

SNAP 2010

Answers and Explanations

1	d	2	a	3	c	4	b	5	d	6	b	7	a	8	a	9	b	10	a
11	b	12	c	13	b	14	a	15	b	16	a	17	c	18	a	19	b	20	d
21	b	22	d	23	c	24	c	25	d	26	c	27	c	28	c	29	b	30	b
31	a	32	c	33	a	34	b	35	d	36	c	37	a	38	d	39	a	40	a
41	b	42	d	43	d	44	d	45	d	46	b	47	d	48	c	49	b	50	d
51	b	52	c	53	b	54	b	55	c	56	b	57	d	58	b	59	d	60	b
61	b	62	b	63	b	64	b	65	a	66	a	67	d	68	b	69	b	70	d
71	a	72	b	73	b	74	c	75	b	76	c	77	a	78	a	79	d	80	b
81	a	82	b	83	a	84	a	85	a	86	a	87	b	88	d	89	b	90	c
91	a	92	d	93	b	94	d	95	c*	96	b	97	b	98	a	99	d	100	b
101	a	102	c	103	d	104	b	105	a	106	b	107	b*	108	b*	109	d*	110	a
111	c	112	b	113	c	114	d	115	b	116	a	117	d	118	b	119	d	120	b
121	a	122	a	123	c	124	a	125	b	126	a	127	c	128	a	129	b	130	c
131	d	132	a	133	c	134	b	135	d	136	b	137	a	138	c	139	b	140	b
141	d	142	c*	143	b	144	c	145	b	146	d	147	b	148	b	149	b	150	d

1. d 2. a 3. c 4. b 5. d
6. b 7. a 8. a 9. b 10. a
11. b 12. c 13. b 14. a 15. b
16. a 17. c 18. a 19. b 20. d
21. b 22. d 23. c 24. c 25. d
26. c 27. c 28. c 29. b 30. b
31. a 32. c 33. a 34. b 35. d
36. c 37. a 38. d 39. a 40. a
41. b Refer to the last paragraph -" Not that the images we are able to see in literary works change." Author says that modernist writers have left an impact on literature by works that have a newer perspective on the theme.
42. d By quoting James Joyce and Virginia Woolf Author wants to emphasize on the fact that the fight for women's independence is not a new theme and that it has been going on for several decades now .
43. d Author appreciates the change that is visible in the literature with reference to the discussed theme.
44. d Author has discussed how modernist writers have impacted the issue of Women's Emancipation . None of the given options are correct.
45. d "Anthropologist" starts with a Vowel sound and hence should use " An " before it . Hence the only correct answer choice is option d.
46. b Apostrophe is used as the marking of possessive case (as in the cat's whiskers).
47. d Period is used to mark the end of declarative and imperative sentences. (Hand in the poster essays no later than noon on Friday.)
48. c Comma (I am, as you have probably noticed, very nervous about this.)
49. b Semi colon is used between closely related independent clauses not conjoined with a coordinating conjunction (I went to the basketball court; I was told it was closed for cleaning.)
50. d "Let the sleeping dogs lie" means 'Do not instigate trouble .'
51. b " A fool and his money are parted easily" means that foolish people lose wealth easily .
52. c " You are a bomb " means exceptionally wonderful.
53. b "flighty" means Indecisive and irresponsible.
54. b " Take down the enemy" means to kill/defeat the enemy.
55. c "Dime a dozen" means very common.
56. b "Throw the baby out with the bath water" means to discard the useful along with the useless.
57. d " Bark up the wrong tree" means to make a wrong choice.
58. b Rode
59. d Prevent
60. b High
61. b Sails
62. b Further
63. b Fawn
64. b Correct answer are discovery and altering.
65. a Correct answers are Young and face lift.
66. a Correct answer is empty.
67. d Correct answer is learning.
68. b Eulogize means to praise highly. Opposite will be to Criticize.
69. b Pedantic means ostentatious in one's learning.
70. d Pyrophobia is the fear of fire.
71. a Masculine has "man".
72. b Respite has "rest".
73. b Weight can be clubbed with both paper (Paper-weight) and lifter (weight -lifter).
74. c "out" can be clubbed with all the words except "bug". 'Out-shine', "out Number" and 'out'.
75. b News can be clubbed with all the words except Week. 'News letter', 'newsstand', 'newspaper'.
76. c Correct answer should be at the party.
77. a Correct expression is Cool as a Cucumber which means very calm.
78. a Correct expression is as fresh as a daisy which means very fresh.
79. d All the rest denote a couple.
80. b Nerd means an uninteresting person.

