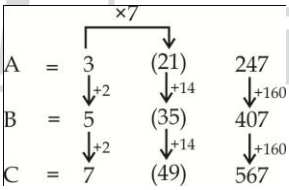
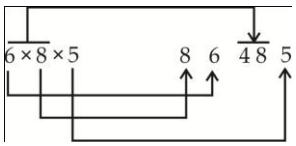
# SSC CHSL
# Mock Test -01
# PART – I (REASONING)

**1.** (d); Psychology is the study of mental condition, similarly, Ornithology is the scientific study of birds.
**2.** (b);
**3.** (b); $13^2 + 13 = 182$
$17^2 + 17 = 306$
**4.** (a); $11^2 + 1 : 13^2 + 1 :: 17^2 + 1 : 19^2 + 1$
**5.** (a);
**6.** (c); Difference in first two numbers than two folds is taken further.
**7.** (d);
**8.** (b); Text is different from the other three.
**9.** (d); except (d) in all other, one letter is skipped between the first two letters.
**10.** (b); D, B, C, A, E
**11.** (a); A, B, D, E, C
**12.** (b); M O L T E N
↓↓↓↓↓↓
D J F H O C
**13.** (c); $16 - 8 + 4 \div 3 \times 9$
$\Rightarrow 20$
**14.** (c);




**15.** (d);




**16.** (c); $9 + 7 - 5 = 11$ *and*
$6 + 4 - 8 = 2$,
Similarly,
$8 + 3 - 4 = 7$
**17.** (c); $4 + 12 = 11 + 5$
$6 + 7 = 10 + 3$
$8 + 9 = 10 + 7$
$7 + 5 = \mathbf{8} + 4$
**18.** (b);
**19.** (a); P
**20.** (c); 15 km
**21.** (a); EMINENT
**22.** (d); DIGITAL
**23.** (d); Total number of males = 1 + 4 + 12 = 17
**24.** (a);
**25.** (a);



## Part II (GENERAL AWARENESS)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **26** | d | **31** | c | **36** | b | **41** | b | **46** | c |
| **27** | a | **32** | b | **37** | d | **42** | c | **47** | d |
| **28** | c | **33** | a | **38** | a | **43** | c | **48** | c |
| **29** | c | **34** | c | **39** | b | **44** | c | **49** | c |
| **30** | a | **35** | a | **40** | c | **45** | c | **50** | c |

## PART – III (QUANTITATIVE APTITUDE)

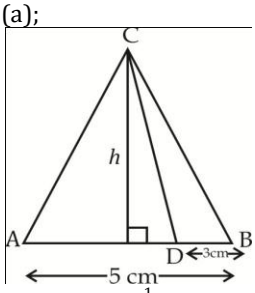
**51.** (d); Let length = $x$
$\Rightarrow$ depth = $\frac{x}{3}$
& breadth = $\frac{1}{2} \times \frac{1}{3} \times \left(x - \frac{x}{3}\right) = \frac{x}{9}$
$\Rightarrow x \times \frac{x}{3} \times \frac{x}{9} = 216$ lit.
$x^3 = 3 \times 6 = 18$ dm
**52.** (b); Ratio's of numbers between A, B, C & D
A : B = 5 : 4
B : C = 9 : 10
C : D = 5 : 4
$\Rightarrow$ A : B : C : D = 45 : 36 : 40 : 32
& D got 320
So A got 450 out of 500
**53.** (b); Let they will meet after T mins.
A.T.Q $\rightarrow$ Relative speed = 5 + 10 = 15 m/min
$\Rightarrow$ T = $\frac{1200}{15} = 80$ min.
**54.** (a); $\because$ 8P = P $\left(1 + \frac{r}{100}\right)^3$
$\Rightarrow 1 + \frac{r}{100} = 2$
Now,
Let $n$ = required number of years
So, 16P = P $\left(1 + \frac{r}{100}\right)^n$
$\Rightarrow 16 = 2^n$
$\Rightarrow n = 4$ years
**55.** (c); $(mp + nr + ot) : (mg + ns + ou)$

