

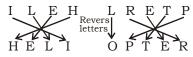
# KD Campus Pvt. Ltd

1997, OUTRAM LINE, KINGSWAY CAMP. DELHI: 110009

# SSC MOCK TEST - 233 (SOLUTION)



Similarly,

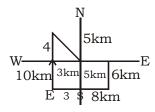


- 2. (C) Frog is an amphibian whereas lizard is a reptile.
- 3. (D) As,  $\frac{60}{4} = 15$

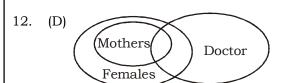
Similarly, 
$$\frac{100}{4} = 25$$

- 4. (D) Except (D) all others are make a house.
- 5. (D) Except options (D) in all others are one or both number is odd.
- 6. (B)  $J \xrightarrow{-3} G \xrightarrow{-3} D$   $N \xrightarrow{-2} L \xrightarrow{-3} I$   $X \xrightarrow{-3} U \xrightarrow{-3} R$   $Q \xrightarrow{-3} N \xrightarrow{-3} K$
- 7. (D) Hectometer → Decameter → Decimeter → Centimeter → Millimeter
- 8. (D) As, D =  $4 \times 3$ And AGE =  $(1 + 7 + 5) \times 3 = 39$ Similarly, JADE =  $(10 + 1 + 4 + 5) \times 3$ = 60
- 9. (A) FTB, IQE LNH OKK RHN

  +3 +3 +3 +3 +3 +3 +3 +3 +3
- 10. (C)
- 11. (C) ATQ.,



Shortest distance between his current location and garage are 5km.



- 13. (C)
- 14. (C) Grand Mother

  Child

  Daughter Brother Chetan

:. Chetan is brother of that girl.

15. (B) A.T.Q,

L N

Present age 7:5

and, present age of N = 32 - 7

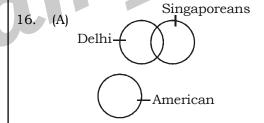
= 25 years

 $\therefore$  5 units = 25 years

 $\Rightarrow$  1 unit = 5 years

Then, present age of L

 $= 7 \times 5 = 35 \text{ years}$ 



- I. (×)
- II. (×)

Neither conclusion I nor II follows.

17. (C) ATQ.,

$$(3 + 14) \times 2 = 34$$

$$\Rightarrow$$
 (18 + 13) ×2 = 62

$$\Rightarrow$$
 (27 + x) ×2 = 98

$$\Rightarrow x = 22$$

18. (A)  $17 \times 15 + 3 - 11 \div 3 = 45$ 

After interchanging sign and numeric value from option (A)

$$\Rightarrow$$
 17 + 11 × 3 – 15 ÷ 3

$$\Rightarrow$$
 17 + 33 - 5

- $\Rightarrow$  45
- 19. (B)



**KD Campus Pvt. Ltd** 1997, OUTRAM LINE, KINGSWAY CAMP. DELHI: 110009

(B) As,

- 21.
- 22.
- 23.
- 24. (B) In figure I and II,

θ	β	α
θ	δ	γ

Hence,  $\alpha$  and  $\beta$  will come on two faces marked 1 and 2.

- 25.
- (B) Kalaripayattu Kerala 26. Chhau - Odisha Lezim – Maharashtra Bhavai is a folk theatre form of Western India (Gujarat).
- 27. (D) **IMF** (International Monetary Fund) – to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth and reduce poverty around the world.

**ADB** (Asian Development Bank) – to social promote and economic development in Asia.

**AIIB** (Asian Infrastructure Investment Bank) - to support the building of infrastructure in the Indo-Pacific region FATF (Financial Action Task Force) founded in 1989 on the initiative of G7, Headquartered in Paris. Its president is Xiangmin Liu.

