

SSC MOCK TEST - 346 (SOLUTION)

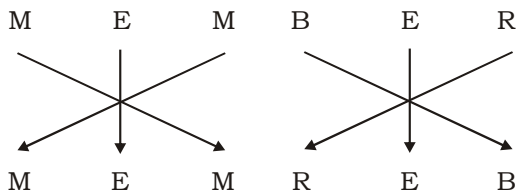
1. (D) The currency of France is Euro, while the currency of Myanmar is Kyat.

2. (A) As, $(7 + 1 + 4) \times (7 \times 1 \times 4) = 336$
Similarly, $(4 + 8 + 2) \times (4 \times 8 \times 2) = 896$

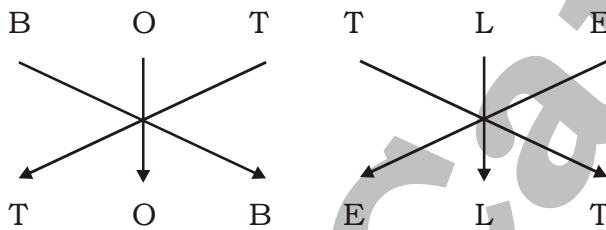
3. (B) Except Sun, others are planet.

4. (D) (A) $729 \Rightarrow 7 + 2 = 9$
(B) $358 \Rightarrow 3 + 5 = 8$
(C) $314 \Rightarrow 3 + 1 = 4$
(D) $537 \Rightarrow 5 + 3 = 8 \neq 7$

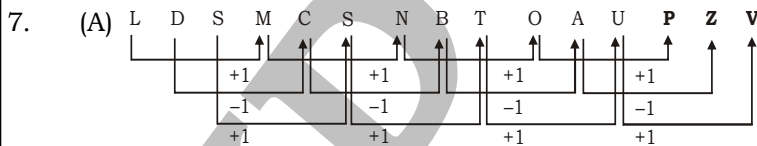
5. (C) As,



Similarly,



6. (B) 70 95 145 220 320
 +25 +50 +75 +100



8. (B) Total number of students = 50
The number of girls is half of the number of boys.

If Nikita ranked at 17th from the top and 7 girls are better than her, then her rank among boys = $17 - 7 = 10$

Now, Nikita is at 17th position from the top that means 33 students are behind her.

So, Nikita's rank is better than = $33 - 10 = 23$ boys

9. (C) As, $97 + (9^2 + 7^2) = 227$
 $227 + (2^2 + 2^2 + 7^2) = 284$
Similarly, $36 + (3^2 + 6^2) = 81$
 $81 + (8^2 + 1^2) = 146$

10. (C) brkmd/brkmd/brkmd

11. (D)

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

$$77 + 23 = 100 \Rightarrow \sqrt{100} = 10$$

In the second row,

$$85 + 84 = 169 \Rightarrow \sqrt{169} = 13$$

In the third row,

$$128 + 196 = 324 \Rightarrow \sqrt{324} = 18$$

13. (C) $225 \times 15 + 20 \div 5 - 10 = 105$

After changing \times and \div ,

$$225 \div 15 + 20 \times 5 - 10 = 105$$

$$15 + 100 - 10 = 105$$

$$115 - 10 = 105$$

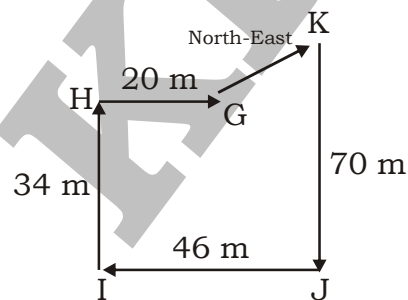
$$105 = 105$$

14. (C) Priya⁻



Hence, Kavya is great grand daughter of Dinesh.

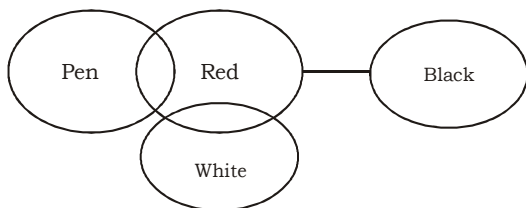
15. (A)



Its clear from the above figure that, Point K is in North-East direction with respect to Point G.

16. (C) 3. Money → 1. Site → 2. Plans → 5. Building → 4. Rent

17. (D)



I. False

II. False

III. False

Hence, No conclusion follows.

18. (C)

19. (A)

20. (D) As, NOWADAYS → Alphabetical order → AADNOSWY

And, SOUND → Alphabetical order → DNOSU

Similarly, ANALOGY → Alphabetical order → AAGLNOY

21. (B)

As, $27 \times 3 + (27 - 3) = 105$

Similarly, $49 \times 6 + (49 - 6) = 337$

22. (B)

23. (C)

24. (B)

25. (A)

29. (A) The other tributaries of the Indus are Jhelum and Chenab. It is one of the largest river basins of the world, covering an area of 1165000 sq km (in India it is 321289 sq km) and a total length of 2880 km (In India 1114 km).

