



G.K

- Sol. 1 (b)
- Sol. 2 (b)
- Sol. 3 (c)
- Sol. 4 (b)
- Sol.5 (a)
- Sol. 6 (b)
- Sol. 7(a)
- Sol. 8 (d)
- Sol. 9(d)
- Sol. 10(b)
- Sol.11(b)
- Sol. 12(a)
- Sol. 13(c)
- Sol. 14(c)
- Sol.15 D

ENGLISH

- 16. (4) Can be inferred from the last sentence of the passage
- 17. (1) Clear from the reading of the passage.
- 18. (3) Clearly stated in the passage.
- 19. (1) Can be easily inferred from the passage.
- 20. (4) Clearly given in the passage.
- 21. (2) Exonerate means declared free from blame, to implicate means to show that someone is involved in something especially a crime, to appease means to pacify, to adore means to love deeply and respect highly.
- 22. (4) Fascinating means charming, fanaticism means madness, especially in religious or political matters, indolence means laziness.
- 23. (3) A 'I will you tomorrow', option (3) will be the most appropriate because its talking about "if you are unable to see kindly call me" completes the sentence
- 24. Option (2) logically follows sentence A, because after invention of steam engine by

James watt, many years later, petrol engine was invented

- 25. This is 'synonym' type question. 'Anthology' means a chronological collection.(1), (3) & (4) could easily be eliminated from the first read of line 'Anthology of poetry. It can only mean collection of poetry. Thus, (2) is the right answer.
- 26. (2)
- 27. (3)
- 28. (4)
- 29. (4)
- 30. (3) fickle means unstable, often changing, not constant, not faithful, Insipid means tasteless

MATH

31.

$$(4) CI - SI = \frac{R \times SI}{2 \times 100}$$

$$144 = \frac{15 \times SI}{200}$$

$$SI = ₹1920$$

$$\frac{PTR}{100} = ₹1920$$

$$\frac{P \times 2 \times 15}{100} = 1920$$

$$P = ₹6400.$$

32.

- (2) Time taken by the tap to fill the tank = p hours
Time taken by the tap to empty the tank = q hours

∴ In one hour the tap fills $\frac{1}{p}$ th part of the tank.

In one hour the tap empties $\frac{1}{q}$ th part of the tank.

Thus, in one hour $\left(\frac{1}{p} - \frac{1}{q}\right)$ th part is filled.

But given tank is filled in r hours when both the taps are opened.

∴ In 1 hour $\frac{1}{r}$ th part of tank is filled.

$$\therefore \frac{1}{r} = \frac{1}{p} - \frac{1}{q}$$

- 33. (3)
- 34. (1)



35. (1)
36. (2)
37. (1)
38. (2)
39. (4)
40. (1)
41. (4)
42.

(2) $R = \text{Radius} = \frac{24}{2} = 12 \text{ cm.}$

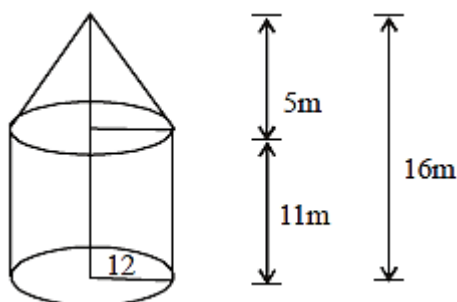
$H = \text{Height} = 11 \text{ m}$

Curved surface area of the cylindrical portion = 2π
 $= 2\pi(12)(11) = (264\pi) \text{ m}^2.$

43.

(3) $h = \text{Height of the cylindrical portion} = 16 - 11 =$

Slant height, $l = \sqrt{h^2 + R^2} = \sqrt{25 + 144} = 13 \text{ m.}$



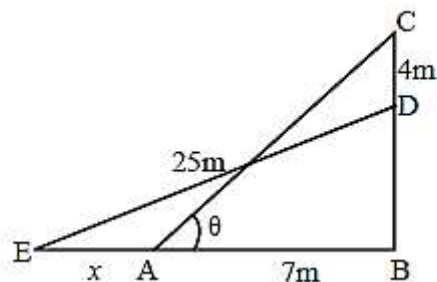
44.

(1) Area of canvas required for the tent = curved surface area of the cylindrical portion + curved surface area of the cone
 curved surface area of the cone = $\pi Rl = \pi(12)(13) = (156\pi) \text{ m}^2$
 Hence, Area of canvas = $(264\pi + 156\pi) \text{ m}^2$

$= (420\pi) \text{ m}^2 = 420 \times \frac{22}{7} = 1320 \text{ m}^2.$

45.

(2)



$DE = 25 = AC = \text{length of ladder.}$

Let $BD = y \text{ m}$

$\therefore (y + 4)^2 + 7^2 = 25^2$

$\Rightarrow (y + 4)^2 = 625 - 49 = 576$

$\Rightarrow y + 4 = \pm 24 \Rightarrow y = 20 \quad [\because y > 0]$

From $\triangle DBE$, $(20)^2 + (x + 7)^2 = (25)^2$

$\Rightarrow (x + 7)^2 = (25)^2 - (20)^2 = (15)^2$

$\Rightarrow x + 7 = 15 \Rightarrow x = 8$

\therefore Foot of the ladder slides 8 m.

Reasoning

46. (d) The series is $\times 2 + 1, \times 2 + 2, \times 2 + 3, \times 2 + 4, \times 2 + 5$

47. (a) The series is $18 + 1^2 = 19; 19 + 2^2 = 23; 23 + 3^2 = 32; 32 + 4^2 = 48; 48 + 5^2 = 73; 73 + 6^2 = 109$

48. (e) The series is $\times 0.5 + 0.5, \times 1 + 1, \times 1.5 + 1.5, \times 2 + 2, \times 2.5 + 2.5, \times 3 + 3$

49. (d)

The pattern of number series is as follows :

$7 \times 2 - 2 = 12$

$12 \times 4 - (2 + 6) = 48 - 8 = 40$

$40 \times 6 - (8 + 10) = 240 - 18 = 222$

$222 \times 8 - (18 + 14) = 1776 - 32 = 1744 \neq 1742$

$1744 \times 10 - (32 + 18) = 17440 - 50 = 17390$

50. (c)

The pattern of number series is as follows :

$6 \times 7 + 72 = 42 + 49 = 91$

$91 \times 6 + 62 = 546 + 36 = 582 \neq 584$

$582 \times 5 + 52 = 2910 + 25 = 2935$

$2935 \times 4 + 42 = 11740 + 16 = 11756$

$11756 \times 3 + 32 = 35268 + 9 = 35277$

51.

(e)

The pattern of number series is as follows:

$9050 - 15^3 = 9050 - 3375 = 5675$

$5675 - 13^3 = 5675 - 2197 = 3478$

$3478 - 11^3 = 3478 - 1331 = 2147$

$2147 - 9^3 = 2147 - 729 = 1418$

$1418 - 7^3 = 1418 - 343 = 1075 \neq 1077$

52. (b) the pattern is... (aab)



53. (b) the pattern is ..(aba)
54. (c) the pattern is ... man
55. (a) Clearly we can understand that the alphabets are arranged according to their respective numbers.
56. (a) The pattern is ...
 $Z - A = 25 - 1 = 24$, $Y - B = 25 - 2 = 23$, $x - C = 24 - 3 = 21$, $W - D = 23 - 4 = 19$,
57. (a)
58. (b)
59. (d)
60. (e)