81. a Total revenue for 30 days = $10,000 \times 30 = \text{Rs. } 3,00,000$
 Total revenue for weekends = $20,000 \times 8 = \text{Rs. } 1,60,000$
 Total revenue for weekdays = $3,00,000 - 1,60,000 = \text{Rs. } 1,40,000$

$$\therefore \text{Average daily revenue for weekdays} = \frac{1,40,000}{22}$$

$$= 6363.6$$

$$= \text{Rs. } 6364$$

82. b As both the prime numbers are greater than 2.
 So both must be odd. Sum of any two odd numbers must be even. Hence, $x + y \neq 87$.

\therefore Statement (b) must be true.

83. a Let total units to be filled be 24.
 Units filled by A in one hour = 4
 Units filled by B in one hour = 3
 Units filled by A, B and c in one hour = 12
 So, units filled by C in one hour = 5

$$\text{Hence, C can fill the complete tank in } \frac{24}{5} = 4.8 \text{ hours.}$$

84. a Let total units to be filled be 6
 Units filled by A in one hour = 2
 Units filled by B in one hour = 1
 Units filled in the swimming pool upto 10:00 a.m. = 2
 Units filled in the swimming pool upto 11:00 a.m. = $2 + 3 = 5$
 Now as 2 units are being filled in one hour.

So, 1 unit will be filled in $\frac{1}{3}$ hr i.e. 20 minutes.

Hence, swimming pool will be completely filled at 11 : 20 a.m.

85. a Prime numbers between 60 and 70 are 61 and 67.
 So, sum = $61 + 67 = 128$

86. a It is an A.P. in second form.
 The difference between the terms is in A.P.
 So, the missing term is $42 + 14 = 56$

87. b Rolls at the time of opening = 40 dozens
 Rolls sold by noon = 20 dozens
 So, rolls remaining = 20 dozens
 Rolls sold between noon and closing time = 12 dozens
 So, rolls left unsold = 8 dozens.

88. d Let total units of work to be done be 120.
 Now, units done by Stuart and Jack in one day = 12
 units done by Jack and Leo in one day = 8
 units done by Leo and Stuart in one day = 10
 So, units done by all three in 2 days = 30
 Remaining units to be done = 90

$$\text{So, time taken by Stuart and Jack} = \frac{90}{12} = 7.5 \text{ days.}$$

89. b $216 : 36$

90. c Let original number be y

$$\text{Now, increased number} = \frac{5}{4}y$$

$$\text{And decreased number} = \frac{7}{10}y$$

According to questions:

$$\frac{5}{4}y - \frac{3}{10}y = 22$$

$$\Rightarrow \frac{25 - 14}{20}y = 22$$

$$\Rightarrow \frac{11}{20}y = 22 \Rightarrow y = 40$$

91. a Bottles produced by 6 machines in one hour = 180
 Bottles produced by 6 machines in 30 minutes = 90
 Bottles produced by 1 machine in 30 minutes = 15
 Bottles produced by 15 machines in 30 minutes = $15 \times 15 = 225$

92. d Let the number be x.
 Now, according to condition

$$\frac{x}{5} + 4 = \frac{x}{4} - 10$$

$$\Rightarrow \frac{x + 20}{5} = \frac{x - 40}{4}$$

$$\Rightarrow 4x + 80 = 5x - 200$$

$$\Rightarrow x = 280$$

93. b $461 + 462 + 463 + 464 \equiv 1 + 2 + 3 + 4 \equiv 10 \equiv \frac{10}{10}$

\therefore The sum will end in 0.

\therefore The sum will be divisible by 10.

