SBI Junior Associates (Prelims) Exam. Practice Set – Explanation

(1-5):

Year	Net Fixed Assets	Growth Rate	Net Current Assets	Growth Rate	Inves-tment	Growth
2012	7	–	13	–	2	–
2013	8	14.28%	16	23.07%	1	–50%
2014	7.5	–6.25%	15	–6.25%	2	100%
2015	9	20%	17	13.33%	4	100%

Total Assets	Growth Rate
22	–
25	13.63%
24.5	–2%
30	22.44%

1. (b) From the table, we can see that the growth rate from 2012 to 2015

$= \frac{(30-22)}{22} = 36.36\% \approx 36\%$

But this over a 3-year period.

$\therefore$ Average annual growth rate $= \frac{36}{3} = 12\%$

2. (c) The lowest growth rate is of investment in 2013, ie 50% decrease.
3. (c) The highest growth rate was seen for Investment in 2014, ie 100% increase
4. (e) None.
5. (c) Total Assets in the year 2013 is ₹25 crore.
Total Current Assets = 13 + 16 + 15 + 17 = ₹61 crore

$\therefore$ Reqd % $= \frac{25}{61} \times 100 = 40.98 \approx 41\%$

6. (b) $? = \left(\frac{6}{4} \times \frac{32}{8} \times \frac{6}{16}\right) + \left(\frac{6}{16} \times \frac{24}{8} \times \frac{36}{4}\right) = \frac{9}{4} + \frac{81}{8} = \frac{99}{8}$

7. (e) $? = \frac{6160 + 12320}{660} = \frac{18480}{660} = 28$

8. (d) $? = \frac{46195.5}{1047 + 137.5}$

or, $? = \frac{46195.5}{1184.5} = 39$

9. (c) $? = \frac{10 \times 10 \times 10}{4+4+4+4} = \frac{1000}{16} = 62.5$

10. (e) $? = \frac{6}{8} + \frac{10}{16} + \frac{26}{32} + \frac{6}{16} = \frac{24+20+26+12}{32}$

$= \frac{82}{32} = \frac{41}{16}$

11. (b) The series is $3 \times 1^2 + 2 = 5$,
$5 \times 2 + 3 = 13$, $13 \times 3^2 + 4 = 121$,
$121 \times 4 + 5 = 489$, $489 \times 5^2 + 6 = 12231$,
Therefore it should be 121 in the place of **120**.
12. (d) The series is $520 + 11^2 = 641$,
$641 - 13^2 = 472$, $472 + 15^2 = 697$,
$697 - 17^2 = 408$, $408 + 19^2 = 769$, ...
Therefore it should be 697 is the place of **700**.
13. (c) The series is

×6 ÷5 ×4 ÷3 ×2

720 4320 **864** 3456 1152 2304

Therefore it should be 864 in place of **865**.
14. (a) The series is

÷10 ÷8 ÷6 ÷4 ÷2

69120 6912 **864** 144 36 18

Therefore, it should be 864 in the place of 1152.
15. (e) The series is $83 - (1^3 + 1) = 81$
$81 + (2^3 + 1) = 90$, $90 - (3^3 + 1) = 62$,
$62 + (4^3 + 1) = 127$, $127 - (5^3 + 1) = 1$,...
Therefore it should be 1 in the place of 10.
16. (e) **I.** $x^2 + 3x + 2 = 0$
or, $x^2 + 2x + x + 2 = 0$
or, $x(x + 2) + 1(x + 2) = 0$
or, $(x + 2)(x + 1) = 0$
$\therefore$ $x = -1, -2$

II. $2y^2 - 5y = 0$
or, $y(2y - 5) = 0$
$\therefore$ $y = 0, \frac{5}{2}$
Hence $x < y$
17. (e) **I.** $x^2 + x = 56$
or, $x^2 + x - 56 = 0$
or, $x^2 + 8x - 7x - 56 = 0$
or, $x(x + 8) - 7(x + 8) = 0$
or, $(x + 8)(x - 7) = 0$
$\therefore$ $x = -8, 7$

