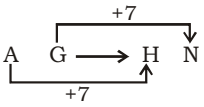
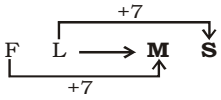
SSC MOCK TEST – 198 (SOLUTION)

1. (B) Moon is a Satellite and Uranus is a **Planet**.

2. (B) As,



Similarly,

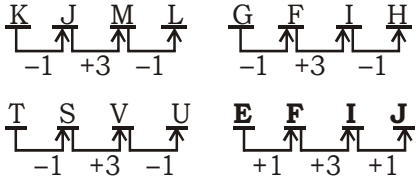


3. (D) As,
(8 + 7) – (1 + 3) = 15 – 4 = 11
Similarly,
(8 + 6) – (3 + 1) = 14 – 4 = **10**

4. (A) Except, "**64 – 83",** others sets are square of two consecutive natural number.

5. (B) Except "**river",** others contain stagnant water.

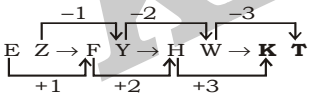
6. (D)



7. (B) **21453**

8. (B) $9^2 - 1 = 80$
$10^2 + 1 = 101$
$11^2 - 1 = 120$
$12^2 + 1 = 145$
$13^2 - 1 = 168$
$14^2 + 1 =$ **197**

9. (B)



10. (B) a**a**bbc**c**aab**b**cca**a**bbcc

11. (D) ATQ,
Q > P > T and S > Q > R
Combining both in inequality
S > Q > P > T
∴ **S** runs fastest among all.

12. (C) **AGENCY**

13. (B) As,

B	A	L	E
↓	↓	↓	↓
2	1	12	5
↓	↓	↓	↓
3	2	13	6
↓	↓	↓	↓
9	4	169	36

and,

C	A	R
↓	↓	↓
3	1	18
↓	↓	↓
4	2	19
↓	↓	↓
16	4	361

Similarly,

T	O	Y
↓	↓	↓
20	15	25
↓	↓	↓
21	16	26
↓	↓	↓
441	**256**	**676**

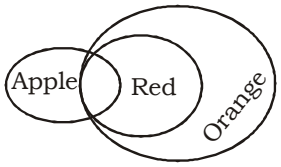
14. (B) 42 + 7 ÷ 5 – 3 × 5
After inter changing the signs as per given details,
= 42 ÷ 7 + 5 × 3 – 5
= 6 + 15 – 5 = **16**

15. (C) As, $\sqrt{64} + \sqrt{36} = 8 + 6 = 14$
and, $\sqrt{169} + \sqrt{16} = 13 + 4 = 17$
Similarly,
$\sqrt{324} + \sqrt{729} = 18 + 27 =$ **45**

16. (C) As, $\sqrt{49} + \sqrt{100} = 7 + 10 = 17$
And, $\sqrt{169} + \sqrt{225} = 13 + 15 = 28$
Similarly, $\sqrt{196} + \sqrt{144} = 14 + 12 =$ **26**

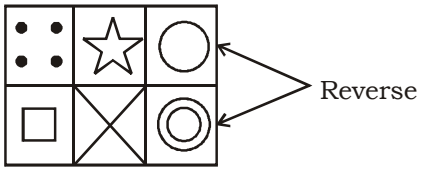
17. (C)

18. (B)



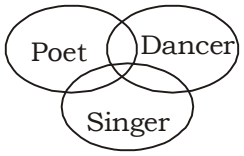
I. × II. ✓
Hence, **only conclusion II follow**.

19. (C) From figure,



∴  can't be made the question figure.

20. (B)



21. (C)
22. (A)
23. (B)
24. (C)
25. (D) **W A R S**
34, 33, 40, 69
26. (A) Mohan Bagan Athletic Club is a football club in Kolkata. It was established by Bhupendra Nath Bose.
Kolkata Cricket and Football Club was founded in 1792 as a cricket club, adding football when it merged to Kolkata F.C in 1965.
North Imphal sporting Association is known as NISA Manipur. NISA won the Manipur state League three times since its inauguration in 2006.
27. (D) Brahmins or Priests were originated from his (Prajapati) head.
28. (D) Nandprayag – Confluence of Alaknanda river and Nandakavi river
Karnprayag – Confluence of Alaknanda river and Pindar river.
Vishnuprayag– Confluence of Alakanda river and Dhauliganga river
29. (D) BHIM (Bharat interface for money) is a Mobile Payment App developed by the National Payments Corporation of India (NPCI), based on the United Payments Interface (UPI). It is available in 13 languages.
31. (B)

Books	**Writer**
Two states –	Chetan Bhagat
The ministry of Utmost Happiness –	Arundhati Roy

32. (B)