94. d From (I) statement b can be either negative or positive. Also from (II) statement 'b' can be either negative or positive (I) and (II) cannot be combined. So, we cannot find out the answer.

95. c* From statement (I)
 $p = q + 17$ and $p = r + 103$
 From statement (II)

$$p + q + r = 1703$$

Combining statement (I) and statement (II)

$$p + p - 17 + p - 103 = 1703$$

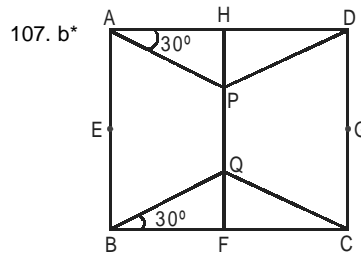
$$\Rightarrow 3p = 1583 \Rightarrow p = 527.66$$

Which is not possible since number of votes cannot be fraction.

So, value of p, q and r can not be found out.

96. b From statement (I) nothing can be said.
From statement (II)
- $$\pi(R_1^2 - R_2^2) = \frac{2}{3}\pi R_1^2$$
- So, ratio of $R_1 : R_2$ can be find out.
Hence, ratio of $C_1 : C_2$ can be found out.
97. b From statement (I) we can not find out the answer.
From statement (II)
- $$a - 3 + a - 2 + a - 1 + a + a + 1 + a + 2 + a + 3 = 105$$
- $$\Rightarrow 7a = 105$$
- $$\Rightarrow a = 15$$
- Hence, middle number can be determined.
98. a From statement (I)
- $$P = \frac{1}{3}(Q + R + S)$$
- and we know that $P + Q + R + S = 360$.
Hence, marks of P can be determined.
From statement (II) we can not say anything.
99. d Even after combining both statement the volume of container cannot be determined. Hence, number of ice cubes that can be accomodated cannot be determined.
100. b Statement (I) tells only about the previous years rate.
Statement (II)
- Dividend from 350 shares = Rs. 1500
- $$\text{Dividend from 1 share} = \frac{1500}{350} = \frac{30}{7} = 4.28$$
- So, rate of interest can be find out
- $$\text{as } 4.28 = \frac{10 \times R \times T}{100}$$
- $$\Rightarrow R = 42.8\%$$
101. a Sales of Voveran in 2006 = Rs. 23,00,00,000
Sales of Calpol in 2005 = Rs. 13,00,00,000
So, difference = Rs. 10,00,00,000
= Rs. 1,000 lakhs.
102. c Percentage increase in sales of Voveran
- $$= \frac{6.5}{16.5} \times 100 = 39.39\%$$
- Percentage increase in sales of Volini
- $$= \frac{2}{7} \times 100 = 28.57\%$$
- Percentage increase in sales of Dolonex
- $$= \frac{3.5}{7} \times 100 = 50\%$$
- Percentage increase in sales of Sumo
- $$= \frac{2.25}{5.25} \times 100 = 42.85$$

103. d Percentage increase in sales of Voveran
- $$= \frac{6.5}{16.5} \times 100 = 39.39\%$$
- Percentage increase in sales of Volini
- $$= \frac{2}{7} \times 100 = 28.57\%$$
- Percentage increase in sales of Move = $\frac{1}{4} \times 100 = 25\%$
- Percentage increase in sales of Nise = $\frac{3}{15} \times 100 = 20\%$
104. b Percentage increase in the sales of Voveran
- $$= \frac{6.5}{16.5} \times 100 = 39.39\%$$
- $$= 40\% \text{ (approx.)}$$
105. a
106. b $\frac{1}{10} \times 400 = 40$
- $$\frac{1}{4} \times 40 = 10$$
- $$\frac{1}{2} \times 10 = 5$$
- Hence, required answer is 5.



