SSC GD Constable Exam. Practice Set
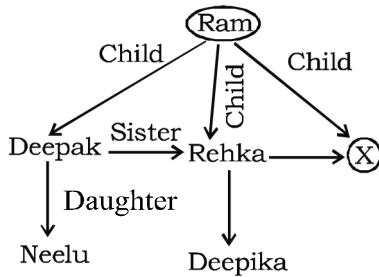
Answer with Explanation

PART-A
GI and Reasoning

1. (d) Except option (d), all are religious book.

2. (b)

3. (d) After changing the sign
$$24 \div 8 + 6 - 16 \times 3 \times 3$$
$$= 3 + 6 - 144$$
$$= 9 - 144 = -135$$

4. (b) 13 : 182 :: **18** : 342
$\underline{13 \times 14} \uparrow$ $\quad$ $\underline{18 \times 19} \uparrow$

5. (c)

Ram
Child — Child — Child
Deepak —Sister→ Rehka —→ Ⓧ
Deepak ↓ Daughter
Neelu
Rehka ↓ Deepika

6. (b) $(16 - 4) \times 6 \div 2 + 8 = 30$
$\Rightarrow (16 \div 4) \times 6 - 2 + 8 = 30$
$\Rightarrow 4 \times 6 - 2 + 8 = 30$
$\Rightarrow 24 - 2 + 8 = 30$

7. (c)

8. (c)
$\dfrac{\text{Cover}}{5}$ $\quad$ $\dfrac{\text{Index}}{3}$ $\quad$ $\dfrac{\text{Prologoue}}{4}$ $\quad$ $\dfrac{\text{Chapter}}{2}$

$\dfrac{\text{Epilogue}}{1}$

9. (b)

10. (c)

11. (c) As, $64 \times 52 \Rightarrow (6 + 4) + (5 + 2) = 17$,
$48 \times 56 \Rightarrow (4 + 8) + (5 + 6) = 23$
and $74 \times 35 \Rightarrow (7 + 4) + (3 + 5) = 19$
Similarly, $84 \times 37 \Rightarrow (8 + 4) + (3 + 7) = 22$

12. (b) According to the question,

Women's grandfather
↓ Daughter
Rajesh —Wife→ X
Rajesh ↓ Daughter
Woman

So, Rajesh is father of that woman.

13. (b) Given,
P R I S M
−1 +1 −1 +1 −1
↓ ↓ ↓ ↓ ↓
O S H T L

and R U B L E
−1 +1 −1 +1 −1
↓ ↓ ↓ ↓ ↓
Q V A M D

Then, W H O R L
−1 +1 −1 +1 −1
↓ ↓ ↓ ↓ ↓
V I N S K

14. (d) T $\xrightarrow{\text{Opp}}$ G $\xrightarrow{\text{Place Value}}$ 7 $\Rightarrow 7^2 = 49$ $\xrightarrow{\text{Reverse}}$ 94

Similarly,

R $\xrightarrow{\text{Opp}}$ I $\xrightarrow{\text{Place Value}}$ 9 $\Rightarrow 9^2 = 81$ $\xrightarrow{\text{Reverse}}$ **18**

15. (b) d<u>mn</u>n/<u>dmn</u>n/<u>dm</u>nn

16. (a)

Birds / Horse / Clouds $\quad$ or $\quad$ B C H

Conclusion − I − ✓
II − ✗

17. (a) M O Q S : A C E G :: P R T V : O Q S U
+2 +2 +2 $\quad$ +2 +2 +2 +2 $\quad$ +2 +2 +2 $\quad$ +2 +2 +2

18. (d) (A) $95 - 82 = 13$ (Difference)
(B) $34 - 21 = 13$ (Difference)
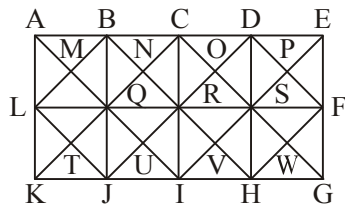(C) $69 - 56 = 13$ (Difference)
(D) $48 - 34 = 14$ (Difference)

19. (d) P A R E N T $\quad$ C H I L D R E N
↓ ↓ ↓ ↓ ↓ and ↓ ↓ ↓ ↓ ↓ ↓ ↓
B D F G J K $\quad$ M O X Q U F G J

Similarly, R E P R I N T
↓ ↓ ↓ ↓ ↓ ↓ ↓
F G B F X J K

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20. (c) There are 24 squares in the following figure.