- 31. (A) **FPO** is a process by which a company, which is already listed on an exchange, issues new shares to the investors or the existing shareholders, usually the promoters. It is used by companies to diversify their equity base.
- 32. (C) Part IV (36 - 51): Directive Principles of state policy are mentioned. DPSPs are taken from Ireland. Dr. B. R. Ambedkar described these principles as 'novel features' of the constitution.
- 33. (D) Authors- Gita Gopinath, Raghuram Rajan, Abhijit Banerjee and Mihir Sharma.
- 35. (D) **Centripetal force** is that acts on a body moving in a circular path and is directed towards the centre around which the body is moving. Ex- Twirling a lasso, spinning a ball on a string and turning a car. Centrifugal force – a force, arising from the body's inertia, which appears to act on a body moving in a circular path and is directed away from the centre around

which the body is moving. Ex- earth is revolving around the sun, a tetherball connected to a pole by a string and passengers feeling pushed outward on a merry-go-round, etc.

(C) Article 75 - Other provisions as to 36. ministers.

Article 101 – Vacation of seats

Article 168 - Constitution of legislature in states

- 37. (D) Rourkela is the first intergrated steel plant. It was founded in 1955, with the help of Germany. Bhilri Steel Plant was setup with the help of the USSR in 1955 Durgapar Steel Plant was set up with the help of U.K in 1959. All these are operated by SAIL (Steel
- Authority of India). 38. (C) 5 most populated countries of Asia China, India, Indonesia, Pakistan and Bangladesh. Maldives is the least populated country.
- 39. (B) Albert Bruce Sabin introduced an oral polio vaccine and came into use in 1961.
- 40. (C) When part of a chromosome is transferred to another chromose, the translocation occurs.
- 42. (B) Mass movement is the geomorphic process by which soil, land, regolith and rocks move downslope typically as a solid, continuous or discontinuous mass.
- 43. (B) An ocean current is a continuous, directed movement of sea water generated by number of forces acting upon the water, including wind, the coriolis effect, breaking moves, cabbeling and temperature and differences.
- (C) 1st Denmark

2nd Norway

- Finland 3rd

- Ukraine 46th

- Saudi Arabia 52nd

46. (D) Some other awards -

T20 International - Deepak Chahar

performance

Emerging Player - Marnus Labuschange Women's Cricket - Ellyse Perry of the Year

Women's ODI Player – Ellyse Perry Women's Emerging Player - Chanida Sutthiruang

- 49. (B) Joseph Stalin announced the plan for Industrialization on 1 October, 1928.
- 50. (A) The Gujral Doctrine is a set of five principles to guide the conduct of foreign relations with India's immediate neighbours. These five principles arise from the belief that India's stature and strength cannot be isolated from the quality of its relations with its neighbours.

# Campus

# **KD Campus Pvt. Ltd**

1997, OUTRAM LINE, KINGSWAY CAMP. DELHI: 110009

51. (B) 
$$x\left(3 - \frac{1}{x}\right) = \frac{3}{x}$$

$$3x-1=\frac{3}{x} \Rightarrow \left(x-\frac{1}{x}\right)=\frac{1}{3}$$

Squaring both sides,

$$\left(x - \frac{1}{x}\right)^2 = \left(\frac{1}{3}\right)^2$$

$$x^2 + \frac{1}{x^2} - 2 = \frac{1}{9}$$

$$x^2 + \frac{1}{x^2} = 2 + \frac{1}{9}$$

$$x^2 + \frac{1}{x^2} = \frac{19}{9}$$

52. (A) OP = 
$$\frac{10}{2}$$
 = 5cm

$$\therefore = \frac{5}{12} \times 12\sqrt{2} = 52cm$$

According to the tangent theorems

$$\Rightarrow$$
  $\angle APO = 90^{\circ}$ 

From right-angled ΔAPO

$$\Rightarrow$$
 OA<sup>2</sup> = AP<sup>2</sup> + OP<sup>2</sup>

$$\Rightarrow$$
 OA<sup>2</sup> = 50 + 25 = 75

$$\Rightarrow$$
 OA =  $\sqrt{75}$  =  $5\sqrt{3}$ 

$$\Rightarrow 2\pi rh = \frac{2}{9} \times \pi r^2 h$$

$$\Rightarrow$$
 r = 9 cm

h = 66.65% of radius = 
$$\frac{2}{3} \times 9 = 6$$
 cm

$$\therefore \text{ Curved surface area} = 2\pi rh = 2 \times \frac{22}{7} \times 9$$