II. $y^2 - 17y + 72 = 0$
or, $y^2 - 8y - 9y + 72 = 0$
or, $y(y - 8) - 9(y - 8) = 0$
or, $(y - 8)(y - 9) = 0$
$\therefore$ $y = 8, 9$
Hence $x < y$

18. (c) **I.** $x^2 + 2x - 8 = 0$ অ্যাচিভার্স
or, $x^2 + 4x - 2x - 8 = 0$
or, $x(x + 4) - 2(x + 4) = 0$
or, $(x + 4)(x - 2) = 0$
$\therefore x = 2, -4$
II. $y^2 = 7 + 2$
or, $y^2 = 9$
$\therefore y = \pm 3$
Hence, there is no relationship between x and y.

19. (b) **I.** $2x^2 + 48 = 20x$ অ্যাচিভার্স
or, $2x^2 - 20x + 48 = 0$
or, $x^2 - 10x + 24 = 0$
or, $x^2 - 6x - 4x + 24 = 0$
or, $x(x - 6) - 4(x - 6) = 0$
or, $(x - 6)(x - 4) = 0$
$\therefore x = 6, 4$
II. $2y^2 + 14y + 24 = 0$
or, $y^2 + 7y + 12 = 0$
or, $y^2 + 4y + 3y + 12 = 0$
or, $y(y + 4) + 3(y + 4) = 0$
or, $(y + 4)(y + 3) = 0$
$\therefore y = -3, -4$
Hence $x > y$

20. (d) **I.** $x^2 + x - 2 = 0$ অ্যাচিভার্স
or, $x^2 + 2x - x - 2 = 0$
or, $x(x + 2) - 1(x + 2) = 0$
or, $(x + 2)(x - 1) = 0$
$\therefore x = 1, -2$
II. $y^2 + 7y + 10 = 0$
or, $y^2 + 5y + 2y + 10 = 0$
or, $y(y + 5) + 2(y + 5) = 0$
or, $(y + 5)(y + 2) = 0$
$\therefore y = -2, -5$
Hence $x \geq y$

21. (a) Volume of cone = Volume of cylinder
or, $\frac{1}{3}\pi r^2 h = \pi R^2 H$ অ্যাচিভার্স
or, $\frac{1}{3} \times \frac{3}{2} \times \frac{3}{2} \times h = 2 \times 2 \times 9$
$\therefore h = \frac{144}{3} = 48\,m$

22. (d) Let one man's 1 day's work be m and 1 woman's one day's work be w.
$\therefore 5m + 7w = \frac{1}{10}$ ... (i)
$20m + 42w = \frac{1}{2}$ ... (ii)
On solving equation (i) and (ii), we get
$\therefore m = \frac{1}{100}$ and $w = \frac{1}{140}$ অ্যাচিভার্স
So, the work will be completed by 10 men and 15 women in
$1 \div \left(10 \times \frac{1}{100} + 15 \times \frac{1}{140}\right) = 1 \div \left(\frac{1}{10} + \frac{3}{28}\right)$
$= 1 \div \left(\frac{14+15}{140}\right) = 1 \div \left(\frac{29}{140}\right) = \frac{140}{29} = 4\frac{24}{29}$ days

23. (c) Let the speed of the car from Patna be x and the speed of the car from Gaya be y.
Then, $\frac{110}{x+y} = 1$
So, $x + y = 110$... (i) অ্যাচিভার্স
And, $\frac{110}{x-y} = 11$
$\therefore x - y = 10$... (ii)
From equation (i) and (ii), we get
$x + y = 110$
$x - y = 10$
$2x = 120$
$\therefore x = 60$ kmph
Putting the value of x in (i), we get
$\therefore y = 50$ kmph
So, the speed of car from Gaya = 50 kmph

24. (b) Let the number of girls be x.
So, the number of boys = 500 – x.
According to the question,
$24(500 - x) + 21x = 22\frac{3}{12} \times 500$...(i)
On solving (i), we get অ্যাচিভার্স
$\therefore x = \frac{835}{5} = 291.667 \approx 292$ girls