Let the edge of the square measures $2a$ units.
In right triangle BFQ:

$$QF = BF \tan 30^\circ = a \tan 30^\circ = \frac{a}{\sqrt{3}}$$

Area of triangle BQC = $2(\text{Area of triangle BFQ})$

$$= 2\left(\frac{1}{2}\right)(a)\left(\frac{a}{\sqrt{3}}\right) = \frac{a^2}{\sqrt{3}} \text{ unit square}$$

Area (ABCQPD) = Area(ABFH) + 2Area (QFC)

$$= \left(\frac{1}{2}\right)\text{Area(ABCD)} + \text{Area (BQC)}$$

$$= 2a^2 + \frac{a^2}{\sqrt{3}} = a^2\left(2 + \frac{1}{\sqrt{3}}\right)$$

Remaining area of ABCD

$$= 4a^2 - \left(2a^2 + \frac{a^2}{\sqrt{3}}\right) = a^2 \left(2 - \frac{1}{\sqrt{3}}\right)$$

$$\text{Answer} = a^2 \left(2 + \frac{1}{\sqrt{3}}\right) : a^2 \left(2 - \frac{1}{\sqrt{3}}\right)$$

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

$$= \frac{(13 + 4\sqrt{3})}{11} \text{ which is none of the given options.}$$

Hence the question is wrong.

Assumption:

Had it been polygon ABQCPD in the question instead of ABCQPD:

answer

$$= 4a^2 - 2(\text{area of } \triangle BQC) : 2(\text{area of } \triangle BQC)$$

$$= \frac{\left(4a^2 - \frac{2a^2}{\sqrt{3}}\right)}{\left(\frac{2a^2}{\sqrt{3}}\right)} = 2\sqrt{3} - 1$$

which is option (b).

108. b* Price of Darjeeling tea on every day after 100th day

$$= 100 + 10 = 110$$

So, according to question $110 = 85 + 0.15x$

$$\Rightarrow x = \frac{25}{15} \times 100 = \frac{500}{3} = 166.67$$

i.e. on 167th day price will be equal.

Hence, on 16th June prices will be equal.

109. d* From statement (I) we can not say that triangles must be congruent. Also from statement II we can not say that every right angle triangles are congruent to each other.

Even on combining both the statements we can not arrive at the conclusion whether the triangles are congruent or not.

110. a Let salary of A be $3x$ and B be $4x$ and expenditure of A be $4y$ and that of B be $5y$.

From statement (I)

$$B's \text{ saving} = x$$

$$4x - 5y = x$$

$$\Rightarrow 3x = 5y$$

$$A's \text{ saving } 3x - 4y = 3x - \frac{3}{5}x = \frac{12}{5}x$$

Hence, ratio of saving can be determined.

From statement (II) we can not say anything.

111. c Let average height of class be A and number of persons in the class be N .

From statement (I)

$$\frac{AN - 56}{N - 1} = A - 1 \Rightarrow AN - 56$$

$$= AN - A - N + 1 \Rightarrow A + N = 55$$

From statement (II)

$$\frac{AN - 42}{N - 1} = A + 1 \Rightarrow AN - 42$$

$$= AN - A + N - 1 \Rightarrow A - N = 43$$

Combining (I) and (II)

$$A + N = 55$$

$$A - N = 43$$

$$2A = 98$$

$$\Rightarrow A = 49$$

Hence, answer can be determined.

112. b $R > S$

$$J < V$$

From statement (I)

Ram is tallest but we can not know who is taller among Shyam and Vikram.

From statement (II)

$$S > V$$

Hence, Jay is the shortest among them.

113. c Let the sales in July be 150 units.

So, the sales in September = 100 units

and the sales in November = 105 units

$$\begin{aligned} \text{Hence, required percentage change} &= \frac{-45}{150} \times 100\% \\ &= -30\% \end{aligned}$$

$$114. d \quad 15x - \frac{2}{x} > 1$$

$$\Rightarrow 15x - \frac{2}{x} - 1 > 0$$

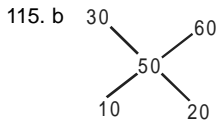
$$\Rightarrow \frac{15x^2 - x - 2}{x} > 0$$

$$\Rightarrow \frac{15x^2 - 6x + 5x - 2}{x} > 0$$

$$\Rightarrow \frac{3x(5x - 2) + 1(5x - 2)}{x} > 0$$

$$\Rightarrow \frac{(3x + 1)(5x - 2)}{x} > 0 \Rightarrow \frac{\left(x + \frac{1}{3}\right)\left(x - \frac{2}{5}\right)}{(x - 0)} > 0$$

$$\therefore x \in \left(-\frac{1}{3}, 0\right) \cup \left(\frac{2}{5}, \infty\right)$$



i.e. 1 : 2

So, with 40 litres of a 60% alcohol solution 20 litres of a 30% alcohol solution should be added to prepare a 50% solution.