Flowers	**Scientific name**
Gullar –	Ficus racemosa
Rose –	Rosa
Lili –	Lilium

34. (C) Murlikanth Petkar is India's first Paralympic gold medalist (in 1972, Heidelberg, Germany). He is awarded with Padma Shri in 2018.
Srikanth Kidambi is an Indian badminton player. In April 2018, he became the heighest ranked men's badminton player in the world. He was awarded with Padma Shri in 2018.
36. (C) Muzaffar Jang was ruler of Hyderabad from 1750 to 1751.
Nasir Jang was a ruler of Hyderabad in 1748.
Khwaja Abid Khan Siddiqui (Kilich Khan) was a Nawab and Military general under Emperor Aurangzeb.
38. (C) The 1951 Asian Games (First Asian Games) was celebrated in New Delhi. A total of 489 athletes representing 11 Asian National Olympic Committees participated in 57 events.
Motto – Play the Game in the Spirit of the Game
9th Asian Games (1982) were held in Delhi. A total of 3411 athletes from 33 National Olympic Committies Participated in 196 events. Hand ball, equestrian, rowing and golf were included for the first time while fencing and bowling were excluded.
2018 Asian Games – Jakarta, Palembang
2022 Asian Games – Hangzhou, China
39. (D) Habbe Falls is located in Kemmangundi in Karnataka.
Magod Falls (Bedti river) is located in Karnatka.
Dudhsagar Falls is located on the Mandovi River in Karnataka and Goa.
Chitrakote Falls is located on Indravati River.
42. (A) Mahad Satyagraha (Chavdar Tall Satyagraha) was led by B.R. Ambedkar on 20 March, 1927 to allow untouchables to use water in Public tank in Mahad, Maharashtra. The day (20 March) is observed as Social Empowerment day in India.
43. (B) Nehru-Liaquat Pact (Delhi Pact) was signed on April 8, 1950. This treaty sought to guarantee the rights of minorities in both the countries after partition.
45. (A)

Country	**Capital**
Kyrgyzstan –	Bishkek
Uzbekistan –	Tashkent
Tajikistan –	Dushanbe
Turkmenistan –	Ashgabat

50. (A)

Strait	**Between Ocean**
• Davis strait –	Bafin Beug and Atlantic Ocean.
• Bering strait –	Bering sea and Chuksi sea
• Bass strait –	Tasman Sea and South Sea.
• North Channel –	Irish sea and Atlantic Ocean.
• Otranto strait –	Adriatic Sea and Ionian Sea.
• Sunda strait –	Lava Sea and Indian Ocean.

51. (B) Let the number be x
ATQ,

$$x + \frac{1}{x} = \frac{65}{8}$$

$$\Rightarrow x + \frac{1}{x} = 8 + \frac{1}{8}$$

$\Rightarrow x = 8$

$\therefore$ Required number = **8**

52. (A) $\dfrac{51^{203}}{7}$

$$\Rightarrow \frac{(49+2)^{203}}{7}$$

$$\Rightarrow \frac{2^{203}}{7} \Rightarrow \frac{(2^3)^{67} \times 2^2}{7}$$

$$\Rightarrow \frac{8^{67} \times 4}{7} \Rightarrow \frac{1^{67} \times 4}{7} = \frac{4}{7}$$

$\therefore$ Required remainder = **4**

53. (C) $100 \xrightarrow{6 \text{ years}} 200 \xrightarrow{6 \text{ years}} 400 \xrightarrow{6 \text{ years}} 800$

8 times

$\therefore$ Required time = 6 + 6 + 6 = **18 years**

54. (D) Given series is a infinite G.P.

with $r = -\frac{1}{3}$ & $a = 1$

$$S\infty = \frac{a}{1-r}$$

$$S\infty = \frac{1}{1-\left(-\frac{1}{3}\right)} = \frac{1}{1+\frac{1}{3}} = \frac{1}{\frac{4}{3}}$$

$= \mathbf{\frac{3}{4}}$

55. (A) $x^4+y^4 = (x^2 + y^2)^2 - 2x^2y^2$
$= [(x + y)^2 - 2xy]^2 - 2x^2y^2$
$= [(x + y)^4 + 4x^2y^2 - 4(x + y)^2xy] - 2x^2y^2$
$=$ Put $x + y = 1$
$= 1 + 4x^2y^2 - 4xy - 2x^2y^2$
$= 1 + 2x^2y^2 - 4xy$
$= 1 + 2xy\ (xy - 2)$
$= 1 + 2 \times 12 =$ **25**

56. (C) $x^{x\sqrt{x}} = x^{\sqrt{x^3}} = x^{x^{\frac{3}{2}}}$

and, $\left(x\sqrt{x}\right)^x = \left(x^{\frac{3}{2}}\right)^x = x^{\frac{3}{2}x}$