25. (a) Let the investment of Sanchit be ₹x, that the Nivesh be ₹y and that of Keshav be ₹z respectively.
Then, 12x : 9y : 6z = 7 : 8 : 9
or, $\frac{12x}{9y} = \frac{7}{8}$
$\therefore 32x = 21y \quad \therefore x = \frac{21}{32}y$ অ্যাচিভার্স
And $\frac{9y}{6z} = \frac{8}{9}$
$\therefore 27y = 16z \quad \therefore z = \frac{27}{16}y$
So, $x : y : z = \frac{21}{32}y : y : \frac{27}{16}y = 21 : 32 : 54$

26. (b) $\text{Zee}_{\text{Male}} = \left[84000 \times \frac{18}{100}\right] \times \frac{7}{18} = 5880$

27. (c) Reqd difference

$= \left(84000 \times \frac{24}{100}\right) \times \left(\frac{13-11}{24}\right) = 1680$

28. (a) $\text{Zee}_{\text{F}} = \left[84000 \times \frac{18}{100}\right] \times \frac{11}{18} = 9240$

$\therefore$ Total number of viewers of all channels together = 84000

$\therefore$ Reqd % $= \frac{9240 \times 100}{84000} = 11\%$

29. (e) Total number of viewers of Star Plus

$= 84000 \times \frac{17}{100} = 14280$

$\therefore$ Star $\text{Plus}_{\text{Male}} = 14280 \times \frac{9}{17} = 7560$

Now, total number of viewers of Sahara

$= 84000 \times \frac{10}{100} = 8400$

$\therefore$ Reqd % $= \frac{7560}{8400} \times 100 = \frac{7560}{84} = 90\%$

30. (b) $\text{Male}_{\text{Total}} = \frac{84000}{100} \times \left(12 \times \frac{8}{21} + 18 \times \frac{7}{18} + 19 \times \frac{5}{12} + 17 \times \frac{9}{17} + 10 \times \frac{3}{10} + 24 \times \frac{11}{24}\right)$

$= 840 \times \left(\frac{32}{7} + 7 + \frac{95}{12} + 9 + 3 + 11\right)$

= 3840 + 5880 + 6650 + 7560 + 2520 + 9240 = 35690

Total number of females = 84000 – 35690 = 48310

$\therefore$ Difference = 48310 – 35690 = 12620

31. (b) The series is $\frac{-12288}{-4} = 3072$, $\frac{3072}{-4} = -768$, $\frac{-768}{-4} = \mathbf{192}$, $\frac{192}{-4} = -48$

32. (c) . . . . . **4**, 4 × 4 = 16, 16 × 16 = 256, 256 × 256 = 65536

33. (d) The series is 4 × 3 = 12, 12 × 3 = 36, 36 × 3 = 108, 108 × 3 = 324, 324 × 3 = **972**...

34. (d) The series is 5 + 7 = 12, 7 + 12 = 19, 12 + 19 = 31, 19 + 31 = 50...

35. (b) The series is $(+2)^3$, $(+3)^3$, $(+5)^3$, $(+6)^3$, $(+7)^3$, $(+8)^3$ ...

(36-40):

Order of item	Item	Children
1	Prayers	U
2	Thoughts	T
3	Pledge	P
	Interval	Inverval
4	Drama	R
5	Speech	S
6	Newsreading	Q

36. (a) 37. (d) 38. (c) 39. (b) 40. (c)

41. (a) Sixth to the right of thirteenth from the right end is (13 – 6 =) 7th from right, ie D.

42. (b) number | symbol | vowel

ie 8#E. Thus, there is only one such symbol.

43. (c) number | consonant | vowel/number/symbol

ie 3P@, 9B%, 1Q©

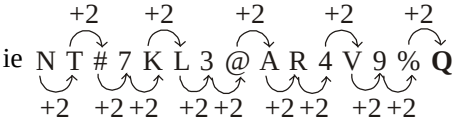
Thus, there are only three such consonants.

44. (c) symbol | number

ie %3, @2, %1

Thus there are only three such numbers.

45. (c) Each element of the groups moves two places forward from the previous element. The last element of each group moves two places forward to become the first element of the next group.



46. (a) **Given statement:**

$W > D$

$W \geq O > N = D \leq E = R$

$N \leq R$

Thus, W > D is true. But conclusion II (R > N) is not true.