116. a Let length of the wire be x mm.
So, according to condition

$$\pi \left(\frac{1}{2} \right)^2 \times x = 66000$$

$$\Rightarrow \frac{22}{7} \times \frac{1}{4} \times x = 66000$$

$$\Rightarrow x = 84,000 \text{ mm}$$

So, length of wire in meters = 84m

117. d Let speed of second train be x km/hr.
Length of both the trains = 220m

$$\text{Now, } \frac{220}{6} = (50 + x) \times \frac{5}{18}$$

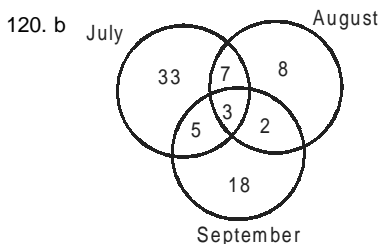
$$\Rightarrow 50 + x = 132$$

$$\Rightarrow x = 82 \text{ km/hr.}$$

118. b $(8R)^2 = 64R^2$
After dividing by 4 = $16R^2$
Its square root = $4R$
So, $Q = 4R$

119. d Let length, breadth and height of room $6x$, $4x$ and $2x$.
So, area of four walls = $24x^2 + 16x^2 = 40x^2$.
Dimensions after changes are $12x$, $2x$ and x .
So, area of four walls = $24x^2 + 4x^2 = 28x^2$.

$$\text{Hence, percentage reduction in area} = \frac{12}{40} \times 100 = 30\%$$



Hence, $7 + 2 = 9$ people read magazine for exactly two consecutive months.

121. a Let number of chocolates with A, B, C and D be a , b , c and d .
After 1st transfer chocolates with $A = a - b - 2c - 3d$ with $B = 2b$, $C = 3c$ $D = 4d$.

$$\text{After 2nd transfer } B = 2b + \frac{d}{2}, D = \frac{7}{2}d$$

$$\text{After 3rd transfer number of chocolates with } A = \frac{9}{10}$$

$$(a - b - 2c - 3d)$$

$$B = 2b + \frac{d}{2} + \frac{2}{10}(a - b - 2c - 3d) = 35, D = \frac{7}{2}d = 35,$$

$$C = 3c + \frac{1}{10}(a - b - 2c - 3d) = 35$$

Solving these equations we get the values of $A=110$, $B=10$, $C=10$ and $D=10$.

122. a 201 is the sum of all three numbers.
So, question mark should be $07 + 203 + 70 = 280$.
123. c The first letter is being incremented by two letters in each element of series, the second is being incremented by three letters and so on.
So, the answer must be ZKXS.
124. a As one statement of each has to be wrong and one has to be right.
So first statement of any one of the three must be right while that of other two must be wrong.
If we assume first statement of Sachin and Ricky to be right, we get some contradicting results.
So, Brian must be top scorer and Sachin cannot be second.
Hence, correct order is Brian, Ricky, Sachin.
125. b Let number of employees who prefer tea be T and who prefer coffee be C , while those who drink both and those who drink neither be B and N respectively.
Now, $T = 3B$ and $2T = 3C \Rightarrow C = 2B$.
Also, $B = N$
So, $T + C - B + N = 60$
 $\Rightarrow 3B + 2B - B + B = 60$
 $\Rightarrow 5B = 60$
 $\Rightarrow B = 12$
126. a As the clock strikes three times in 6 seconds i.e. at 0 seconds, 3 seconds and 6 seconds, means taking 3 seconds in between two strikes.
Now, clock has to strike 9 times at 9 o'clock.
So, it will take $8 \times 3 = 24$ seconds.