By comparing power of x,

$$x^{\frac{3}{2}} = \frac{3}{2}x$$

squaring both sides,

$$\Rightarrow x^3 = \frac{9}{4}x^2$$

$$\Rightarrow x = \mathbf{\frac{9}{4}}$$

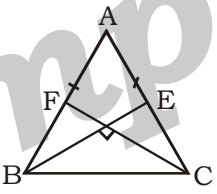
57. (C) $x^3 + y^3 = (x + y)(x^2 + y^2 - xy)$
$\Rightarrow 9 = 3(x^2 + y^2 - xy)$
$\Rightarrow x^2 + y^2 - xy = 3$
$\Rightarrow (x + y)^2 - 3xy = 3$
$\Rightarrow 9 - 3xy = 3$
$\Rightarrow xy = 2$
Now, $x^4 + y^4$
$\Rightarrow (x^2 + y^2)^2 - 2x^2y^2$
$\Rightarrow x^4 + y^4 = [(x + y)^2 - 2xy]^2 - 2xy^2$
$\Rightarrow x^4 + y^4 = (3^2 - 2 \times 2)^2 - 2(2)^2$
$\Rightarrow x^4 + y^4 = 25 - 8 =$ **17**

58. (C)

A ⟶ 6			6
A ⟶ 12	⟶	36	3
C ⟶ 18			2
A+B+C		—	11

Required number of days = $\frac{36}{11} = \mathbf{3\frac{3}{11}}$ **days**

59. (C)



We know that AB = AC and CF $\perp$ BE
$\therefore AB^2 + AC^2 = 5BC^2$
$\Rightarrow 2AB^2 = 5BC^2$

$$\Rightarrow \left(\frac{AB}{BC}\right)^2 = \frac{5}{2}$$

$$\Rightarrow \frac{AB}{BC} = \mathbf{\sqrt{\frac{5}{2}}}$$

60. (B) $1 + 2\sec^2A.\tan^2A - \sec^4A - \tan^4A$
$= 1 - (\sec^4A + \tan^4A - 2\sec^2A.\tan^2A)$
$= 1 - (\sec^2A - \tan^2A)^2$
$= 1 - (1)^2 =$ **0**

61. (C) Let the number be x
ATQ,
$60\%\ x + 60 = x$
$\Rightarrow 60\%\ x + 60 = 100\%x$
$\Rightarrow 60 = 40\%\ x$

$$\Rightarrow \frac{3}{2} = 1\%x$$

$\Rightarrow 150 = 100\%x$
$\Rightarrow$ Required number = **150**

62. (D) $\frac{(5\sqrt{5}x^3 - 81\sqrt{3}y^3)}{\sqrt{5}x - 3\sqrt{3}y} = Ax^2 + By^2 + Cxy$

$\Rightarrow \frac{(\sqrt{5}x - 3\sqrt{3}y)(5x^2 + 27y^2 + 3\sqrt{15}xy)}{\sqrt{5}x - 3\sqrt{3}y} = Ax^2 + By^2 + Cxy$

$\Rightarrow 5x^2 + 27y^2 + 3\sqrt{15}\,xy = Ax^2 + By^2 + Cxy$

By comparing both sides,

A = 5, B = 27 and C = $3\sqrt{15}$

Now, $6A + B - \sqrt{15}\,C$

$= (6 \times 5) + 27 - \sqrt{15}\,(3\sqrt{15})$

$= 30 + 27 - 45 =$ **12**

63. (B) $985x3678y$ is divisible by 72

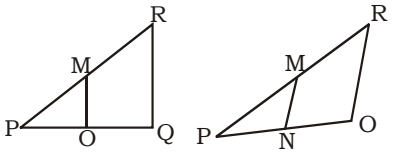
$\therefore$ $985x3678y$ is also divisible by 8 and 9.

Now, $985x3678y$ is divisible by 8, when y = 4

and, $9 + 8 + 5 + x + 3 + 6 + 7 + 8 + y$ is divisible by 9, when $x = 4$

Now, $4x - 3y = 4 \times 4 - 3 \times 4 =$ **4**

64. (A)



In ΔPQR

$\because$ $MO \parallel QR$

$\therefore \frac{PO}{OQ} = \frac{PM}{MR} = \frac{4}{5} = 4 : 5$

In ΔPOR

$\because$ $OR \parallel NM$

$\therefore \frac{PN}{NO} = \frac{PM}{MR} = \frac{4}{5} = 4 : 5$

Let PO = 40

$\therefore$ $OQ = 50$ and $ON = 40 \times \frac{5}{9} = \frac{200}{9}$

$\therefore$ $ON : OQ = \frac{200}{9} : 50 =$ **4 : 9**

65. (C) $\angle COB = 360° - (130° + 90°) = 140°$

$\Rightarrow x = \angle CAB = \frac{1}{2}\angle COB = \frac{1}{2} \times 140° = 70°$

