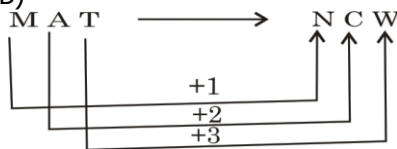


**SSC Test Series -24. Solution  
(New Pattern)**

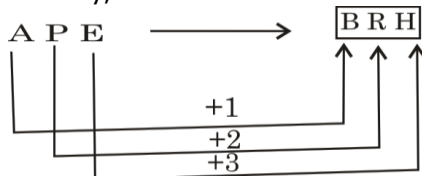
1	C	26	C	51	D	76	A
2	B	27	B	52	A	77	A
3	D	28	C	53	A	78	C
4	B	29	A	54	A	79	B
5	B	30	A	55	D	80	A
6	A	31	B	56	A	81	B
7	B	32	D	57	B	82	B
8	C	33	B	58	C	83	B
9	D	34	D	59	B	84	B
10	A	35	A	60	D	85	B
11	D	36	B	61	D	86	C
12	C	37	C	62	D	87	A
13	B	38	C	63	D	88	C
14	C	39	C	64	D	89	A
15	C	40	C	65	D	90	B
16	C	41	D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

**REASONING ABILITY**

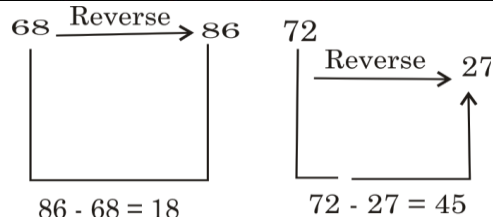
- (C)
- (B) Hawaii is the major producer of Pineapple. Similarly Florida is a major producer of Oranges.
- (D)
- (B)



Similarly,



- (B)



- (A)  
 $4 : 18 : 5 : ?$   
 $\downarrow \qquad \qquad \downarrow$   
 $4! - 3! \quad 5! - 4!$   
 $= 24 - 6 \quad = 96$

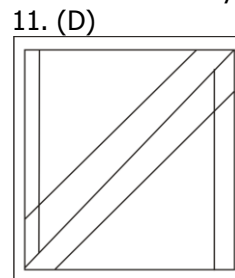
- (D) In all the other pairs, second number is 23 more than the first number.

- (C)  
 $D \leftrightarrow W; \quad H \leftrightarrow S$   
 Pairs of opposite letters  
 $B \leftrightarrow Y; \quad D \leftrightarrow W$   
 $E \leftrightarrow V; \quad J \leftrightarrow Q$

The opposite letter of C is X and that of F is U.

- (D)

- (A) Number of boys in the row  
 $= (15 + 4 + 3) = 22$   
 C is just left of A. So, C is 14th from the left end.  
 Number of boys to the right end of the row.



- (C) There are total 15 squares in the given figure.
- (B) Sitting arrangements of the members are as follows  
 Left U R Q P S Right

• • • • •

Hence, Q is sitting in the middle of row.

- The series is nnmm/nnmm/nmm. Thus, the pattern 'nnmm' is repeated.
- (C) Net ascent of the monkey in 1 hour  
 $= (30 - 20) \text{ feet}$   
 $= 10 \text{ feet}$   
 SO, the monkey ascent 90 feet in 9 hours i.e., till 5 : 00

pm. Clearly, in the next 1 hour i.e., till 6 : 00 pm the monkey sacends remaining 30 feet to touch the flag.

16. (C)

Word	Vowels	Consonants
ASSISTANT	3	6 ⇒ 36
MANAGER	3	4 ⇒ 34
STAFF	1	4 ⇒ 14
DIRECTOR	3	3 ⇒ 35

17. (B)  $X = 3^2 - 1^2 = 8$

$Y = 5^2 - 3^2 = 16$

$Z = 7^2 - 6^2 = 13$

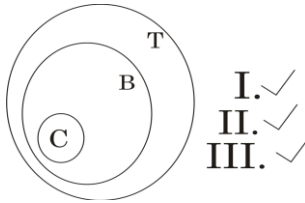
18. (C) The given sequence is a combination of two series.

I. 13, 24, 35, 46, 47

and II. 32, 43, ?, 65, 76. The pattern in both I and II is + 11.