31. (A) Right to Property was deleted from Fundamental Rights by the 44th Constitutional Amendment. Hence this is not a Fundamental Right. This is the correct answer.

33. (A) Khwaja Muinuddin Chisti is regarded as foremost preacher of Sufism among Sufis of India.

35. (C) Asian Power Index is prepared by the Lowy Institute of Sydney. In the recently released index of 2021, the United States ranked at the top spot, for exerting influence over the region.

36. (C) After the decline of the Chalukya Kingdom of Kalyani at the close of 12 century and of the Chola Kingdom at the beginning of the 13 century, the new kingdoms which arose in South India were Yadavas of Devagiri and Kakatiyas of Warangal and Hoysalas of Dwarasamudra and Pandyas of Madurai.

37. (D) Ursa Major, (Latin: "Greater Bear") also called the Great Bear, in astronomy, a constellation of the northern sky, at about 10 hours 40 minutes right ascension and 56° north declination.

38. (D) The name "United Nations", coined by United States President Franklin D. Roosevelt, was first used in the Declaration by United Nations of 1 January 1942, during the Second World War, when representatives of 26 nations pledged their Governments to continue fighting together against the Axis Powers.

39. (A) Both the diseases have been eradicated in India. The country's last case of polio was in 2010, in West Bengal, and the WHO had declared India polio-free in 2014. Small pox has been eliminated across the world, after one last outbreak in Somalia in the late 1980s.

41. (D) The effect of scattering is inversely related to the fourth power of the wavelength of a given colour. Since the colour red has the highest wavelength of all the colours it gets scattered the least. So, red light is used as a danger signal as it is able to travel the longest distance through the fog, rain, etc.

43. (C) The fission process becomes self-sustaining as neutrons produced by the splitting of atom strike nearby nuclei and produce more fission. This is known as a chain reaction and is what causes an atomic explosion.

44. (D) Shah Jahan recovered Kandhar in 1638 from the Iranians but lost it again in 1649 despite three campaigns. The loss of Kandhar was a big blow as it was a strategic stronghold

45. (B) Sujata Vasant Manohar (born 28 August 1934) is a retired judge of the Supreme Court of India (retired in 1999) and a former member of the National Human Rights Commission of India.

46. (A) If the stars are seen to rise perpendicular to the horizon by an observer then the observer is at the equator because celestial equator is an imaginary circle around the sky directly above the earth's equator.
47. (B) Potato mosaic is NOT a seed-borne disease. It is a disease caused by a virus which affects the potato plant. Generally, mosaic viruses that infect potatoes are transmitted by aphids. They feed on the sap of infected plants and transmit the virus to healthy plants.
49. (B) The Serial Line Internet Protocol (SLIP) is an encapsulation of the Internet Protocol designed to work over serial ports and router connections.
50. (B) The Seine is a 777-kilometre-long river situated in northern France. The opening ceremony of the Paris Olympics on July 26, 2024, will be held on the River Seine.

51.(B) Volume of hemispherical cup = $\frac{2}{3}\pi r^3$

$$= \frac{2}{3} \times \pi \times (4)^3 = \frac{128}{3} \pi \text{ cm}^3$$

$$\text{Volume of cone} = \frac{1}{3} \times 8 \times 8 \times 16 \times \pi = \frac{1024}{3} \pi \text{ cm}^3$$

$$\text{Percentage part of empty} = \frac{\frac{1024}{3} \pi - \frac{128}{3} \pi}{\frac{1024}{3} \pi} \times 100 = 87.5\%$$

52. (C) $(x^2 - 1)$, $(x^2 + 1)$, $2x$

Put $x = 1, 2, 3$

Let $= 2 = 3, 5, 4$ (Right Triangle)

53. (B) CP : MP P : d
2 : 3 3x : 2x

$$\frac{2(100 + 3x)}{100} = \frac{3(100 - 2x)}{100} \quad (\because SP = SP)$$

$$200 + 6x = 300 - 6x$$

$$x = \frac{25}{3} \%$$

$$\text{Discount\%} = \frac{50}{3} \% = 16.66\%$$

54. (B) $\frac{12}{3 + \sqrt{5} + 2\sqrt{2}} \times \frac{3 + \sqrt{5} - 2\sqrt{2}}{3\sqrt{5} - 2\sqrt{2}}$

$$= \frac{12(3 + \sqrt{5} - 2\sqrt{2})}{(3 + \sqrt{5})^2 - (2\sqrt{2})^2} = \frac{12(3 + \sqrt{5} - 2\sqrt{2})}{9 + 5 + 6\sqrt{5} - 8}$$