$= (m \times 2 + n \times 2 + o \times 2) : (m \times 3 + n \times 3 + o \times 3)$
$= 2\,(m + n + o) : 3(m + n + 0)$
$= 2 : 3$

**56.** (d); HCF = 29, LCM = 4147 = 29 ×11 ×13
As both the numbers are greater than 29.
So, the first number = 29 × 11 = 319
And the second number = 29 × 13= 377
Sum of the numbers = 319 + 377
= 696

**57.** (b); a : b = 2 : 3
b : c = 4 : 5
$\Rightarrow a : b : c = 8 : 12 : 15$
$\Rightarrow \frac{a+b}{b+c} = \frac{8+12}{12+15} = \frac{20}{27}$

**58.** (a);




$\frac{\text{Area of } \Delta ADC}{\text{Area of } \Delta ABC} = \frac{\frac{1}{2} \times AD \times h}{\frac{1}{2} \times AB \times h}$ (Heights are same)
$= \frac{AD}{AB} = \frac{5-3}{5} = \frac{2}{5}$

**59.** (b); $\frac{\text{Arun's avg.Speed during first five hours}}{\text{Arun's Avg.speed during last five hours}}$
$= \frac{\frac{20+30+20+15+25}{5}}{\frac{15+25+35+20+30}{5}}$
$= \frac{110}{125} = \frac{22}{25}$

**60.** (b); Req. diff. = 210 km – 185 km = 25 km.

**61.** (c); Avg. speed in (km/hr) during the first four hours
$= \frac{25+40+35+25}{4} = \frac{125}{4}$
= 31.25 km/hr.

**62.** (c); Total discount he can allow = $36{,}000 \times \frac{7}{100} = 2520$
Discounted price break-up = $20{,}000 \times \frac{8}{100} + 10{,}000 \times \frac{5}{100}$
$= 1600 + 500 = 2100$
Difference $= 2520 - 2100$
$= 420$
⇒ He can allow discount of Rs. 420 on Rs. 6000
⇒ Req. % $= \frac{420}{6000} \times 100 = 7\%$

**63.** (d); Let the radius of cylindrical flask = $x$
⇒ radius of cone = $3x$
AT.Q $\Rightarrow \frac{1}{3}\pi \times 9x^2 \times 24 = \pi \times x^2 \times H$
H = 72 cm.

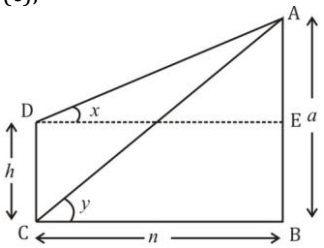
**64.** (a); $S = 4\pi r^2$
$V = \frac{4}{3}\pi r^3$
$\Rightarrow \frac{S^3}{V^2} = \frac{(4\pi r^2)^3}{\left(\frac{4}{3}\pi r^3\right)^2} = 36\pi$

**65.** (b); Total surface area $= 4 \times \left[\frac{\sqrt{3}}{4} \times 1^2\right]$
$= \sqrt{3}$ cm$^2$

**66.** (b); $\frac{(A+B+C)\times 2}{\frac{1}{2}} = \frac{(B+C)\times 2}{\frac{3}{10}}$
$\frac{A+B+C}{B+C} = \frac{5}{3}$
A + B + C can do work in – 4 days with efficiency of 5
⇒Total work = 20
A alone can do it in $= \frac{20}{2} = 10$ days

**67.** (d); $v - u = \frac{12}{5}$ ($v$ = Speed of Boat, $u$ = Speed of current)
$\Rightarrow v - 4 = \frac{12}{5} \Rightarrow v = \frac{12}{5} + 4 = \frac{32}{5} = 6.4$
$v + u = \frac{15}{T} \Rightarrow 10.4 = \frac{15}{T} \Rightarrow T = \frac{15}{10.4}$
T = 1 hour 26 $\frac{7}{13}$ min.