So, missing term = 43 + 11 = 54

19.(a) all Follows



20.(b)  $16 \div 2 = 14 \Rightarrow \div = -$

$18 - 3 = 54 \Rightarrow - = \times$

$14 \times 2 = 16 \Rightarrow \times =$

$96 \div 4 = 24 \Rightarrow \div = \div$

Then,  $18 - 5 + 3 \times 2 \div 24 = ?$

After interchanging the signs we have,  $? =$

$18 \times 5 \div 3 + 2 \div 24 = ?$

$= 18 \times \frac{5}{3} + 2 - 24$

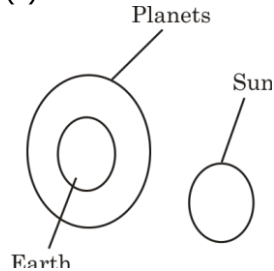
$= 32 - 24 = 8$

21. (a)  $(16 \times 2) + (5 \times 6) = 32 + 30 = 62$

$(2 \times 19) + (21 \times 5) = 38 + 105 = 143$

$(17 \times 4) + (51 \times 3) = 68 + 153 = 221$

22. (c)



Earth is a planet. But, sun is entirely different.

23. (c) After interchanging the digits 8 and 3 we have,  $24 \div$

$3 \times 2 - 4 + 8$

$= 8 \times 2 - 4 + 8$

$= 16 + 8 - 4$

$= 24 - 4 = 20$

24. (c) Angle traced by hour hand in 25/4 hrs

$= \left( \frac{360}{12} \times \frac{22}{4} \right) = 187.5^\circ$

Angle traced by it in 15 min

$= \left( \frac{360}{60} \times 15 \right) = 90^\circ$

∴ Required angle =  $(187.5^\circ - 90^\circ) = 97.5^\circ$

25. (c)

**QUANTITATIVE APTITUDE**

26. (C) BD is the diagonal of square ABCD

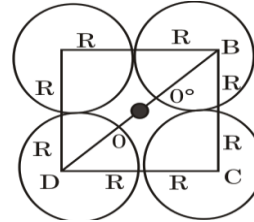
Do = BO' = R [Same radius of circle]

OO' is the diameter of small circle

$OO' = BD - (DO + O'B)$

$= 2\sqrt{2} R - 2R$

$= 2R (\sqrt{2} - 1)$



So, Radius of small circle  $\frac{OO'}{2} = \frac{2R(\sqrt{2} - 1)}{2}$

27.(B) Let x person added to finish the work at time.

$M_1 = 45$

$M_2 = 45 + x$

$D_1 = 200$

$D_2 = 350 - 200 = 150$

$W_1 = 4.5$

$W_2 = 12 - 4.5 = 7.5$

From

$\frac{M_1 D_1}{W_1} = \frac{M_2 D_2}{W_2}$

$\frac{45 \times 200}{4.5} = \frac{(45 + x) \times 150}{7.5}$

$60 = \frac{(45 + x) \times 3}{5}$

$45 + x = 100$

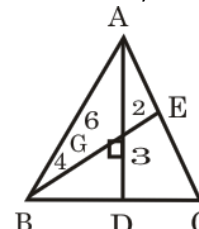
$x = 55$

28.(C) AD = 9 cm

BE = 6 cm

AG = 6, GD = 3

BG = 4, Ge = 2



[ G interest the medium]

2 : 3

$$BD = \sqrt{3^2 + 4^2}$$

$$BD = 5 \text{ cm}$$

29. (A)  $A + C + E = 180^\circ$

$$B + D + F = 180^\circ$$

$$\text{So, } A + B + C + D + E + F = 360^\circ$$

30. (A) 31.  $Pq + qr + rp = 0$

$$\text{Put } p = 4, q = 4, r = 2,$$

$$4 \times 4 - 4 \times 2 - 2 \times 4$$

$$16 - 8 - 8 = 0$$

$$\text{Value of } \frac{p^2}{p^2 - qr} + \frac{q^2}{q^2 - rp} + \frac{r^2}{r^2 - pq}$$

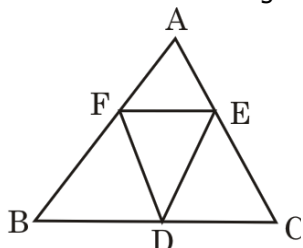
$$= \frac{16}{16 + 8} + \frac{16}{16 + 8} + \frac{4}{4 - 16}$$

$$= \frac{16}{24} + \frac{16}{24} - \frac{4}{12}$$

$$= \frac{4}{3} - \frac{1}{3}$$

$$= \frac{3}{3} = 1$$

32.(D) EFD separate the triangle in four. Equal part Let area of each triangle = 1 unit