$$= \frac{2(3 + \sqrt{5} - 2\sqrt{2})}{(\sqrt{5} + 1)}$$

Again,

$$\begin{aligned} &= \frac{2(3 + \sqrt{5} - 2\sqrt{2})}{\sqrt{5} + 1} \times \frac{(\sqrt{5} - 1)}{(\sqrt{5} - 1)} \\ &= \frac{2(3\sqrt{5} + 5 - 2\sqrt{10} - 3 - \sqrt{5} + 2\sqrt{2})}{4} \\ &= \sqrt{5} + \sqrt{2} - \sqrt{10} + 1 \end{aligned}$$

55. (C) Pankaj : Suraj
Efficiency 5 : 4
Time 4 : 5
5 unit = 6

$$4 = \frac{6}{5} \times 4 = \frac{24}{5} \text{ days}$$

56. (D) Distance between the two centre = $\sqrt{d^2 - (r_1 + r_2)^2}$

$$(8)^2 = \sqrt{d^2 - (r_1 + r_2)^2}$$

$$64 = d^2 - 100$$

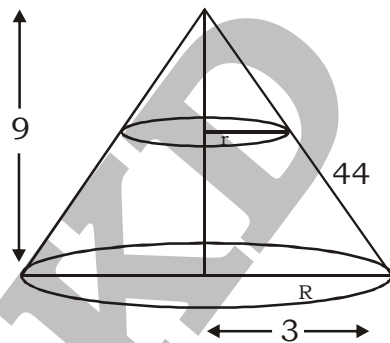
$$164 = d^2$$

$$d = 2\sqrt{41} \text{ cm}$$

57. (D) $(80 - x) = (96 - 3x)$
 $2x = 16$
 $x = 8$
 $CP = 80 - 8 = 72$

$$\text{Profit}\% = \left(\frac{18}{72} \times 100\right)\% = 25\%$$

58. (C)



$$\text{Volume of cone} = \frac{1}{3} \times \pi \times (3)^2 \times 9 = 27\pi$$

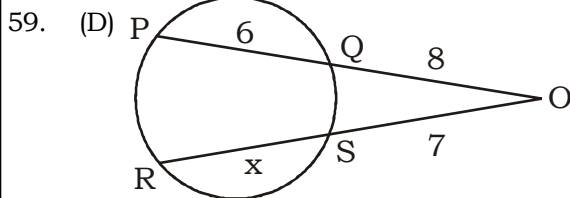
$$h = 3r \quad (\because 44 = 14\pi)$$

$$\text{Volume of upper part} = 27\pi - 14\pi = 13\pi$$

$$= \frac{1}{3} \times \pi r^2 \times h = 13\pi$$

$$= \frac{1}{3} \times \pi \times r^2 \times 3r = 13\pi$$

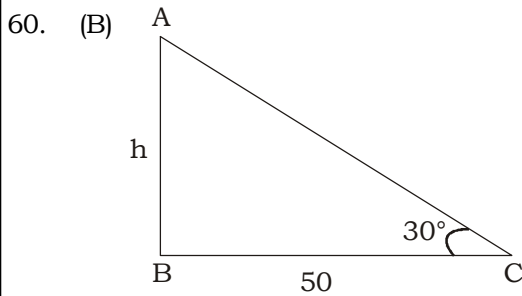
$$r = \sqrt[3]{13} \text{ cm}$$



$$OP \times OQ = OR \times OS$$

$$14 \times 8 = (x + 7) \times 7$$

$$x = 9 \text{ cm}$$



$$\tan 30^\circ = \frac{h}{50}$$

$$\frac{1}{\sqrt{3}} = \frac{h}{50}$$

$$h = \frac{50}{\sqrt{3}} \text{ m}$$

61. (C) $\frac{3}{2}$ year, $R = 10\%$

3 year, $R = 10\%$ (Half yearly)