For questions 127 and 128:

Name	E-1	E-2	E-3
Order of starting time	2	3	1
Order of completion time	3	1	2

127. c E-3

128. a E-1

For questions 129 and 130:

The order of students from brightest to dullest is

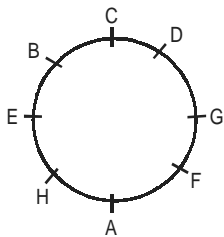


129. b P is clearly the brightest among all the students.

130. c R is the dullest among the three students from Elite School.

131. d As we do not know who entered earlier among Roger and Rafael. So, it cannot be decided.

For questions 132 to 134:



132. a

133. c

134. b

135. d There is no evidence given to support or deny a relationship between balloons and tables. Hence none of the first three given options can be conclusively deduced.

For questions 136 and 137:

The arrangements can be

A - C - E
or E - C - A

136. b So, C must be sitting in the middle.

137. a A and E are always at the extreme ends.

138. c Commission earned by D in 1994 = Rs. 29,800
Commission earned by A in 1994 = Rs. 24,600

$$\begin{aligned} \text{So, required percentage} &= \frac{5200}{24,600} \times 100 \\ &= 21.14\% \\ &= 21\% \text{ approximately.} \end{aligned}$$

139. b Commission earned by B in 1993 = Rs. 28,000
Total commission earned by all salesmen in 1993 = Rs. 1,46,960

$$\begin{aligned} \text{So, required percentage} &= \frac{28,000}{1,46,960} \times 100 \\ &= 19.05\% \\ &= 20\% \text{ approximately.} \end{aligned}$$

140. b The numbers in the second row are squares of numbers in first row decreased by 2 i.e. $n^2 - 2$
So, missing number must be $(8)^2 - 2$

$$\begin{aligned} &= 64 - 2 \\ &= 62. \end{aligned}$$

141. d The order will 2, 5, 1, 3, 6, 4

142. c* Options b and d can be eliminated as they are specific in nature. Option c is the best answer amongst the given although this can act only as one premise while concluding the given statement. We need more information to conclusively deduce the given statement.

143. b Let the length of each candle be L.
And n is the number of hours.

$$\text{Now, } 2\left(L - \frac{nL}{4}\right) = L - \frac{nL}{6}$$

$$\Rightarrow 2L - \frac{nL}{2} = L - \frac{nL}{6}$$

$$\Rightarrow L = \frac{nL}{3}$$

$$\Rightarrow n = 3$$

So, after three hours length of both the candles will be same.

144. c Let the numerator and denominator of the fraction be $2x$ and $3x$.

$$\text{So, } \frac{2x-6}{3x} = \frac{2}{3} \times \frac{2x}{3x}$$

$$\Rightarrow 18x - 54 = 12x$$

$$\Rightarrow 6x = 54$$

$$\Rightarrow x = 9$$

$$\text{So, the numerator} = 2 \times 9 = 18$$

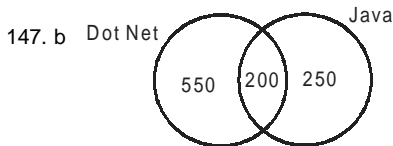
145. b According to question $100y + x - 20 = 2(100x + y)$

$$100y + x - 20 = 200x + 2y$$

$$98y - 199x = 20$$

Solving we get $x = 26$ and $y = 53$

146. d If we take two pieces then they can either be both of same colour, or of different colours. But third one must be of the one of the two colours. So, by taking out 3 pieces we must have atleast one pair.



Number of SW personnels having both skills are 200.

148. b If we assume that the set athlete has only good and bad athletes and that good and bad athletes are complimentary sets, then Statement b is a paraphrase of the conclusion statement and hence the answer.

149. b The missing numbers are 8, 1024 and 32.

150. d $17 = \frac{17x}{1-x}$

$$\Rightarrow 17 - 17x = 17x$$

$$\Rightarrow 34x = 17$$

$$\Rightarrow x = \frac{1}{2}$$

$$\text{So, } (2x) \times x = 2 \times \frac{1}{2} \times \frac{1}{2} = \frac{1}{2}$$