SSC CHSL (Tier-I) Practice Set

Answers with Explanation

1. (b) Olaf Scholz was sworn in as Germany's new chancellor on 8 November 2021, formally taking power after Angela Merkel's historic 16 years as leader   অ্যাচিভার্স

2. (b) The Olympic bronze medal winning Indian hockey player. Rupinder Pal Singh has announced his retirement from international hockey to make way for young and talented players.

3. (b) Sangai festival is an annual cultural festival organised by Manipur Tourism Department every year from 21 to 30 November.

4. (a)

5. (d) States with Highest Forest area/Cover :
   - **Area-wise Madhya Pradesh has the largest forest cover** in the country followed by Arunachal Pradesh, Chhattisgarh, Odisha and Maharashtra.
   - **In terms of forest cover as percentage of total geographical area, the top five states are** Miazoram Arunachal Pradesh, Meghalaya, Manipur and Nagaland.
   - The term **forest area** denotes the **legal status of the land** as per the government rocords whereas th term **forest cover indicates presence of trees over any land.**

6. (d) The **Vande Bharat Express,** also known as **Train 18** is an Indian semi high speed, intercity, EMU train which was designed and manufactured by Integral Coach Factory (ICF) at Perambur, Chennai under the Indian government's Make in India initiative, over a span of 18 months.   অ্যাচিভার্স

7. (a) Pulakeshin II, the King of the Chalukya dynasty defeated Harshavardhana when he seeks to enlarge his Empire into the southern peninsula of India. He defeated Harshavardhana on the banks of the Narmada river in 630 A.D.

8. (b) Purusha sukta is the Xth mandal of the Rig Veda that explains the origin of four varnas viz. brahmana, Kshatriya, Vaishya and Shudra.

9. (c) The Ibadat Khana was a meeting house built in 1575 CE by the Mughal Emperor Akbar at Fatehpur Sikri to gather spiritual leaders of different religious grounds so as to conduct a discussion on the teachings of the respective religious leaders.   অ্যাচিভার্স

10. (a) The system of ranking of Du-Aspa and Sih-Aspa was introduced by the emperor Jahangir. It was an honourable ranking given to Mansabdars who owned horses. Shahjahan was the emperor who used it extensively and formalised it after being established by his father.   অ্যাচিভার্স

11. (b) The Provisional Government of Free India (Arzi Hukumat-e-Azad Hind) or, more simply, Azad Hind,was an Indian provi- sional government established in Japanese occupied Singapore during World War II. It was created in October 1943 and supported by - as well as largely dependent on-the Empire of Japan

12. (b) all export and import-related activities including custom duty are governed by the Foreign Trade Policy (FTP), which is aimed at enhancing the country's exports and use trade expansion as an effective instrument of economic growth and employment generation.

13. (d)   অ্যাচিভার্স

14. (a)

15. (a) Indirect tax is the kind is a tax which is levied on goods and services and its final burden falls on the consumers. That is why it causes a burden on the poorer section of the society.

16. (b)

17. (d) all but Palar river are Western Ghat rivers.

18. (b) The foothills zone of Himalayas is known as Siwalik. It stretches from the Indus River to the brahmaputra river with an average wide of 10-50 kilometers.

19. (c) Khardung La is a mountain pass in the Leh district of the Indian union territory of Ladakh. Built in 1976, it was opened to public motor vehicles in 1988. Maintained by the border Roads Organisation, the pass is strategically important to India as it is used to carry supplies to the Siachen Glacier. The road is one of the world's highest motoroable roads.

20. (d) The southwest monsoon arrives in Kerala in the last (3-4) days of May.   অ্যাচিভার্স

21. (d) berubari case was the Presidential Reference Under art. 143(1) of the Constitution of India on the implementation of the Indo-Pak agreement relating to berubari union and exchange of enclaves which come up for
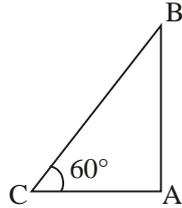
consideration by a bench consisting of eight judges.   অ্যাচিভার্স

22. (b) The Estimates Committee has 30 members, all of them being from Lok Sabha. There is no representation from the Rajya Sabha.

23. (c) Xerophthalmia is a serious eye disorder associated with vitamin a deficiency.

24. (c) Desert coolers are based on the simple principle that when unsaturated air comes in contact with water, the water evaporates. In the process, the moisture content of air increases, while its temperature decreases. The resulting cold but moist air is used for providing cooling.