Like– TQUJ, ROSV, PFWS, BCRQ, SFGH, LQJK, RDFH, CEGI, BMQN, RNQU, URVI, SWHV, CDSR, RSHI, LBRJ, ACIK, LMQT, NCOR, ODPS, ABQL, DEFS, QRIJ, QCSI and BDHJ

PART-B
GK and General Awareness

21. (b) Independent Labour party was an Indian political organization formed under the leadership of Dr. B.R. Ambedkar in August 1936 against the brahmanical and capitalist structures in the society.

22. (c) The original name of Nana Phadanavis was Balaji Janardan Bhanu.

23. (a) Human Chorionic Gonadotropin (HCG) is a hormone produced by the embryo following implantation. The presence of HCG is detected in pregnancy test.

24. (b) The most important work during the tenure of Lord Ripon was the Governments proposal on Local Self Government. Ripon wanted to develop municipal corporation because according to him these inaugurates country's political education.

25. (d) Exobiology is the branch of biology that deals with the study life beyond the earth's atmosphere, as on other planets.

26. (c) National Income can be calculated by 3 ways.
1. Sum of all expenditures
2. Sum of all incomes
3. Sum of all outputs
There is no any role of "sum of all savings" in Calculating National Income.

27. (b) Electromagnetic radiation is often described by its frequency-the number of oscillations of the perpendicular electric and magnetic fields per second–expressed in hertz.

28. (a) A convex mirror makes objects look smaller than they actually are. So, it is used in the vehicles.

29. (b) Hind Limbs Thumping on Ground by a rabbit is a Behaviour related to warning signal to member. The rabbit feels threatened by a danger or threat nearby, and is warning the rest of his warren. If rabbit loudly thumping his leg over and over, he could be trying to courteously alert you else in your home.

30. (c) Carotene is the name derived from "Carota" means "carrot".
It is synthesized by plants, and it can not make by animals. Carotene is a type of Photosynthetic pigment for plants. It absorbs the ultraviolet, violet, usually red or blue and yellow ring of COWS Carotene is also responsible for colour of carrots as well as oranges. Carotene is of three types as alpha carotene, beta carotene and gamma–carotene.

31. (c) It was a declaration passed during the tenure of Lord Irwin in 1929 (just after Simon commission 1928). It was just a show leaf to Indians for dominion status that was to be not granted anywhere in the near future.

32. (d) Hansen's disease (also known as leprosy) is an infection caused by slow-growing bacteria called Mycobacterium leprae. It can affect the nerves, skin, eyes, and lining of the nose (nasal mucosa).

33. (d) Moment of inertia is neither scalar nor vector, it is a tensor quantity.

34. (a) Because methanol has toxic properties, it is frequently used as a denaturant additive for ethanol manufactured for industrial purposes. Methanol is frequently called wood alcohol because it was once produced primarily as a byproduct of the destructive distillation of wood.

35. (d) The theory of price is a microeconomics principle that involves the analysis of supply and demand in determining an appropriate price point for a good or service.

36. (d) United States
37. (d) Dhanlaxmi Bank
38. (a) Singapore
39. (c) Australia
40. (b) Dr. APJ Abdul Kalam

PART – C
Elementary Mathematics

41. (c) $\because$ Total cost of 7000 bricks = 5740 + 805
$$= ₹ 6545$$

Total cost of 1 brick $= \dfrac{6545}{7000}$

$\therefore$ Total cost of 1000 bricks $= \dfrac{6545}{7000} \times 1000$

$= ₹\ 935$

42. (a) $\dfrac{\sqrt[3]{1372} \times \sqrt[3]{1458}}{\sqrt[3]{343}}$ অ্যাচিভার্স

$= \sqrt[3]{\dfrac{1372 \times 1458}{343}} = \sqrt[3]{\dfrac{2 \times 2 \times 343 \times 2 \times 9 \times 9 \times 9}{343}}$

$= \sqrt[3]{2 \times 2 \times 2 \times 9 \times 9 \times 9} = 2 \times 9 = 18$

43. (d) Here, SP is same. Hence, there is always a loss

$\left(\dfrac{r^2}{100}\right)\%$

$\therefore$ Loss per cent $= \dfrac{20 \times 20}{100} = 4\%$

44. (a) Let the required time be n.

