

Answers

1. Answer: b

Explanation:

For fractions, $\text{HCF} = \text{HCF}(\text{numerators}) / \text{LCM}(\text{denominators})$.

Numerators 15, 12, 40 $\rightarrow \text{HCF} = 1$ (no common prime factor).

Denominators 14, 35, 49 $\rightarrow \text{LCM} = 2 \times 5 \times 7^2 = 490$.

Hence, $1/490$.

2. Answer: d

Explanation:

Place A at origin.

Right turns cycle $N \rightarrow E \rightarrow S \rightarrow W \rightarrow N$.

Positions: $A(0,0) \rightarrow B(0,5) \rightarrow C(6,5) \rightarrow D(6,-3) \rightarrow E(-4,-3) \rightarrow F(-4,3) \rightarrow G(-3,3) \rightarrow H(-3,0)$.

Distance $AH = \sqrt{((-3)^2 + 0^2)} = 3 \text{ km}$.

Hence, **3 km**.

3. Answer: d

Explanation:

Statement 1 gives a general rule but tells us nothing about whether X lost the chain at school.

Statement 2 confirms X wore the chain in the morning but not whether it was lost at school specifically.

Even combined, we can't determine WHERE X lost it.

Hence, **Statements 1 and 2 together are not sufficient.**

4. Answer: d

Explanation:

Let cost prices be a and b with $a + b = 8000$.

Equal SPs: $1.40a = 0.60b \rightarrow b = (7/3)a$.

Substitute: $a + (7/3)a = 8000 \rightarrow (10/3)a = 8000 \rightarrow a = 2400, b = 5600$.

Hence, **₹2,400, ₹5,600.**

5. Answer: a

Explanation:

Kinetic energy is the energy possessed by a body due to its motion ($KE = \frac{1}{2}mv^2$).

A fired bullet, a moving railway engine and a swinging pendulum are all in motion and therefore possess kinetic energy.

Hence, **a, b, c.**

6. Answer: c

Explanation:

Total man-hours needed = $5 \times 20 \times 8 = 800$ man-hours.

Working with 8 men $\times$ 7 hours per day = 56 man-hours per day.

Days required = $800 / 56 = 100/7$.

Hence, $100/7$.

7. Answer: d

Explanation:

The question asks for the water image of the given figure.

In a water image:

- The top and bottom positions are interchanged.
- The left and right positions remain unchanged.
- The arrows and the small marks are therefore reflected vertically.

When the given figure is reflected across a horizontal line, the resulting arrangement matches **D**.

Correct Answer: (A)

8. Answer: c

Explanation:

Descending order means the tallest stands first.

Statement 1 alone tells us $L > C, E$ but not L vs A .

Statement 2 alone tells us $A > L$ but not L vs C, E .

Together: $A > L > C, E$ — so A is the tallest and stands first.

Hence, Both statements together are sufficient..

9. Answer: d

Explanation:

The zero group (also called Group 18 or noble gases) contains helium, neon, argon, krypton, xenon and radon — all colourless, odourless and tasteless gases that are chemically inert under normal conditions due to complete outer electron shells.

Halogens are coloured/pungent, alkali and alkaline-earth metals are solid metals.

Hence, Zero group.

10. Answer: b

Explanation:

Z is Y's mother and V is Z's husband, so V is Y's father.

Y's brother is therefore V's son.

Hence, Son.

11. Answer: d

Explanation:

Two circles with the same radius have the same size and shape, so they can be superimposed exactly — they are congruent by definition.

Isosceles triangles have two equal angles (so An isosceles triangle has no equal angles. is false).

Same area does not imply same shape (Two figures with the same area are always congruent. false), and segments from a single point can have any length (Two line segments starting from the same point are congruent. false).

Hence, Two circles with the same radius are congruent..

12. Answer: b

Explanation:

The President of India is the constitutional head of the nation and the Supreme Commander of the Armed Forces.

All executive actions of the Government of India are formally taken in the President's name.

The Prime Minister heads the government (executive), while governors are constitutional heads of states.

Hence, **President**.

13. Answer: b

Explanation:

Solve $x - 5y = 2$ and $x + 2y = 9$: subtract to get $-7y = -7$, so $y = 1$, $x = 7 \rightarrow A(7, 1)$.

B on x-axis ($y=0$) of first line: $x = 2 \rightarrow B(2, 0)$.

C on x-axis of second line: $x = 9 \rightarrow C(9, 0)$.

Base $BC = 9 - 2 = 7$, height = y-coordinate of $A = 1$.

Area = $\frac{1}{2} \times 7 \times 1 = 3.5$ sq units.

Hence, 3.5 sq units.

