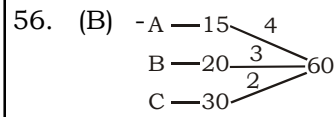


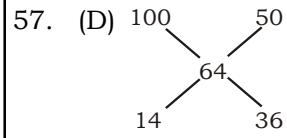
**DP HEAD CONSTABLE – 10 (SOLUTION)**

1. (C) As, Peot used Pen. Similarly, **Tailor** used Needle.
2. (C) As, Tiger is national animal of India. Similarly, brown bear is the national animal of **Russia**.
3. (A) As,  $152 + 15 = 240$   
Similarly,  $192 + 19 = \mathbf{380}$
4. (C) Except **Lucknow**, all others are the union territories.
5. (A) (**64, 83**), 83 is not a perfect square.
6. (B) CAT  $\rightarrow 3+1+20=24$   
BAT  $\rightarrow 2+1+20=23$   
ACT  $\rightarrow 2+1+20=24$   
DT  $\rightarrow 4+20=24$
7. (A) Captain  $\rightarrow$  Major  $\rightarrow$  Colonel  $\rightarrow$  Brigadier  $\rightarrow$  General
8. (B)  $\begin{matrix} 21 & 28 & 33 & 35 & 37 & 36 \\ \leftarrow +7 & \leftarrow +5 & \leftarrow +3 & \leftarrow +1 & \leftarrow -1 & \end{matrix}$
9. (D)  $\begin{matrix} 5 & 13 & 29 & 61 & 120 & 253 \\ \leftarrow 5 \times 2 + 3 & \leftarrow 13 \times 2 + 3 & \leftarrow 29 \times 2 + 3 & \leftarrow 61 \times 2 + 3 & \leftarrow 125 \times 2 + 3 & \end{matrix}$
10. (C)
11. (A) Left  $\bullet$  S R **P** Q T  $\bullet$  right
12. (A)
13. (D)
14. (A)  $6 \times 3 = (6 + 3)^2 + (6 - 3)^2 + 2 \times 6 \times 3$   
 $= 81 + 9 + 36$   
 $= \mathbf{126}$

15. (C) As,  $G = (7)^2 = 49$   
and,  $BEST = (2+5+19+20)^2 = (46)^2 = 2116$   
Similarly,  $RAM = (18+1+13)^2 = \mathbf{1024}$
16. (C) As,  $(3)^2 + (2)^3 = 9+8=17$   
and,  $(2)^2 + (3)^3 = 4 + 27 = 31$   
Similarly,  $(3)^2 + (4)^3 = 9+ 64 = \mathbf{73}$
17. (C) As,  $\frac{10+4+12+10}{2} = 18$   
and,  $\frac{11+12+12+5}{2} = 20$   
Similarly,  
 $\frac{15+8+10+13}{2} = \mathbf{23}$
18. (B) **acbc/acbc/acbc/acbcacbc**
19. (C)
20. (B)
- I.  $\times$
- II.  $\checkmark$
- Only conclusion II follows.
21. (A)  $13 \div 27 + 3 \times 5 - 2$   
After changing the signs as per given details,  
 $13+ 27 \div 3 - 5 \times 2$   
 $= 13 + 9 - 10 = 22 - 10 = \mathbf{12}$
22. (B) ATQ,  
 $Q > P > T$  and  $S > Q > R$   
Combining Both inequality, we get  
 $S > Q > P > T$  and  $S > R$   
 $\therefore \mathbf{S}$  is fastest among them.
23. (B)
24. (B)
25. (D) **D R E A M**  
 $\downarrow \downarrow \downarrow \downarrow \downarrow$   
**11, 22, 04, 13, 23**



Total work together in 3 days = 27 unit  
 Work done by B in last days = 3 unit  
 B and C together work for =  $\frac{30}{5} = 6$   
 Total time = 3 + 1 + 6  
 = **10 days**



Boys : Girls = 7 : 18  
 Total girls = 18 × 4 = **72**

58. (C) Let total milk initially = x  
 ATQ,

$$\frac{x \left(1 - \frac{6}{x}\right)^3}{x} = \frac{27}{27 + 98}$$

$$\Rightarrow 1 - \frac{6}{x} = \frac{3}{5}$$

$$\Rightarrow \frac{2}{5} = \frac{6}{x}$$

$$\Rightarrow x = \mathbf{15 \text{ litre}}$$

59. (D)  $\alpha + \alpha = -2(1 + k)$   
 $2\alpha = -2(1 + k) \Rightarrow \alpha = -(1 + k)$   
 and  $\alpha \alpha = k^2 \Rightarrow \alpha^2 = k^2$   
 $[-(1 + k)]^2 = k^2$   
 $\Rightarrow k^2 + 1 + 2k = k^2$   
 $\Rightarrow 2k = -1$   
 $\Rightarrow k = \frac{-1}{2}$