11 gm DEFB has 2 triangle  $\triangle DEF + \triangle BDF$

Area if 11 gm DEFB = 2 unit

Trapezium CAFD has 3 triangle  $[\triangle CDE, \triangle AEF + \triangle DEF]$

So  $\triangle CAFD = 3$  unit

11 gm DEFB :  $\triangle CAFD = 2 : 3$

33. (B)  $\sec \theta + \tan \theta = p \dots\dots(i)$

$$\sec \theta - \tan \theta = \frac{1}{p} \dots\dots(ii)$$

(i) + (ii)

$$2 \sec \theta = p + \frac{1}{p}$$

$$\sec \theta = 2\left(p + \frac{1}{p}\right)$$

34.(D)  $2A = -3B$

$$\frac{A}{R} \rightarrow \frac{3}{2}$$

Efficiency of A = 3

" " B = 2

Total work =  $8 \times 3$

$$\text{Alone do work} = \frac{8 \times 3}{2} = 12 \text{ days}$$

35. (A)  $P = 99$   $p(p^2 + 3p + 3) = ?$

$$p^3 + 3p^2 + 3p + 1 - 1$$

[We added 1 subtract 1 also]

$$[p^3 + 3p(p+1) + 1^3] - 1$$

$$[p+1]^3 - 1$$

Put the value of p

$$(99+1)^3 - 1 = 100^3 - 1$$

$$= 1000000 - 1$$

$$= 999999$$

36.(B)  $x = 0 \dots\dots(i)$

$$2x + 3y = 6 \dots\dots(ii)$$

$$x + y = 3 \dots\dots p(iii)$$

The coordinate from equ (i) = (0, 0)

From eqn (ii)  $2 \times 0 + 3y = 6$

$$3y = 6$$

From eqn (iii) = (3, 0)

$$\text{Area of triangle} = \frac{1}{2} \times 2 \times 3$$

$$= 3 \text{ saq unit}$$

37.(C)  $4M = 8W$

$$1M = 2W$$

Let (6M + 12W) work done in D days

So,

$$(6M + 12W) \times D = 8W \times 15$$

$$\text{Put } 6M = 12W [\because 1M = 2W]$$

$$(12W + 12W)D = 8W \times 15$$

$$D = 5 \text{ days}$$

38. (C) Speed = 75 km/hr

$$\text{Distance} = 1050 \text{ km}$$

$$\text{time} = \frac{\text{Distance}}{\text{speed}} = \frac{1050}{75} = \frac{70}{5}$$

$$= 14 \text{ hrs.}$$

39. (C)  $2 \sin^2 \theta + 3 \cos^2 \theta$

$$\text{Minimum Value} = 2$$

40. (C) A writes No of plays in one hour =  $\frac{75}{25} = 3$  pages

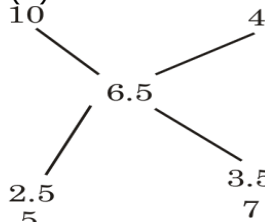
A + B Writes No. of pages in one hour

$$= \frac{135}{27} = 5 \text{ pages}$$

B Writes No. of pages in one hour =  $5 - 3 = 2$  pages

$$\text{So, B take time to write 42 pages} = \frac{42}{2} = 21$$

41.(D)



15 kg

5 unit → 15 kg

1 unit → 3 kg

So, 7 unit = 3 × 7 = 21 kg

So, We added 21 kg og Rate 4/kg

42. (D)Relative speed = 48 + 42 = 90 km/hr  
 $= 90 \times \frac{5}{18} = 25 \text{ m/sec}$

Length of book train = 25 × 12 = 300 m

Length of long train = 200 M

Distance couer in 45 sec by train =  $48 \times \frac{5}{18} \times 45$   
 = 600 M

