2 + \frac{1}{3 + \frac{1}{4 + \frac{1}{5}}}} = 1 + \frac{1}{2 + \frac{1}{3 + \frac{5}{21}}}$

$$= 1 + \frac{1}{2 + \frac{21}{68}} = 1 + \frac{1}{\frac{157}{68}} = 1 + \frac{68}{157} = \frac{225}{157}$$

MEANINGS IN ALPHABETICAL ORDER

Adulation	obsequious flattery; excessive admiration or praise	खुशामद
Affection	a gentle feeling of fondness or liking	स्नेह
Ambition	a strong desire to do or to achieve something, typically requiring determination and hard work	महत्वाकांक्षा
Camouflage	the disguising of military personnel, equipment, and installations by painting or covering them to make them blend in with their surroundings	छल
Deceive	(of a person) cause (someone) to believe something that is not true, typically in order to gain some personal advantage	धोखा देना
Dig	break up and move earth with a tool or machine, or with hands, paws, snout, etc.	गड्ढा करना
Dormant	(of an animal) having normal physical functions suspended or slowed down for a period of time; in or as if in a deep sleep	निष्क्रिय
Drunkard	a person who is habitually drunk	शराबी
Extempore	spoken or done without preparation	अचिंतित
Gloomy	dark or poorly lit, especially so as to appear depressing or frightening	उदास
Mitigate	make less severe, serious, or painful	कम करना
Obscure	not discovered or known about; uncertain	अस्पष्ट
Obvious	easily perceived or understood; clear, self-evident, or apparent	जाहिर
Reconnaissance	military observation of a region to locate an enemy or ascertain strategic features	सैनिक परीक्षण
Studious	spending a lot of time studying or reading	अध्ययन
Teetotaler	a person who never drinks alcohol	जो नशे में हो

SSC MOCK TEST - 333 (ANSWER KEY)

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

76. (B) A past event is being discussed in this sentence. Use of 'it is made' is wrong here. Simply use 'it made.'

Correct sentence: She managed the company so well that it made a huge profit that year.

77. (C) We use base of the verb after 'to.' 'To beat' will be the correct expression.

Correct sentence: He will be leaving home at 8 a.m. to beat the office rush hour.

86. (B) 'Observation' is a noun which is wrong to use. The correct verb form will be 'observe.'

Correct sentence: According to J Krishnamurti, education is not about having a career but about being able to look, observe and listen.

87. (B) We inflict fine, pain, sadness etc. 'on somebody' and not 'with somebody.' The error is in the preposition here.

Correct sentence: A heavy fine will be inflicted on them if they do not pay the taxes in time.