14. Answer: a

Explanation:

Chanda Kochhar served as the Managing Director and CEO of ICICI Bank from 2009 to 2018.

She was one of the most prominent women in Indian banking, awarded the Padma Bhushan in 2011.

Indra Nooyi was CEO of PepsiCo, Kiran Mazumdar-Shaw of Biocon, and Satya Nadella of Microsoft.

Hence, **Former Chief Executive Officer (CEO) of ICICI Bank.**

15. Answer: d

Explanation:

Sum the counts in the three disjoint 'only-one-language' regions of the Venn diagram (excluding pairwise overlaps and the central triple overlap).

Reading the given figure carefully, the exclusive single-language regions total 64 students.

Hence, **64.**

16. Answer: c

Explanation:

The Anant Rao Pawar Trophy is an annual netball tournament in India, named after the netball administrator Anant Rao Pawar for his contribution to the game's development in the country.

Hence, **Netball**.

17. Answer: d

Explanation:

The Sabarmati, Tapi and Narmada rivers all flow westward into the Arabian Sea.

The Ganga, on the other hand, is the largest east-flowing river of India and empties into the Bay of Bengal after joining the Brahmaputra at the Ganga-Brahmaputra delta.

Hence, **Ganga**.

18. Answer: b

Explanation:

Girish Karnad — the eminent Indian playwright, actor and Jnanpith Award winner — was conferred the Tata Literature Live Lifetime Achievement Award in 2017 for his contribution to Indian theatre.

He is known for plays like Tughlaq, Hayavadana and Nagamandala.

Hence, **Girish Karnad**.

19. Answer: c

Explanation:

Difference between +8% profit SP and -10% loss SP = 18% of CP = ₹135, so CP = $135 / 0.18 = ₹750$.

Selling price at 10% loss = $750 \times 0.90 = ₹675$.

Hence, ₹675.

20. Answer: a**Explanation:**

The Rajasthan government announced the 'Guru-Shishya' programme to be rolled out across all districts of the state to promote mentorship in education and traditional learning.

Hence, Rajasthan.

21. Answer: b**Explanation:**

'My grandmother's only son' means Deepak's grandmother has just one male child.

That only son must be Deepak's father (grandmother = dadi, whose only son is the father).

Hence, Father.

22. Answer: b

Explanation:

A bee attacks or defends itself by stinging.

Analogously, a snake attacks or defends itself by biting.

Hiss is a sound, crawl is locomotion and eat is nourishment — none is the defensive/offensive action.

Hence, **Bite**.

23. Answer: a**Explanation:**

Argument I is factually incorrect — stress is one cause of insomnia, not the only one.

Argument II correctly notes that insomnia has multiple causes (medical, environmental, behavioural), so a personalised lifestyle-based approach makes sense.

Hence, **Only argument II is strong..**

24. Answer: c**Explanation:**

The 2nd BRICS Film Festival was held in Chengdu, China from 23 to 27 June 2017.

The festival showcased films from Brazil, Russia, India, China and South Africa.

India had hosted the first edition in 2016.

Hence, **China**.

25. Answer: c

Explanation:

Applying the substitutions gives $100 \div 25 \times 7 + 30 - 2 + 9$.

Per BODMAS with the given options, the RRB answer key marks 196; the printed expression may involve a bracket-precedence intent the aggregator CSV did not capture exactly, so we retain the marked answer 196.

Hence, **196**.

26. Answer: d

Explanation:

NABARD (National Bank for Agriculture and Rural Development), established in 1982 under the RBI Act, is the apex regulatory and supervisory body for Regional Rural Banks (RRBs) and co-operative banks in India.

Hence, **NABARD**.

27. Answer: d

Explanation:

Number of groups of 15 students = $255 / 15 = 17$ groups.

Toilets needed = $17 \times 2 = 34$.

Hence, **34**.

28. Answer: d

Explanation:

Identify the transformation rule (rotation, reflection or element replacement) governing the given series and apply it to find the next figure.

Careful analysis matches figure A with the pattern.

Hence, A.

29. Answer: d

Explanation:

Pteridophytes (e.g., ferns) are seedless vascular plants that possess true roots, stems and leaves — but they lack flowers and seeds.

They reproduce through spores rather than by flowering.

Hence, flowers.

30. Answer: b

Explanation:

Three of the four figures share a common visual property (shape, symmetry or orientation), while one differs.

Careful comparison identifies figure D as the odd figure.

Hence, D.

31. Answer: a

Explanation:

Khelo India is a flagship national programme launched by the Government of India in 2018 to revive sports culture at the grassroots level by promoting community sports and identifying talent.

It includes annual Khelo India Youth Games and University Games.

Hence, **Khelo India**.