$\Rightarrow x =$ **70°**

66. (D) Speed of train

$= \frac{70}{(14-10)} \times \frac{18}{5} =$ **63 km/hr**

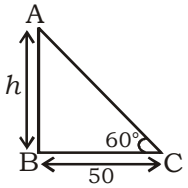
67. (C) $x^2 - 1$, $x^2 + 1$, $2x \rightarrow$ sides

put $x = 2$

3, 5, 4 $\rightarrow$ Right angled traingle

Hence, the traingle will be **right angle triangle.**

68. (D)



$\tan 60° = \frac{h}{50}$

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

$\Rightarrow h =$ **50** $\sqrt{3}$ **m**

69. (C) ATQ,

$h_{cone} = h_{cylinder}$

$R_{cone} : R_{cylinder} = 3 : 1$

$\therefore$ Required Ratio

$= \frac{1}{3}\pi\, R^2_{cone}.h_{cone} = \pi R^2_{cylinder.}\, h_{cylinder}$

$\Rightarrow \frac{3^2}{3} : 1 \Rightarrow$ **3 : 1**

70. (C) Let B be speed of boat & S be speed of stream.

ATQ,

$B + S = 9$

$B - S = 5$

$2B = 14$

$\Rightarrow B =$ **7 km/hr**

71. (D) Required angle = $\frac{16}{100} \times 360° =$ **57.6°**

72. (B) Percentage expenditure = $\frac{43.2°}{360°} \times 100\%$

$= 12\%$

12% expenditure $\Rightarrow$ **Royality**

73. (B) ATQ,

42% = ₹4200 [Printing]

$\Rightarrow$ 1% = ₹100

$\Rightarrow$ 4% = **₹400** [Binding]

74. (B) Required ratio = 42% : 16%

= 21 : 8

75. (B) ATQ,

12% = ₹6000 [Royality]

$\Rightarrow$ 1% = 500

$\Rightarrow$ 42% – 16% = 26% = 26 × 500 = ₹13000

$\therefore$ Required difference = **₹13000**

MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Acquaintance	knowledge of something	जान-पहचान
Bigoted	blindly devoted to some creed, opinion, or practice	धर्मांध
Colloquy	a conversation	बातचीत
Committed	pledged or bound	प्रतिबद्ध
Countenance	looks	हाव-भाव
Dexterous	skillful	निपुण
Disinclined	unwilling because of mild dislike or disapproval	विमुख
Eager	excited and interested	उत्सुक
Eloquence	fluent speaking	अच्छे वक्ता का गुण
Fanatic	very enthusiastic or devoted	कट्टर
Homophile	relating to homosexuals	समलैंगिक
Inflammatory	causing anger	गुस्सा पैदा करने वाला
Irrefutable	impossible to deny	अखंडनीय
Irresistible	impossible to resist	अप्रतिरोध्य
Irrevocable	not possible to be changed	अपरिवर्तणीय
Militant	engaged in warfare or combat	लड़ाकू
Moderate	avoiding extremes of behaviour or expression	साधारण
Obloquy	a strongly condemnatory utterance	किसी के विरोध की बात
Provocative	causing discussion, thought, argument, etc.	उत्तेजक
Prudent	having or showing careful good judgement	समझदार
Rabid	extremely violent	उग्र
Reluctant	showing unwillingness	अनिच्छुक
Soliloquy	the act of talking to oneself	स्वयं से बात
Steadfast	firmly fixed in place	हट्टी, डटा हुआ
Unfaltering	not wavering or weakening	अडिग
Unreliable	not reliable	अविश्वसनीय
Unrepentant	not sorry for something wrong that you have done	बेदर्द
Unwavering	continuing in a strong and steady way	अटूट
Valiant	having or showing courage	साहसी

SSC MOCK TEST - 198 (ANSWER KEY)

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

76. (B) Add preposition 'to' with close. 'Sat close to him' is the correct formation.

77. (B) Replace 'brush side' with 'brushed past'. Since first part of the sentence is in Past Tense, hence latter part should also be in Past Tense. Change 'side' into 'past'. 'Brush past' means 'quickly pass by and lightly touch someone or something'.

78. (C) Replace 'for' with 'against'. Bang means a hard hit or blow. Bang takes preposition 'against'.

88. (C) Here 'starting' is a subject and is in Gerund form.

89. (C) 'are being' is the correct option. According to the meaning, sentence should be in passive voice. 'Those films' are plural. Hence plural verb 'are' is used.

Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003

Note:- Whatsapp with Mock Test No. and Question No. at 7053606571 for any of the doubts. Join the group and you may also share your suggestions and experience of Sunday Mock Test.

Note:- If you face any problem regarding result or marks scored, please contact 9313111777