25. (b) HF< HCl < Hbr < Hl is the correct increasing order of the acidic strenght
   ● The acidic strength is the tendency of acid to be able to dissociate into a proton H+ and an anion
   ● A strong acid completely ionizes in a solution and a weak acid only partially ionizes.
   ● The polarity of the Hydrogen-atom bond determines the acid strength.
   ● The stronger an acid is, the lower the pH it would produce in solution.   অ্যাচিভার্স

26. (c) $\cos^2\theta = \dfrac{(x+y)^2}{4xy}$

   Max value of $\cos^2\theta = 1$

   $\Rightarrow \quad 1 = \dfrac{(x+y)^2}{4xy}$

   $\Rightarrow \quad 4xy = (x+y)^2$
   $\Rightarrow \quad 4xy = x^2 + y^2 + 2xy$
   $\Rightarrow \quad O = x^2 + y^2 - 2xy$
   $\Rightarrow \quad O = (x-y)^2$
   $\Rightarrow \quad O = x - y$ অ্যাচিভার্স
   $\Rightarrow \quad x = y$

27. (b) $\Rightarrow 7\sin^2\theta + 3\cos^2\theta = 4$
   $\Rightarrow 7\sin^2\theta + 3(1+\sin^2\theta) = 4$
   $\Rightarrow 7\sin^2\theta + 3 - 3\sin^2\theta = 4$
   $\Rightarrow 4\sin^2\theta = 1$

   $\Rightarrow \sin^2\theta = \dfrac{1}{4}$

   $\Rightarrow \sin\theta = \dfrac{1}{2}$

   $\Rightarrow \sin\theta = \sin 30°$
   $\Rightarrow \theta = 30°$ অ্যাচিভার্স

   $\tan 30° = \dfrac{1}{\sqrt{3}}$

28. (d) average amount of interest paid by the company during the given period   অ্যাচিভার্স

   Rs. $\left[\dfrac{23.4+32.5+41.6+36.4+49.4}{5}\right]$ lakhs

   Rs. $\left[\dfrac{183.3}{5}\right]$ lakhs

   = Rs. 36.66 lakhs

29. (c) Require(d) percentage

   $=\left[\dfrac{(3.00+2.52+3.84+3.68+3.96)}{(288+342+324+336+420)}\times 100\right]\%$

   $=\left[\dfrac{17}{1710}\times 100\right]\% \approx 1\%$

30. (b) Required ratio

   $=\left[\dfrac{(83+108+74+88+98)}{(98+112+101+133+142)}\right]$ অ্যাচিভার্স

   $=\left[\dfrac{451}{586}\right] = \dfrac{1}{1.3} = \dfrac{10}{13}$

31. (a) $V_1 : V_2 = 1 : 1$

   $\pi r_1^2 h_1 : \pi r_2^2 h_2 = 1:1$

   $\dfrac{r_1^2}{r_2^2}\times\dfrac{1}{2} = \dfrac{1}{1}$

   $r_1 : r_2 = \sqrt{2}:1$

32. (b) Let water raised be x

   $2\times\dfrac{4}{3}\pi\times(3)^2 = \pi\times(6)^2\times x$

   $72\pi = \pi \times 36x$ অ্যাচিভার্স
   x = 2cm

33. (d) Let breadth = x. then, length = 2x. then,
   (2x – 5) (x +5) – 2x × x = 75
   $\Rightarrow$ 5x – 25 = 75 $\Leftrightarrow$ x = 20
   So, length of the rectangle = 2x
   Therefore, 2 × 20 cm$\Rightarrow$ 40 cm.

34. (b) Height of the equilateral triangle = $20\sqrt{2}$

   $=\left(\dfrac{\sqrt{3}}{2}\right)$ side = $20\sqrt{2}$

   = side $= \dfrac{(40\sqrt{2})}{\sqrt{3}}$ cm   অ্যাচিভার্স

   $\Rightarrow$ area of equilateral triangle

   $=\left(\dfrac{\sqrt{3}}{4}\right)$side$^2 = \left(\dfrac{\sqrt{3}}{4}\right)\times\left[\left(\dfrac{40\sqrt{2}}{\sqrt{3}}\right)\right]^2$

$\Rightarrow$ area of equilateral triangle $=\left(\dfrac{800\sqrt{3}}{3}\right)$cm^2

$\therefore$ area of equilateral triangle is

$=\left(\dfrac{800\sqrt{3}}{3}\right)$cm^2
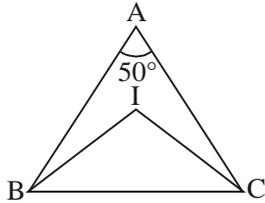
35. (d) Let AB be the wall and BC be the ladder

Then, $\angle ACB = 60°$ and AC = 4.6m.