47. (b) **Given statements:**

$P \leq Q = T \geq N$ ... (i)

$V < S \leq P$ ... (ii)

Combining both the statements, we get

$V < S \leq P \leq Q = T \geq N$

Thus, $N \geq S$ is not true. But $S \leq T$ is true.

48. (e) **Given statements:**

$L = M \geq S > G$ ... (i)

$H \leq K = G$ ... (ii)

Combining both the statements, we get

$L = M \geq S > G = K \geq H$

Thus, L > K is true. Again S > H is also true.

49. (c) **Given statements:**

$R \le I \le T = Q < P = N$

$R \le Q$

$R \le Q$ means $R < Q$ or $R = Q$

Hence either conclusion I or II is true.

50. (d) Given statements:

$C \ge D < B = E$ ... (i)

$D < J = P$ ... (ii)

Combining both the statements, we get

$P = J > D < B = E$

Again, $C \ge D < J = P$

Thus, $C \ge P$ is not true.

Again, $J < E$ is not true.

51. (a) Some tablets are medicines (I) + No medicine is a capsule (E) = I + E = O = Some tablets are not capsules.

Hence conclusion I follows.

Again, No medicine is a capsule (E) $\rightarrow$ conversion $\rightarrow$ No capsule is a medicine (E). Hence conclusion II does not follow.

52. (b) No fox is a tiger (E) + (No lion is a tiger (E) $\rightarrow$ conversion $\rightarrow$) No tiger is a lion (E) = E + E = No conclusion. Hence conclusion I does not follow. But conclusion II follows.

53. (d) All floors are houses (A) + Some houses are buildings (I) = A + I = No conclusions. Hence conclusion I does not follow.

Some houses are buildings (I) + No building is an office (E) = I + E = O = Some houses are not offices. Hence conclusion II does not follow.

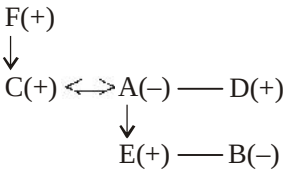
54. (e) There is no negative statement between the first and the second statement. Thus the possibility in I exists. Hence conclusion I follows.

Again, Some houses are buildings (I) + No building is an office (E) = I + E = O = Some houses are not offices, but the possibility in II exists. Hence conclusion II follows.

55. (b) All cars are buses (A) + (No train is a bus (E) $\rightarrow$ conversion $\rightarrow$) No bus is a train (E) = A + E = E = No car is a train.

Again, No car is a train (E) $\rightarrow$ conversion $\rightarrow$ No train is a car. Hence conclusion II follows, but conclusion I does not follow.

(56-57):



56. (b)

57. (d)

(58-60): need for insurance index $\rightarrow$ na pt ch kl ... (i)

insurance index in india $\rightarrow$ kl sa zo pt ...(ii)

india need insurance parameter $\rightarrow$ ch zo pt me ... (iii)

From (i), (ii) and (iii), insurance $\rightarrow$ pt ... (iv)

From (i), (iv) and (ii), index $\rightarrow$ kl ... (v)

From (i), (iv) and (iii), need $\rightarrow$ ch ... (vi)

From (i), (iv), (v) and (vi), for $\rightarrow$ na ... (vii)

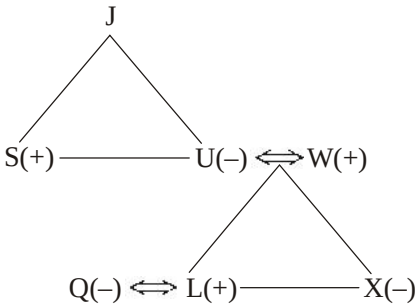
From (ii), (iv) and (iii), india $\rightarrow$ zo ... (viii)

From (ii), (iv), (v) and (viii), in $\rightarrow$ sa ... (ix)

From (iii), (iv), (vi) and (viii), parameter $\rightarrow$ me ... (x)

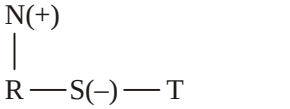
58. (b) 59. (b) 60. (a)

(61-65):



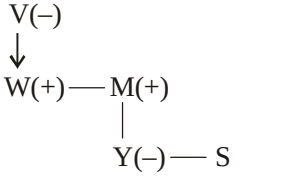
61. (d) 62. (a) 63 (b) 64. (d) 65 (b)

66. (c)



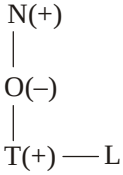
Hence, R is either brother or sister of S.