$$\times$$
 6 = 339.42 cm<sup>2</sup>

54. (D) 
$$A + C = 180^{\circ}$$

$$= \sin\left(\frac{A+B}{2}\right) \sin \frac{C}{2} + \cos\left(\frac{A+B}{2}\right) \cos\frac{C}{2}$$

$$= \sin\left(\frac{180 - C}{2}\right) \sin\frac{C}{2} + \cos\left(\frac{180 - C}{2}\right) \cos\frac{C}{2}$$

$$= sin \left(90 - \frac{C}{2}\right) sin \frac{C}{2} + cos \left(90 - \frac{C}{2}\right) cos \frac{C}{2}$$

$$= \sin\left(\frac{C}{2}\right) \sin\frac{C}{2} + \sin\left(\frac{C}{2}\right) \cos\frac{C}{2}$$

$$\left[\sin(x+y) = \sin x \cos y + \cos x \sin y\right]$$

=sinC

55. (A) External volume of box = 
$$80 \times 60 \times 40$$
  
=  $192000 \text{ cm}^3$ 

Internal volume of box =  $76 \times 56 \times 36$ 

 $= 153216 \text{ cm}^3$ 

Volume of wood = 192000 - 153216

 $= 38784 \text{ cm}^3$ 

Weight of empty box = 
$$38784 \times \frac{15}{1000}$$

$$= 581.76 \text{ kg}$$

$$\therefore$$
 4 hours 45 minutes =  $\frac{19}{4}$  hours

Relative speed = 
$$380 \times \frac{19}{4} = 80 \text{ km/h}$$

:. Speed of T = 
$$80 \cdot 27 = 53 \text{ km/h}$$

57. (C) Let total sales = ₹ 
$$x$$

Bonus on sales = 1% of 4500 = ₹45

Deposit after earning = 32345 - 45 = ₹

Total commission = 15%

$$85\%$$
 of  $x = 32300$ 

$$\Rightarrow x = \frac{32300}{85} \times 100$$

Simple Interest = 
$$\frac{P \times R \times T}{100}$$

$$\Rightarrow 32 = \frac{100 \times R \times 4}{100}$$

$$\Rightarrow$$
 R = 8%

Compound Interest = 
$$P \left[ 1 + \frac{R}{100} \right]^n - P$$

$$= 24000 \left[ 1 + \frac{8}{100} \right]^3 - P$$

$$= 24000 \left[ \frac{27 \times 27 \times 27}{25 \times 25 \times 25} - 1 \right]$$



## Campus

### KD Campus Pvt. Ltd 1997, OUTRAM LINE, KINGSWAY CAMP. DELHI: 110009

(D) ATQ.,

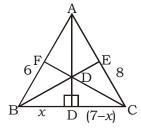
$$\therefore \pi (r \times r \times 7r - r \times r \times 3r) = 539$$

$$\Rightarrow \frac{22}{7} \times (4r^3) = 539$$

$$\Rightarrow$$
 r =  $\frac{7}{2}$ 

Height of the cylinder =  $3 \times \frac{7}{2} = \frac{21}{2}$  cm

60. (A)