Then, $A = P\left(1 + \dfrac{r}{100}\right)^t$

$\Rightarrow 1331 = 1000\left(1 + \dfrac{10}{100}\right)^n$

$\Rightarrow \dfrac{1331}{1000} = \left(\dfrac{10+1}{10}\right)^n$ অ্যাচিভার্স

$\Rightarrow \left(\dfrac{11}{10}\right)^n = \left(\dfrac{11}{10}\right)^3 \quad \therefore\ n = 3$

45. (c) 6 men = 12 women

$\therefore$ 1 man = 2 women

Now, 8 men + 16 women

$= (8 \times 2 + 16) = 32$ women

According to the question, $\dfrac{M_1D_1}{W_1} = \dfrac{M_2D_2}{W_2}$

$\Rightarrow \dfrac{12 \times 20}{1} = \dfrac{32 \times D_2}{2}$

$\Rightarrow 12 \times 20 = 16D_2$

$\Rightarrow D_2 = 3 \times 5$

$\therefore D_2 = 15$ days

46. (d) Given, $x + \dfrac{1}{x} = 2$

$\Rightarrow x^2 + 1 = 2x$

$\Rightarrow x^2 + 1 - 2x = 0$

$\Rightarrow (x - 1)^2 = 0$ অ্যাচিভার্স

$\Rightarrow x = 1$

$\therefore x^{2013} + \dfrac{1}{x^{2014}} = 1 + 1 = 2$

47. (b) Sum of squares of 1st n natural numbers

$= \dfrac{n(n+1)(2n+1)}{6} = \dfrac{10(10+1)(20+1)}{6} = 385$

48. (a) Given, $x = \dfrac{(\sqrt{5} + \sqrt{3})}{(\sqrt{5} - \sqrt{3})}$ and $y = \dfrac{(\sqrt{5} - \sqrt{3})}{(\sqrt{5} + \sqrt{3})}$

Then, $x + y = \dfrac{(\sqrt{5} + \sqrt{3})}{(\sqrt{5} - \sqrt{3})} + \dfrac{(\sqrt{5} - \sqrt{3})}{(\sqrt{5} + \sqrt{3})}$

$= \dfrac{(\sqrt{5} + \sqrt{3})^2 + (\sqrt{5} - \sqrt{3})^2}{(\sqrt{5})^2 - (\sqrt{3})^2}$

$= \dfrac{2\left[(\sqrt{5})^2 + (\sqrt{3})^2\right]}{2}$ অ্যাচিভার্স

$[\because (a - b)^2 + (a + b)^2 = 2(a^2 + b^2)]$

$= \dfrac{2 \times 8}{2} = 8$

49. (d) Here, $n = 8$, $a = 60$ kg, $b = 1\dfrac{1}{2}$ kg

$\therefore$ Weight of new oarsman $= a + nb$

$= 60 + 8 \times \dfrac{3}{2} = 60 + 4 \times 3$

$= 60 + 12 = 72$ kg

50. (d) y is 10% more than 125

$= 125 \times \dfrac{110}{100}$

$= 137.5 = y$

and x is 10% less than y অ্যাচিভার্স

$= \dfrac{90}{100} \times y = \dfrac{90}{100} \times 137.5 = 123.75$

$\therefore x = 123.75$

51. (b) Ratio of values of 50 paise, 25 paise and 10 paise coins

$= \dfrac{2}{2} : \dfrac{3}{4} : \dfrac{5}{10} = 1 : \dfrac{3}{4} : \dfrac{1}{2} = 4 : 3 : 2$

Sum of the ratios $= 4 + 3 + 2 = 9$

Value of 25 paise coins $= \dfrac{3}{9} \times 90 = ₹\ 30$

Number of 25 paise coins $= 30 \times 4 = 120$

52. (c) Given, $x = a\sec\theta$, $y = b\tan\theta$

$\dfrac{x^2}{a^2} - \dfrac{y^2}{b^2} = \dfrac{(a\sec\theta)^2}{a^2} - \dfrac{(b\tan\theta)^2}{b^2}$