$\dfrac{AC}{BC} = \cos 80° = \dfrac{1}{2}$

$\Rightarrow$ BC = 2 × AC

$\qquad$ = (2× 4.6)m

$\qquad$ = 9.2m

36. (a)

$\angle BIC = 90° + \angle A/2$

$\Rightarrow \angle BIC = 90° + 58/2$

$\Rightarrow \angle BIC = 90° + 29 = 119°$

37. (b)
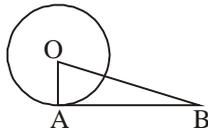
Given : Largest chord in a circle is the

diameter, $\Rightarrow$ radious OA $=\dfrac{10}{2}=5$ cm and

OB = 13 cm

To find : AB = ?

Solution : In right Δ OAB

$\Rightarrow (AB)^2 = (OB)^2 - (OA)^2$

$\Rightarrow (AB)^2 = (13)^2 - (5)^2$

$\Rightarrow (AB)^2 = 169 - 25 = 144$

$\Rightarrow AB = \sqrt{144} = 12$ cm

38. (d) Failed in mathematics, n(1) = 34

Failed in English, n(2) = 42

$n\left(A\bigcup B\right) = n(1) + n(2) - n(A\bigcap B)$

= 34 + 42 – 20 = 56

Failed in either or both subjects are 56

Percentage passed = (100 – 56)% = 44%

39. (c) Let CP of Horse = x

according to the questions

$x \times \dfrac{20}{100} - \left(20000 - x\right) \times \dfrac{10}{100} = 20000 \times \dfrac{2}{100}$

x = Rs. 8,000

40. (d) amount =

$15000\left(1 + \dfrac{2}{100}\right)\left(1 + \dfrac{4}{100}\right)\left(1 + \dfrac{5}{100}\right)$

= Rs. 16707.60

41. (a) Let the length of one train be x

Then, the distance covered = 2x

Relative speed = (78 – 68) = 10 km per hour

$=\left(\dfrac{5}{18} \times 10\right)$

Speed $= \dfrac{\text{Distance}}{\text{time}}$

$= \dfrac{5}{18} \times 10 = \dfrac{2x}{72} = 100$ m

42. (b) A is 50% more efficient than B.

Ratio of the works A and B done in 1 day

150 : 100 = 3 : 2

Work done by A and B together in 1 day

$= \dfrac{1}{15}$

$\therefore$ A's 1 day's work $= \dfrac{1}{15} \times \dfrac{3}{5} = \dfrac{1}{25}$

Hence, A alone finish the all work in 25 days.

43. (c) A : B

(Amount × time) $\rightarrow$ 21,000 × 12 : 42,000 × x

according to the question,

21,000 × 12 = 42,000 × x

$\Rightarrow$ x = 6

He joined after 6 months

44. (b) LCM of 2, 5, 9, 11 = 990

Thus, the required number = 990 + 1 = 991

45. (c) If the numbers be 2x and 3x, then LCM of 2x

and 3x = 6x

LCM = 48 (given)

$\therefore$ 6x = 48

$x = \dfrac{48}{6} = 8$

$\therefore$ Two numbers are (8×2 = 16) and

(8 × 3 = 24) respectively
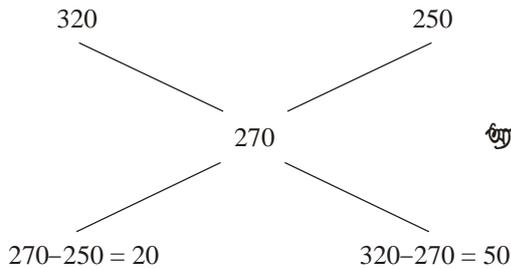
$\therefore$ Sum = 16 + 24 = 40