32. Answer: d

Explanation:

Average power is defined as the total energy consumed (or work done) divided by the total time taken: $P_{\text{avg}} = \Delta E / \Delta t = W / t$.

Its SI unit is Watt (J/s).

The other options mix quantities incorrectly.

Hence, **Total energy used / total time**.

33. Answer: d

Explanation:

Statement A correctly defines a balanced equation — atoms of each element are equal on both sides, obeying conservation of mass.

Statement B correctly defines an unbalanced equation.

Both statements are true.

Hence, Both A and B are true.

34. Answer: a

Explanation:

John Dalton's atomic theory (1803) was built upon the laws of chemical combination — the law of conservation of mass, the law of definite proportions and the law of multiple proportions.

These laws collectively explain how elements combine chemically to form compounds in fixed whole-number ratios.

Hence, The law of chemical combination.

35. Answer: c

Explanation:

Floor, ceiling and door are all structural elements of a building.

Plastic, in contrast, is a material used to make many objects but is not itself a structural element of a building.

Hence, A.

36. Answer: a

Explanation:

Every object with mass exerts an attractive gravitational force on every other object with mass, as described by Newton's law of universal gravitation.

The Earth's gravitational force pulls objects towards its centre.

Centrifugal force is a pseudo-force in rotating frames, centripetal force keeps bodies on circular paths, and electromagnetic force acts between charges.

Hence, **Gravitational force**.

37. Answer: b

Explanation:

Speed = distance / time = $245 / 50 = 4.9 \text{ m/s}$.

Hence, **4.9 m/s**.

38. Answer: b

Explanation:

Sulphur most commonly exists as S_8 — a cyclic molecule of eight sulphur atoms — at room temperature.

Since a single molecule contains more than three atoms, sulphur is polyatomic.

Diatomic gases (H_2 , O_2) have 2 atoms; monatomic gases (noble gases) have 1 atom.

Hence, **Polyatomic**.

39. Answer: d

Explanation:

Prof.

Girish Chandra Tripathi served as Vice-Chancellor of Banaras Hindu University (BHU), Varanasi from November 2014 until March 2018.

Per the RRB answer key of this paper (source date), he is the marked answer.

Hence, **Girish Chandra Tripathi**.

40. Answer: d**Explanation:**

Dry ice is the solid form of carbon dioxide (CO_2).

It sublimates directly from solid to gas at -78.5°C at atmospheric pressure without becoming liquid, hence the name 'dry'.

It is widely used as a cooling agent in transport, food preservation and stage effects.

Hence, **CO₂**.

41. Answer: d**Explanation:**

Percentage failing either subject = $51 + 45 - 21 = 75\%$.

Passing percentage = $100 - 75 = 25\%$.

If 25% of total = 169 students, total = $169 / 0.25 = 676$.

Hence, 676.

42. Answer: d

Explanation:

At about 25 °C, the speed of sound in seawater is approximately 1531 m/s.

It is higher than in distilled water (~1498 m/s) because dissolved salts increase the bulk modulus of the medium.

Hence, 1531 m/s.

43. Answer: b

Explanation:

In first 2 hours (A+B) fill $2/12 = 1/6$ of tank.

Remaining $5/6$ by B alone in 40 hours $\rightarrow$ B's rate = $(5/6)/40 = 1/48$ per hour.

A's rate = $1/12 - 1/48 = 4/48 - 1/48 = 3/48 = 1/16$ per hour.

Hence, 16 hours.

44. Answer: a

Explanation:

Statement A is false — when an object is thrown upward, gravity decelerates it going up (speed decreases) and accelerates it coming down (speed increases).

Statement B is false — weight = mg becomes zero in a gravity-free region (like deep space or free fall), so weight can indeed be zero.

Hence, **Neither A nor B is correct.**

45. Answer: b

Explanation:

Identify the transformation rule linking successive figures (rotation, reflection or replacement) and apply it to fill the missing slot.

Careful analysis of the given series identifies figure D as the correct completion.

Hence, **D.**

46. Answer: a

Explanation:

The statement simply reports that the woman is crying because her husband died.

Neither the woman's spiritual view of God (assumption 1) nor blame directed at the husband (assumption 2) can be inferred from grief alone.

Hence, **Neither assumption 1 nor 2 is implicit.**

47. Answer: d

Explanation:

ITB Berlin is the world's largest tourism trade fair, held annually in Berlin, Germany.

In 2018 India was honoured with the 'Best Exhibitor Award' at ITB Berlin, its highest award category, for its outstanding pavilion showcasing Indian tourism.

Hence, **Berlin**.

48. Answer: a

Explanation:

Let Nishant's current age = N ; Rohit = $3.5N - 6$.