60. (C)  $P(A \cup B) = P(A) + P(B) - P(A \cap B)$   
 Total students who failed in at least one subject  
 = 47 + 38 - 12 = 73%  
 Then, total students who passed in both subject = **27%**

61. (B) Let income of A = 300  
 Then, income of B = 100

Total income after increment = 120 + 480  
 = 600

Required increment  
 =  $\frac{200}{400} \times 100 = \mathbf{50\%}$

62. (C) Let first cost price = ₹x

Then,  $x \times \frac{60}{100} = (840 - x) \times \frac{12}{100}$   
 $\Rightarrow x = \mathbf{₹140}$

63. (A) Let distance between Delhi and Hisar = 300 km

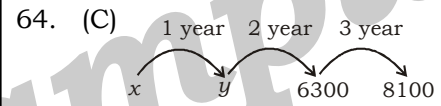
Let both trains meet x km away from Delhi.

$$\frac{x}{150} = \frac{300 - x}{100}$$

$$\Rightarrow x = 180 \text{ km}$$

$$\text{Time} = \frac{180}{150} = 72 \text{ min}$$

Hence, they will meet at **10 : 12 am.**



$$y = \frac{6300 \times 6300}{8100} = 4900$$

$$x = \frac{4900 \times 4900}{6300}$$

$$= \mathbf{₹3811.11}$$

65. (A) Let cost price = ₹x

ATQ,

$$1868 - x = x - 1000$$

$$\Rightarrow x = ₹1434$$

Selling price to earn profit 50%

$$= 1434 \times \frac{150}{100}$$

$$= \mathbf{₹2151}$$

66. (A) As, month is starting with saturday so, 5 monday will be in the month.

Required average

$$= \frac{660 + 25 \times 228}{30}$$

$$= \mathbf{300}$$

67. (C) Total distance travelled

$$= 24 + 29 + 34 + 39 + \dots = \frac{15}{2} [(2 \times 24) + (15-1) \times 5]$$

= **885 km**

68. (D) radius of hemisphere

= Height of cylinder =  $r$

$$\Rightarrow \frac{\text{Volume of cylinder}}{\text{Volume of hemisphere}} = 1$$

$$\Rightarrow \frac{\pi r^2 \times r}{\frac{2}{3} \pi r^3} = 1$$

$$\Rightarrow \frac{r^2}{\frac{2}{3} r^3} = 1$$

$$\Rightarrow \frac{3}{2} = r$$

$$\Rightarrow r : r_1 = \sqrt{3} : 2$$

69. (D) Let amount = ₹ $x$

$$x \left(1 + \frac{25}{100}\right)^4 = x + 2812.5$$

$$\Rightarrow x \left(\frac{125}{100}\right)^4 = x + 2812.5 = ₹5000$$

Simple interest at 12.5% for 4 years

$$= 5000 \times \frac{25}{2} \times \frac{4}{100} = ₹2500$$

70. (A) Let cost price of pencil = ₹10

Cost price = ₹1200

and, selling price = ₹1500 ×  $\frac{90}{100}$

= ₹1350

Hence, profit percent

$$= \frac{150}{1200} \times 100$$

∴ = **12.5%**

71. (C)  $8(4M + 6W) = 10(3M + 7W)$

$$\Rightarrow 32M - 30M = 70W - 48W$$

$$\Rightarrow M = 11W$$

$$\Rightarrow 50 \times 8 = 10 \times x \quad (M_1 D_1 = M_2 D_2)$$

$$\Rightarrow x = \mathbf{40}$$

72. (B)  $x = \sqrt{5\sqrt{5\sqrt{5\sqrt{5\sqrt{5}}}}}$

$$\Rightarrow x = \sqrt{5x}$$

$$\Rightarrow x^2 = 5x$$

$$\Rightarrow x = \mathbf{5}$$

73. (C) Put  $\theta = 45^\circ$   $\sin \theta + \cos \theta$   
 $\sin 45^\circ + \cos 45^\circ$

$$= \frac{1}{\sqrt{2}} + \frac{1}{\sqrt{2}} = \frac{2}{\sqrt{2}} = \sqrt{2}$$

74. (D) In  $\triangle ABD$ ,

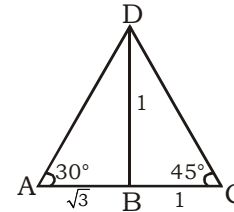
$$\angle BDA = 180^\circ - (\angle A + \angle B)$$

$$= 180^\circ - (60^\circ + 90^\circ) = 30^\circ$$

$$\angle CAD = \angle BDA = 30^\circ$$

∴ **CA = CD**

75. (A)