$$\cos A = \frac{6^2 + 8^2 - 7^2}{2 \times 6 \times 7} = \frac{17}{32}$$

Let 
$$BD = x$$

$$\therefore$$
 DC = 7 - x

$$AD^{2} = 6^{2} - x^{2} - (7 - x)^{2}$$

$$\Rightarrow 36 - x^{2} = 64 - 49 - x^{2} + 14x$$

$$\Rightarrow 36 - x^2 = 64 - 49 - x^2 + 1$$

$$\Rightarrow x = \frac{21}{14} = \frac{3}{2}$$

Let 
$$OD = y$$

:. OB = 
$$\sqrt{9^2 + \frac{9}{4}}$$
, OC =  $\sqrt{9^2 + \frac{121}{4}}$ 

$$\cos (180 - A) = \frac{OB^2 + OC^2 - BC^2}{2 \times OB \times OC}$$

$$\Rightarrow -\cos A = \frac{9^2 + \frac{9}{4} + 9^2 + \frac{121}{4} - 49}{2\sqrt{9^2 + \frac{9}{4}\sqrt{9^2 + \frac{121}{4}}}}$$

$$=\frac{-17}{32}$$

On solving we get,

$$OD = \frac{11}{2\sqrt{15}} \, cm$$

(A) The required average

$$=\frac{2250}{5}=450$$

62. (A) The required Percent = 
$$\frac{340}{2010} \times 100$$
  
= 16.9%

63. (A) The required ratio = 
$$\frac{370 + 250}{420 + 430}$$

$$=\frac{620}{850}=\frac{62}{85}=62:85$$

(C) The required percent

$$=\frac{430}{\left(310+370+420\right)}\times100$$

$$=\frac{430}{1100}\times100=39.1\%$$

65. (D) If 
$$a^3 + b^3 + c^3 - 3abc = 8$$

$$\Rightarrow x = 2a + b + c, y = (a + 2b + c) \text{ and } z$$
  
=  $(a + b + 2c)$ 

Put 
$$b = c = 0$$
, then

$$\Rightarrow a^3 = 8$$
.  $x = 2a$ .  $y = a$  and  $z = a$ . then

⇒ 
$$a^3 = 8$$
,  $x = 2a$ ,  $y = a$  and  $z = a$ , then  
⇒  $x^3 + y^3 + z^3 - 3xyz = (2a)^3 + a^3 + a^3 - 3 \times 2a \times a \times a$ 

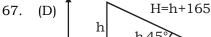
$$\Rightarrow 8a^3 + a^3 + a^3 - 6a^3 = 10a^3 - 6a^3$$

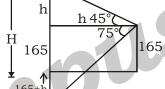
$$\Rightarrow$$
 4a<sup>3</sup> = 4 × 8 = 32

66. (A) Price at which he should sell 85% of

product = 
$$\frac{(300 \times 120)}{(85 \times 100)} \times 100$$

$$= \frac{36,000}{17} = ₹423.53$$





$$\Rightarrow \tan 75^\circ = \frac{330 + h}{h}$$

$$\Rightarrow 2 + \sqrt{3} = \frac{330 + h}{h}$$

$$\Rightarrow$$
 h = 165  $(\sqrt{3} - 1)$ 

So, H = 165 + 165 
$$(\sqrt{3} - 1)$$
 =  $165\sqrt{3}$  m

(B) Let present age of Q = 9x68. According to question;

$$\frac{7x-10}{9x-10} = \frac{5}{7}$$

$$\Rightarrow 49x-70 = 45x-50$$

$$\Rightarrow 49x - 70 = 45x - 50$$

$$\Rightarrow x = 5$$

$$9x = 45$$

Present age of Q = 45 years

69. (A) Total marks initially =  $40 \times 34 = 1360$ 

:. Correct average = 
$$\frac{1360 - 62 + 26}{40}$$
  
= 33.1

(C) Let the number is  $\overline{x}$ 70.