46. (d) Given SP = 324, then

CP of the mixture $= \dfrac{SP \times 100}{100 - Gain\%}$

$= \dfrac{324 \times 100}{100 + 20} = \dfrac{324 \times 100}{120} = 270$

by alligation rule

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   320                      250
        \                  /
         \                /
          \              /
               270
          /              \
         /                \
   270–250 = 20        320–270 = 50
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Required ratio = 20 : 50 = 2 : 5

47. (a) Let distance covered by A, B and C = d

Now, speed of A = 6x

and speed of B = 3x

and speed of C = x

This distance is covered by C in $1\dfrac{1}{2}$ h

Time taken to covered this distance by

$C = \dfrac{Distance}{Speed}$

$\Rightarrow Time = \dfrac{d}{x}$

$\Rightarrow 90 = \dfrac{d}{x}$

$\Rightarrow x = \dfrac{d}{90}$ ....(i)

Now, time taken to covered this distance by

$A = \dfrac{Distance}{Speed}$

$\Rightarrow Time = \dfrac{d}{6x} = \dfrac{d}{6 \times \dfrac{d}{90}}$ [from Eq.(i)]

$\Rightarrow Time = \dfrac{d \times 90}{6 \times d} = \dfrac{90}{6} = 15 \min$

Time = 15 min

48. (a) Required number of students = HCF of 1001 and 910

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910) 1001 (1
     910
      91) 910 (10
          910
            0
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Hence, HCF = 91

49. (c) Total price of the two pens = Rs [(20 ×18)– (18×15.50)] = Rs. 81

Let the price of other pen = Rs. 2x

So, x – 2x = 81

x = 27

The price of the two pens are Rs. 27 and Rs 54

50. (b) R : S = 1 : 1

S : P = 2 : 3

R : N = 1 : 2

R : S : P : N = 2 : 2 : 3 : 4

Then $\dfrac{2x + 2x + 3x + 4x}{4} = 55$

x = 20

Only Pooja and Neenu have equal to or greater than 60 kgs.

51. (c) The correct order is :

Key	Lock	Door	Room	Switch on
1	3	2	4	5

52. (d) The relationship between 729 and 3 is $\sqrt[6]{729} = 3$ and so, $\sqrt[6]{64} = 2$

53. (c) Iron deprivation is anaemia and the condition in which there is sleep deprivation is insomnia

54. (d) 64 92 148 ?

+28 +56 +112

Hence, '?' Will be replaced by 260

55. (d) Here the series is

$5 \times 1 + 1^2 = 6$
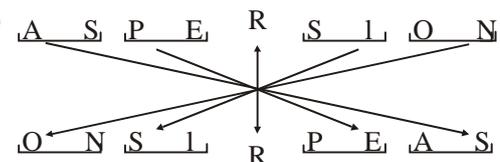
$6 \times 2 + 2^2 = 16$

$16 \times 3 + 3^2 = 57$

$57 \times 4 + 4^2 = 244$

$244 \times 5 + 5^2 = 1245$

$1245 \times 6 + 6^2 = 7506$

Hence, ? should be replaced by 244

56. (b)

57. (a)

Kharif crop
Wheat
Groundnut

58. (a) $50 \times \dfrac{56}{8} = 350$

$48 \times \dfrac{32}{8} = 192$

Similarly,

$$30 \times \frac{40}{8} = 150$$

অ্যাচিভার্স

59. (c)

Elephants — Chimpanzees — Tigers

and according to the figure it is true that some chimpanzees are elephants. But Elephants don't have any relation with tigers. So, the conclusion 1 is wrong but 2 is true.

60. (a)
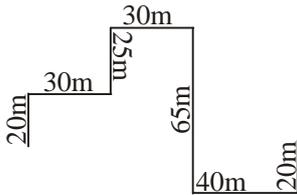
Closely, observe the drawn figure,
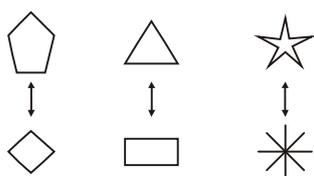She is in East of her starting position.