67. (a)



Hence, V is grandmother of Y.

68. (d)



We don't know the gender of L.

69. (b)

684	512	437	385	296
+2	+2	+2	+2	+2
884	712	637	585	496

Now, only 585 is divisible by 3.

70. (c)

684	512	437	385	296
864	521	743	853	**962**

Hence, 296 becomes the highest number after arrangement.

71. (d) It is **Preposition** related error.

Look at the sentence :

- I can't easily give an **answer to** the question.

Hence, **answers/solutions to it** is the right usage.

72. (c) Here, **straight in** is the right usage.

73. (b) Here, **in the afternoon** is the right usage.

74. (d) **for good :** permanently

- This time she's leaving for good.

The best option is **permanently**

75. (b) **black sheep :** a person who is considered bad or embarrassing.

- He is the **black sheep** of the family.

The best option is **person with bad reputation**

76. (d) **a red letter day :** an important day.

- Independence Day is **a red letter day** in Indian History.

The best option is **an important day**

77. (b) **to draw the line :** to set a limit.

- We would have liked to invite all our relatives, but you have **to draw the line somewhere**.

The best option is **fix a limit**.

78. (b) **controversial**

contentious (Adj.) : controversial; likely to cause disagreement.

79. (c) **shameless**

brazen (Adj.) : shameless; open and without shame.

80. (c) **summary**

synopsis (N.) : a summary of a piece of writing, a play etc.

81. (a) **atheist**

atheist (N.) : someone who does not believe in the existence of God

theist (N.) : one who believes in the existence of God/gods

mystic (N.) : someone who believes in the existence of realities beyond human comprehension (understanding)

cynic (N.) : someone who is critical of the motives of others

82. (a) **arsonist**

arsonist (N.) : a criminal who illegally sets fire to property

extortionist (N.) : a person who practises the crime of obtaining money by threat of violence

hijacker (N.) : a person who uses force to take over a vehicle (aeroplane) in order to reach another destination

assassin (N.) : a person who murders somebody important or famous, for money or for political reasons

83. (b) **archaeology**

archaeology (Noun) : the study of human history and prehistory, the excavation of sites and the analysis of artifacts and other physical remains

physiology (Noun) : the scientific study of the normal functions of living things

ethonology (Noun) : the scientific study and comparison of human races

zoology (Noun) : the branch of biology that studies animals

84. (c) **fugitive**

fugitive (Noun) : a person who has escaped/ is running away from some where and is trying to avoid being caught

85. (c) RSQP

86. (d) QPSR

87. (a) RPQS

88. (d) QSRP

89. (a) RQPS

90. (a) The correctly spelt word is **grammatic**

91. (a) The correctly spelt word is **rumble**

The correct spellings of the other words are **stumble, jumble, triple**

92. (a) The correctly spelt word is **separate**

93. (d) **inexpressible**

ineffable (Adj.): too good or beautiful to describe in words; unutterable; indescribable.

unintelligible (Adj.): not clearly understood/ expressed illegible (Adj.) : not able to read (handwriting)

inexplicable (Adj.) : incapable of being explained/accounted for

inexpressible (Adj.) : to strong to be put into words

94. (b) **spying**

espionage (N.) : the activity of secretly getting important political or military information; spying.

hypnotism (N.) : the practice of putting a person into an unconscious state

perception (N.) : becoming aware of something via the senses

detente (N.) : the easing of tensions/strained relations (between nations)

95. (b) **indifference**

apathy (N.) : lack of interest, enthusiasm or concern; indifference; impassivity.

96. (d) Because of lack of self-discipline

97. (a) By taking risks

98. (c) It helps us to learn

99. (a) By taking a short holiday

100. (b) One has to work hard and learn at least from failures.