$$(x + 69) = \frac{103}{100}x$$
  

$$\Rightarrow 100x + 6900 = 103x$$
  

$$\Rightarrow x = 2300$$



# KD Campus Pvt. Ltd

1997, OUTRAM LINE, KINGSWAY CAMP. DELHI: 110009

- (C) Let first term = Aand, common difference = D
  - According to question,
  - A+4D=1A+7D = -17
  - From (i) and (ii), we have
  - D = -6, A = 25
  - Required Sum
  - $= \frac{13}{2} \left[ 2 \times 25 + (13 1)(-6) \right]$
  - $=\frac{13}{2}(50-72)$
- =  $13 \times (-11) = -143$ 72. (D) Let the co-ordinates of point A = (x, y)

  - $x = \frac{6 \times 1 + 5 \times 0}{5 + 1} = 1$
  - and,  $y = \frac{-4 \times 1 + 5 \times 8}{5 + 1} = 6$
  - Co-ordinates of A are (1, 6)

- 73. (B) ATQ,
  - $\frac{XY}{PQ} = \frac{Perimeter\ of\ \Delta XYZ}{Perimeter\ of\ \Delta PQR}$
  - $\Rightarrow XY = 27 \times \frac{4}{9} = 12 \text{ cm}$
- (B) A:B:C 74.
  - Required difference
  - $= \frac{(8-5)}{3+5+8} \times 3200 = \text{ } \text{ } 600$
- 75. (C) Net discount =  $20 + 35 \frac{20 \times 35}{100}$ 
  - (100 48) units = 50700
  - $\Rightarrow$  100 units =  $\frac{50700}{52} \times 100 = 97500$

## MEANINGS IN ALPHABETICAL ORDER

### Word Meaning in English

Aghast struck with terror or horror pleasantly entertained or diverted Amused

to find out or learn with certainty Ascertain

Basophilia tendency to stain with basic dyes

**Bestow** to put to use

Chamois an agile goat-antelope with short hooked horns

grant Confer

Curtain that conceals or acts as a barrier

Determined having made a firm decision **Envious** feeling or showing envy, jealous

Imbibe absorb or assimilate

**Impart** make (information) known

Penetralia the innermost or most private parts

Persuade to move by argument, entreaty Pursue to follow in order to overtake, capture, kill, or defeat

Regalia special clothes and decorations (such as a crown

or scepter) for official ceremonies

Turquoise a light greenish blue

Withdrawn removed from immediate contact or easy approach

Wooing to sue for the affection of and usually marriage with

### Meaning in Hindi

भौचक्का

प्रसन्न

सुनिश्चित करना

क्षारग्रसिता

प्रदान करना

साबर

प्रदान करना

आवरण, पर्दा

दूढ़-निश्चय

ईष्याल

सोख लेना

बताना

अंदर का भाग

राजी करना

पीछा करना

विशेष पौशाक

फिरोजा

अलग

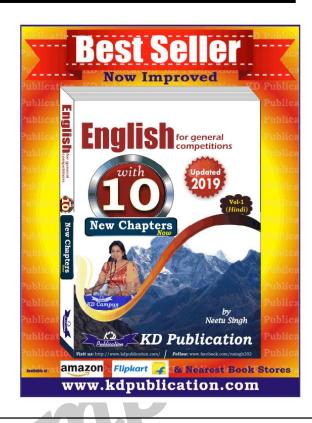
प्रेम दिखाना, रिक्षाना



1997, OUTRAM LINE, KINGSWAY CAMP. DELHI: 110009

# SSC MOCK TEST - 233 (ANSWER KEY)

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



- 76. (D) No error
- 77. (B) Use 'lower' in place of 'lowed'. Comparative degree will be used. We need an adjective here and as there is a comparison between two things.
- 78. (D) Proverb meaning: If one really wants to do something, one finds the way.
- 79. (B) Come off to acquit oneself. Came about – to happen Come out - to go somewhere with someone for a social event.
- 87. (C) Selected Choose as being best or most suitable. Selective - tending to choose carefully. We need an adjective here.



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