Length of platform = 600 – 200 = 400 M

43.(D) A : B = 4 : K : 5 : K

According to question,

$B^2 - A^2 = 81$

$(5k)^2 - (4k)^2 = 81$

$25k - 16k^2 = 81$

$9k^2 = 81$

$K = 3$

So, A = 4k = 4 × 3 = 12

44. (D)Arithmetic mean of first n odd number = n

Here. n = 20

So, Arithmetic mean = 20

45. (D) Distance = 180M

Speed = 90 km/hr =  $90 \times \frac{5}{18} = 25 \text{ m/sec}$

Time =  $\frac{\text{Dis tan ce}}{\text{Speed}} = \frac{180}{25} = 7.2 \text{ sec}$

46. (A)Monthly Income = 36000

$360^\circ \rightarrow 36,000$

saving =  $60^\circ = \frac{12 \times 36,000}{360^\circ} \times 60^\circ$   
 = 72,000

47.(b) Education expend = 70°

Home expend = 54°

Difference = 16°

Value of 16° = 1600

Value of 1° = 100

So, food = 120° =  $120 \times 100$   
 = 12,000

48. (A)Food expend = 120°

savings = 60°

$120^\circ : 60^\circ = 21 : 1$

49.(a) Correct Average =  $\frac{6 \times 88 \times 68 - 86}{6}$

$= \frac{528 - 18}{6}$

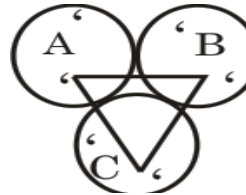
$= \frac{510}{6}$

= 85

50. (c)ABC is an equilateral

Triangle whose each

Sides = 2 cm



Area of  $\triangle ABC = \frac{\sqrt{3}}{4} \times (2)^2 = \sqrt{3} \text{cm}^2$

Area of circle =  $\pi r^2 = \pi \times 1^2 = \pi$

Area of shaded region

= Area of triangle -  $\frac{1}{2}$  area of

$= \sqrt{3} - \frac{\pi}{2} \text{cm}^2$

**English Language explanatory Solution**

76. (a) Have +VIIIrd ` Criticised in place of cticise

77. (a) 'Impatiently' use होगा Impatient के स्थान पर

78. (b) 'Whom' के स्थान पर 'Who' use होगा

79. (b) (Verb) Effected प्रमाणित, Reflected प्रतिबिम्ब किया, Expceted अपेक्षित Affected (adjective) कपटी, दिखावटी (affect) प्रभावित करना (verb)

80. (a) With

81. (b) To surround a place with the intention of capturing it

Besige घर लेना (surround so as to force to give up)

82. (d)One who is opposed to intellectual progress :

Obscurant रूढ़िवादी

Imposter ढोंगी

Prospectors पूर्वक्षक, सोना चांदी की खान खोजने वाला

Chaperon संरक्षिका, चौकसी करने वाली स्त्री

83.(b) A owman with dark brown hair

Brunette गौरी स्त्री जिसके बाल काले हों

Blonde सुनहरें बालों वाली

Termagant झगडालू

Coiffure बाल बनाने के प्रकार

84. (b) Weal and wal

Joys and sorrows सुख: और दु:ख

85. (b) at one's beck and call

To be always at one's service हर किसी की सेवा के लिए सदैव तैयार रहना

86. (c) Rack and ruin –

Destroyed बर्बादी

Successfulसफलता, Debt श्रण, Ransacked लूटा हुआ

87. (a) was on the alert.

- 88.(c) 'Explain' use होगा say के स्थान पर
- 89.(a) Let's buy a new sari with annual bonus shall we ?  
Let's के साथ Question tag –"Shall we" लगाने हैं
90. (a) If you had studied hard, you would have got a first class.  
If S+ had+ VIII, S+would have + VIII+O
- 91.(a) First Sentence 'past Tense' में है तो but के बाद वाला भी 'Past Tense' में होगा  
Nobody was there.
92. (a) 'Will be able to make' के बाद का Verb (Superede)V form में है। 'Make' सही है क्योंकि इसी के बाद स्थिति में 'to' Supersede होता
93. (c) Augur पूर्व सूचना  
Signify (सूचित करना)  
Heal घाव भरना,  
Reform सुधार
94. (c) Barbarous असभ्य  
Civilized सभ्य  
Improved बेहतर, Cardial – हार्दिक, Modified शंशोधित
95. (a) Assimilation – Absorption (आत्मसात)
96. (d)
97. (c) 'Neo-Rich' means Newly rich people.
98. (c), 99. (d), 100. (b).