61. (b) $27 \times 2 - 24 \div 8 + 4$
= 54 − 3 + 4
= 58 − 3
= 55

62. (d) Order of words as per Dictionary :
3. Frankalmoign
↓
1. Frankenstein
↓
2. Frankincense
↓
4. Frauendienst

63. (b)

64. (c)

65. (a) M   O   Q   ?   U
   +2   +2   +2   +2

Hence, 'S' will come in the place of '?'
Similarly, if we observe the every 2nd letter of each of the terms, then we can find that 'M' will come as the 2nd letter in the missing term [D + 3 = G; G + 3 = J; J + 3 = M]
In case of the number
5   7   10   ?   19
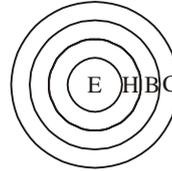 +2   +3   +4   +5

অ্যাচিভার্স

66. (d) $\frac{14 \times 5}{7} = 10$

$$\frac{18 \times 2}{4} = 9$$

$$\frac{16 \times 3}{2} = 24$$
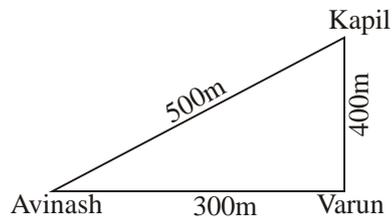
$$\frac{13 \times 6}{2} = 39$$

অ্যাচিভার্স

67. (a)

E H B C

68. (c)
69. (d) $\ldots^2 + (4)^2 = 65$
$(9)^2 + (8)^2 = 145$
70. (b)
71. (d)
72. (c)

Kapil, 500m, 400m, Avinash, 300m, Varun

অ্যাচিভার্স

The distance between Avinash's house and Varun's house is 300 meter.

73. (b)

Stones — Bricks — Trees

74. (b) Pages either new or white but not both
= 43 + 57
= 100

75. (d)
76. (c) Lusophilia means an affection for Portuguese language and culture

77. (b)   অ্যাচিভার্স
78. (d)
79. (a) 'was' undertaken; singular verb will be used for the word 'productiion'
80. (c) Canard : a false report or piece of information that is intended to deceive people.
81. (c) 'Inculpate' is the correct spelling.
82. (c)
83. (a) Replace 'glance at' with 'glance over' Glance over something (a wide surface) : to examine something very quickly.
84. (b) Replace 'with regard of' with 'with regard to'.
As 'with regard to a matter' is the correct prepositional phrase.   অ্যাচিভার্স
85. (c) Replace 'come by' with 'come about'.
Come about : Happen; take place
Come by : manage to acquire or obtain (something).

Hence, 'come about' fits in the context appropriately.

86. (d)   অ্যাচিভার্স

87. (c)

88. (b) Sternutation : the action of smeezing
Hence Sternutation and Sneezing are synonyms to each other.

89. (b) Incinerate: destroy (something especially waste material) by burning.
Hence Incinerate and burn are synonyms to each other.

90. (b) Repine to express dissatisfaction, pain or resentment usually tiresomely.
Gripe complain about something in a persistent, irritating way.
Rejoice : feel or show great joy or delight.
Quibble : argue or raise objections about a trivial matter.   অ্যাচিভার্স
Bleat make a characteristic weak, wavering cry.
Hence, Repine and Rejoice are antonyms to each other.

91. (a) Sapient : having or showing deep understanding and intelligent application of knowledge
Imbecile : stupid; idiotic.
Hence Sapient and Imbecile are antonyms to each other.

92. (c) The answer can be easily inferred from the last few sentences of the last paragraph of the passage.
... "This is where the importance of women's political empowerment comes .... democracy can become 'politics of difference'

and 'politics of presence."   অ্যাচিভার্স

93. (a) The last sentence of the 2nd paragraph clearly states the opposite of what is stated in the option (a)
"... Rural women in the asia-Pacific region make critical contributions to household production and national food security, yet their contribution is hardly acknowledged."

94. (b) Refer to the 2nd sentence of the 2nd paragraph of the passage.
"... as Renana Jhavwala of SEWA and member of UN Secretary General's High Level Panel on Women's Economic Empowerment aptly says, "Women's work is invisible ... women are at the base of the economic pyramid."

95. (c) The answer can be easily inferred from the 3rd sentence of the 3rd paragraph of the passage.
"... This scheme has pulled millions out of poverty."

96. (d) refer to the 3rd sentence of the last paragraph of the passage. "... Policy makers across the world have placed great emphasis on gender equality. "   অ্যাচিভার্স

97. (a)

98. (c) Cadence: a consistent rhythm or beat.

99. (b) Hard up: to not have enough of something important or valuable.
Hard on: to treat or criticize somebody.
Hence, 'hard up' is the right usage.

100. (a) Subvention: a grant of money, as by a government or some other authority; in aid or support of some institution or undertaking.

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