**68.** (c);




Let height of building be a metre
& CB = DE = $n$
In ADE
$\tan x = \frac{AE}{DE} = \frac{a-h}{n}$
$n = (a - h)\cot x$ .....(i)
In ABC
$\tan y = \frac{a}{n} \Rightarrow n = a \cot y$ .....(ii)
From (i) & (ii)
$a = \frac{h \cot x}{\cot x - \cot y}$

**69.** (b); Complement of an angle $= \frac{1}{4}$ Supplementary angle
$90° - \theta = \frac{1}{4}(180° - \theta)$
$\theta = 60°$

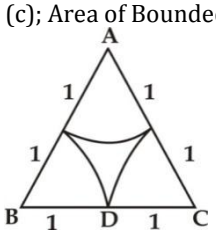
**70.** (c);


Work $= 30 \times \frac{4}{5} = 24$
Efficiency =3
Days $= \frac{24}{3} = 8$ days.

**71.** (b); $2P + \frac{1}{P} = 4 \Rightarrow P + \frac{1}{2P} = 2$ (dividing by 2)
$\Rightarrow \left(P + \frac{1}{2P}\right)^3 = 8 \Rightarrow P^3 + \frac{1}{8P^3} + 3 \times P \times \frac{1}{2P} \times 2 = 8$
$P^3 + \frac{1}{8P^3} = 8 - 3 = 5$

**72.** (c); Area of shaded region = area of semicircle – area of triangle.
$= \frac{\pi(a)^2}{2} - \frac{1}{2} \times a \times 2a$
$= \frac{\pi a^2}{2} - a^2 = a^2\left(\frac{\pi}{2} - 1\right)$ sq. unit.

**73.** (c); Area of Bounded region




$= \frac{\sqrt{3}}{4} \times 2^2 - \frac{1}{2}\pi\,(1)^2$
$= \left(\sqrt{3} - \frac{\pi}{2}\right)$ cm$^2$

**74.** (c); $\left[\frac{\cos^2 A(SinA+CosA)}{cosec^2A(SinA-CosA)}\right]+\left[\frac{\sin^2 A(SinA-CosA)}{\sec^2A(SinA+CosA)}\right](\sec^2 A - Cosec^2A)$

$\Rightarrow \frac{\cos^2 A.Sin^2A(SinA+CosA)}{(SinA-CosA)}+\left[\frac{\sin^2 A.\cos^2A\,(SinA-CosA)}{(SinA+CosA)}\right]\left[\frac{1}{\cos^2A}-\frac{1}{Sin^2A}\right]$

$\Rightarrow \left[\frac{(SinA+CosA)^2+(SinA-CosA)^2}{Sin^2A-Cos^2A}\right]\times(\sin^2 A - Cos^2A)$

$= 2$

**75.** (b); Let initially avg. weight = x
& weight of men = a
$\Rightarrow$ total weight of 150 oarsmen = 15x
After replacement total weight = 15(x + 1.6)
15x – 42 + a = 15 (x + 1.6)
15x – 42 + a = 15x + 24
A = 66 kgs.

## PART - IV ENGLISH LANGUAGE

**76.** A
**77.** A
**78.** C
**79.** A **Precarious**- dependent on chance, uncertain, doubtful, dubious
i. Ex- "he made a precarious living as a painter"
**80.** C **Abundant**-plenty, in large numbers/quantity
**i.** (another)
**81.** B **Cumbersome**- slow or complicated and therefore inefficient
**82.** D **Mulish**- obstinate, recalcitrant
**i. Benign**- Polite, Decent
**ii. Fanatic**- Bigot, Zealot, Extremist
**iii. Docile**- obedient
**83.** C; **Maladroit**-inefficient or inept
**i. Bellicose**-willingness to fight
**ii. Overt**-clear, unconcealed
**84.** A; **Calumny**- an untrue statement to harm someone's reputation
**i. Expletives**- cussword, obscenity
**85.** C;
**86.** D; **Admissible**- able to be admitted or allowed
**87.** A
**88.** A
**89.** C;
**90.** C; use 'interferes' in place of interfere
**91.** A; You may be rest assured (passive sentence is needed here)
**92.** B; Way is a singular countable noun so use article 'a' before it (in a way)
**93.** A; Despair of- the complete loss or absence of hope
**94.** D;
**95.** C; **Last long**- till long time
**96.** A
**97.** C
**98.** D
**99.** C
**100.** B