[putting the values of x and y]

$= \dfrac{a^2\sec^2\theta}{a^2} - \dfrac{b^2\tan^2\theta}{b^2}$ অ্যাচিভার্স

$= \sec^2\theta - \tan^2\theta = 1$

53. (b) Rate downstream $= \dfrac{18}{4} = \dfrac{9}{2}$ km/h

Rate upstream $= \dfrac{18}{12} = \dfrac{3}{2}$ km/h

Now, speed of the stream

$$= \frac{\text{Rate downstream} - \text{Rate upstream}}{2}$$

$$= \frac{\frac{9}{2} - \frac{3}{2}}{2} = \frac{6}{4} = \frac{3}{2} = 1.5 \text{ km/h}$$

54. (c) By factorising 1800,

2	1800
2	900
2	450
5	225
5	45
3	9
3	3
	1

We have, $1800 = 2 \times 2 \times 2 \times 3 \times 3 \times 5 \times 5$

$= 2^3 \times 3^2 \times 5^2$

To make 1800 a perfect cube, it must be multiplied by 3×5 i.e., 15

∴ Sum of the digits $= 1 + 5 = 6$

55. (b) $3 + \dfrac{3}{3 + \dfrac{1}{3 + \dfrac{1}{3}}} = 3 + \dfrac{3}{3 + \dfrac{1}{\dfrac{9+1}{3}}}$

$= 3 + \dfrac{1}{3 + \dfrac{3}{10}} = 3 + \dfrac{3}{\dfrac{30+3}{10}}$

$= 3 + \dfrac{3 \times 10}{33} = \dfrac{99 + 30}{33} = \dfrac{129}{33} = \dfrac{43}{11}$

56. (a) Given P = 62500, A = ?, T = 2 yr

$$A = P\left(1 - \frac{R}{100}\right)^T$$

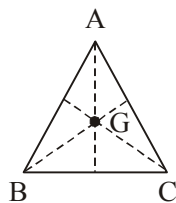∴ $P = 62500\left(1 - \dfrac{4}{100}\right)^2 = 62500 \times \dfrac{24}{25} \times \dfrac{24}{25}$

∴ P = 57600

57. (d) Given, A : B = 2 : 3

B : C = 4 : 5

∴ A : B : C = $2 \times 4 : 3 \times 4 : 3 \times 5 = 8 : 12 : 15$

58. (b)

∴ Area of $\triangle BGC$

$$= \frac{\text{Area of } \triangle ABC}{3} = \frac{48}{3} = 16 \text{ cm}^2$$

59. (c) Gain % $= \dfrac{SP - CP}{CP} \times 100$

$= \dfrac{210 \times (5+3) - (180 \times 5 + 200 \times 3)}{180 \times 5 + 200 \times 3} \times 100$

$= \dfrac{1680 - 1500}{1500} \times 100 = \dfrac{180}{1500} \times 100 = 12\%$

60. (b) When a train crosses a railway platform, it travels a distance equal to sum of length of platform and its own length.

Given, speed $= 132$ km/h $= 132 \times \dfrac{5}{18} = \dfrac{110}{3}$ m/s

Required time

$$\frac{(\text{Length of train} + \text{Length of platform})}{\text{Speed of train}}$$

$= \dfrac{110 + 165}{\dfrac{110}{3}} = \dfrac{275 \times 3}{110} = 7.5$ s

PART – D
English

61. (c) The glasses were filled with water by the waiter.

62. (b) Bigot – ধর্মান্ধ বা গোঁড়া ভক্ত।

63. (d) to tolerate

64. (a) cast away – বর্জন করা (reject)

65. (b) cut into – বাধা দেওয়া (interrupt)

66. (a) sheaf

67. (d) No error

68. (c) Clever

69. (b) Free

70. (a) Excessive

71. (b) margin

72. (a) stood out

73. (a) Mindful

74. (b) Kiran asked me whether I had seen the football match on television the earlier night.

75. (c) solid

76. (d) complaisant

77. (d) soul

78. (c) The teacher asked the student why he disturbed the class

79. (d) QSPR

80. (d) To desert someone in his difficulties

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