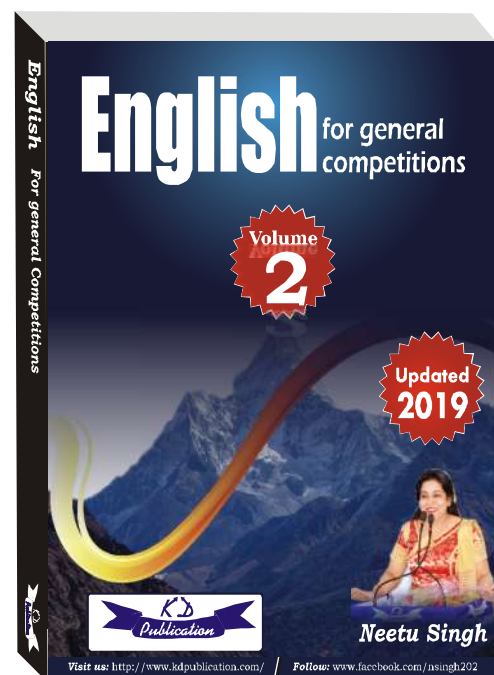


ATQ.,

1 unit  $\rightarrow$  50m

$$\therefore (\sqrt{3} + 1) \text{ units} = 50 (\sqrt{3} + 1) \text{ m} = 136.6 \text{ m}$$

$$\therefore \text{Required distance} = \mathbf{136.6 \text{ m}}$$



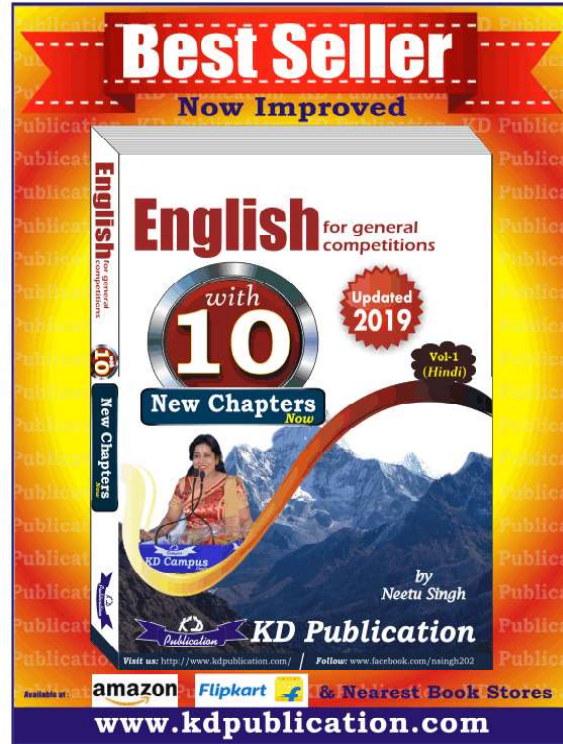


## MEANINGS IN ALPHABETICAL ORDER

<b>Word</b>	<b>Meaning in English</b>	<b>Meaning in Hindi</b>
Pitched	intensely fought	तीव्र लड़ना
Heated	marked by anger	क्रोध से चिहिनत
Peaked	to appear pale or wan	निर्बल
Ruddy	to have a healthy complexion, to be healthy	स्वस्थ, तदरूस्त
Stentorian	loud; usually used to imply a voice of great power and range	बहुत ऊंची और जोरदार आवाज
Quixotic	foolishly impractical	विलक्षण
Staid	sedate and marked by prim restraint	शांत, गंभीर
Millefleur	having an allover pattern of small flowers and plants	छोटे फूलो का पैटर्न
Legion	a large military force	सैन्य टुकड़ी
Array	to put soldiers in a place or position so that they are ready to attack	सरणी
Sordid	very bad or dishonest	नीच, पतित
Nausea	extreme disgust	घृणा
Abrasive	causing damage, wear, or removal of surface material by grinding or rubbing	अपघर्षक
Heave	to lift or pull something with effort	उभाड़
Shrimp	a very small or unimportant person	महत्वहीन व्यक्ति
Wimp	a weak, cowardly, or ineffectual person	डरपोक
Runt	a very small or weak person	छोटा व्यक्ति
Adhesive	designed to stick to something	विपकना
Brooches	an ornament that is held by a pin or clasp and is worn at or near the neck	ब्रौच
Patriot	one who loves and supports his or her country	देश-भक्त
Scholar	a learned person	विद्वान
Buglers	army person playing bugles, which is an instrument that resembles a trumpet	बिगुलवाला

**DP HEAD CONSTABLE – 10 (ANSWER KEY)**

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



76. (B) Change 'indicating' into 'indicate' because the correct structure is 'could be used + to + V<sup>1st</sup> from'.
77. (C) Change 'over' with 'out' because "callout" means 'to speak aloud or to shout'.
90. (D) Phrasal verb 'take off' means 'to remove something'.
91. (C) Present Perfect Continuous tense is used for an action that has already started and still going on.  
Hence replace 'were being' with 'have been'.

**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**