$$SI = 5 + 5 + 5 = 15\%$$

$$CI = 5 + 5 + \frac{5 \times 5}{100} = 10.25\%$$

$$10.25 + 5 + \frac{10.25 \times 5}{100} = 15.7525\%$$

$$\text{Difference} = 0.7625\% \rightarrow 244$$

$$100\% \rightarrow \frac{244}{0.7625} \times 100 = ₹ 32000$$

62. (D) 5 E 9

2 F 8

3 G 7

1114

Total = 1114

F = 9, E = 0, G = 0

63. (A) $4a - \frac{4}{a} + 3 = 0$

$$a - \frac{1}{a} = \frac{-3}{4}$$

Both side cube,

$$a^3 - \frac{1}{a^3} - 3 \times \frac{-3}{4} = \frac{-27}{64}$$

$$a^3 - \frac{1}{a^3} = \frac{-27}{64} - \frac{9}{4}$$

Add 3 on both sides,

$$a^3 - \frac{1}{a^3} + 3 = \frac{-27}{64} - \frac{9}{4} + 3 = \frac{21}{64}$$

64. (B) Required ratio = $\frac{B}{A} = \sqrt{\frac{36}{16}}$

$$\frac{B}{A} = \frac{3}{2} = 3 : 2$$

65. (C) $7\frac{1}{2}$ min \rightarrow 1 km

$$= \frac{15}{2} \times 60 = 8 \text{ km / h}$$

$$\text{Speed of boat} = \frac{1}{2}(8 + 5) = 6\frac{1}{2} \text{ km / h}$$

66. (B) Ratio of income = 5 : 6

Expenditure = 3 : 4

$$5x - 3y = 1800 \quad \dots(i)$$

$$6x - 4y = 1600 \quad \dots(ii)$$

From equ. (i) and (ii),

$$x = 1200$$

$$y = 1400$$

$$\text{Income of Apurva} = 1200 \times 6 = ₹ 7200$$

67. (D) Milk : Water

7 : 1

Milk = 35

Water = 5

ATQ,

$$\frac{5+x}{35} = \frac{1}{3}$$

$$x = 6\frac{2}{3} \text{ litres}$$

68. (C) Average of 7 consecutive number = $\frac{(x-3)+(x-2)+(x-1)+x+(x+1)+(x+2)+(x+3)}{7}$

$$20 = \frac{(x-3)+(x-2)+(x-1)+x+(x+1)+(x+2)+(x+3)}{7}$$

$$7x = 140$$

$$x = 20$$

Largest number = 23

69. (B) Let the ratio be 5x and 6x years.

ATQ,

$$\frac{5x+2}{6x+2} = \frac{7}{8}$$

$$40x + 16 = 42x + 14$$

$$x = 1$$

Then, Present age = 5 years and 6 years

After 12 year, the ratio = 17 : 18

70. (D) $\sin(\theta + 30^\circ) = \frac{3}{\sqrt{12}} \times \frac{\sqrt{12}}{\sqrt{12}}$

$$\sin(\theta + 30^\circ) = \frac{\sqrt{3}}{2}$$

$$\sin(\theta + 30^\circ) = \sin 60^\circ$$

$$\cos^2 30^\circ = \frac{3}{4}$$

71. (B) Required difference = $\frac{1}{6} \times (14 + 18 + 23 + 21 + 27 + 26) - 15 = 21.5 - 15$
= 6.5 thousand

72. (D) Required ratio = 18 : 15 : 9 = 6 : 5 : 3

73. (B) From graph the required year is 2000

74. (C) Required percentage = $\frac{29}{35} \times 100 \approx 83\%$

75. (A) Required percentage increase = $\frac{27-18}{18} \times 100 = 50\%$

MEANINGS IN ALPHABETICAL ORDER

Abjure/Renounce	To reject formally	छोड़ देना
Auspicious	Prosperous, favourable	शुभ, मंगल
Batten	Long flat squared timber/metal for fastening	फट्टा]
Boisterous	Noisy, lacking in discipline	हुल्लाड़बाज
Catastrophe	Disaster, event causing	प्रलय
Contagious	Capable of transmission by touch	संक्रामक
Contemporary	Occurring at the same time	समकालीन
Deist	One who advocates natural religion	प्रकृतिवादी/प्रत्यक्षवादी
Epitomize	A perfect example of	प्रतीक होना
Fastidious	Very attentive to accuracy and detail / hard to please	दुराध्य/नखरेबाज
Hatches	A small opening	निकास
Hireling	A person employed to do menial work	निम्न कार्य करने वाला
Irrelevant	Having no connection with subject	बेमतलब
Loquacious	Talkative	बातूनी
Mime	Communication by gestured facing expressions (especially without words)	मूक अभिनय
Mobilize	Make moveable or capable of movement	इस्तेमाल करना
Nirvana	Place of complete bliss/delight	स्वर्ग
Officious	Intrusively offensive in offering help or advice	जबरदस्ती दखल देने वाला
Proliferation	Rapid increase in numbers	बहुजनन/संख्या में बढ़ना
Rationalist	Who believes in practical reason & knowledge	तार्किक
Respectably	In a decent & reputable manner	सम्माननीय ढंग से
Serenity	Absence of mental stress	शांतचित्तता
Tangent	Diverging from the original purpose	अलग रास्ते में चले जाना
Underneath	On the lower side	नीचे
Venal	Motivated by bribery, corrupt	बिकाऊ
Volunteer	A person freely offering to do something	स्वयंसेवक



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SSC MOCK TEST - 346 (ANSWER KEY)

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

KD