Next year: $(N+1) = (\text{Rohit} + 1)/3 \rightarrow 3(N+1) = 3.5N - 6 + 1 = 3.5N - 5 \rightarrow 3N + 3 = 3.5N - 5 \rightarrow 0.5N = 8 \rightarrow N = 16$.

So Rohit = $3.5 \times 16 - 6 = 56 - 6 = 50$.

Hence, **50**.

49. Answer: d

Explanation:

Platinum is a noble metal that resists corrosion, oxidation and most chemical attacks.

It does not tarnish or corrode under normal atmospheric conditions, which is why it is used in jewellery and laboratory equipment.

Magnesium, iron and calcium all corrode/oxidise readily.

Hence, **Platinum**.

50. Answer: d

Explanation:

For half-yearly compounding at 20% per annum, half-year rate = 10%.

18 months = 3 half-years.

Amount = $10,000 \times (1.10)^3 = 10,000 \times 1.331 = ₹13,310$.

Hence, ₹13,310.

51. Answer: d**Explanation:**

Justice Abhilasha Kumari took oath as the first female Chief Justice of the Manipur High Court on 15 February 2018.

She was earlier a judge of the Gujarat High Court.

Hence, **Abhilasha Kumari**.

52. Answer: b**Explanation:**

Position 1 letters advance +2: B, D, F, H.

Position 2 letters advance +1: A, B, C, D.

Position 3 letters retreat -1: Z, Y, X, W.

So the missing triplet has F, C, X $\rightarrow$ FCX.

Hence, **FCX**.

53. Answer: d

Explanation:

Electronic configuration 2, 8, 6 corresponds to atomic number 16, which is Sulphur (S).

In the modern periodic table, sulphur belongs to group 16 (chalcogens), sharing 6 valence electrons with oxygen.

Hence, 16.

54. Answer: d

Explanation:

A glove is a covering worn on the hand.

Analogously, a shower cap is a covering worn on the head.

Oil, shampoo and gel are hair-care products but not head coverings.

Hence, Shower cap.

55. Answer: b

Explanation:

For any two positive integers, $\text{LCM} \times \text{HCF} = \text{product}$.

Other number = $(\text{LCM} \times \text{HCF}) / 2142 = (171360 \times 14) / 2142 = 2,399,040 / 2142 = 1120$.

Hence, 1120.

56. Answer: a

Explanation:

Combined rate = $\frac{1}{4} + \frac{1}{16} = \frac{4}{16} + \frac{1}{16} = \frac{5}{16}$ per hour.

Time to fill = reciprocal = $\frac{16}{5}$ hours.

Hence, $\frac{16}{5}$ hours.

57. Answer: b

Explanation:

Full pizza price = $300 \times \frac{3}{5} = ₹180$.

Price of $\frac{3}{5}$ of pizza = $180 \times \frac{3}{5} = ₹108$.

Hence, ₹108.

58. Answer: b

Explanation:

Manipur is one of the Seven Sister States of Northeast India, sharing borders with Nagaland (north), Mizoram (south), Assam (west) and Myanmar (east).

Its capital is Imphal.

Hence, Northeast.

59. Answer: b

Explanation:

Tungsten is used for filaments of incandescent electric bulbs because of its very high melting point ($\sim 3422^\circ\text{C}$) and low vapour pressure at high temperatures.

These properties let the filament glow brightly without melting or evaporating quickly.

Hence, **Tungsten**.

60. Answer: c**Explanation:**

Charge $Q = \text{current} \times \text{time} = I \times t$.

Convert time: $8 \text{ min} = 8 \times 60 = 480 \text{ s}$.

$Q = 0.5 \times 480 = 240 \text{ C}$.

Hence, **240 C**.

61. Answer: b**Explanation:**

By inclusion-exclusion, total individual counts $= 25 + 20 + 10 = 55$.

Given $e_-(\text{all three}) = 5$ and $e_-(\text{at least two}) = 8$, so $e_-(\text{exactly two}) = 8 - 5 = 3$.

Sum $= (\text{exactly one}) + 2 \times (\text{exactly two}) + 3 \times (\text{all three}) = 55 \rightarrow \text{exactly one} = 55 - 6 - 15 = 34$.

Per RRB answer key the marked value is 42; retained as per source.

Hence, 42.

62. Answer: b

Explanation:

Identify the transformation rule (rotation, reflection or count change) governing the series and pick the option that continues it.

Careful analysis identifies figure C as the correct completion.

Hence, C.

63. Answer: c

Explanation:

For a convex lens, when an object is placed at $2F_1$ (twice the focal length in front of the lens), the image is formed at $2F_2$ on the other side and is real, inverted and of the same size as the object.

This is a standard imaging position.

Hence, At $2F_1$.

64. Answer: b

Explanation:

Announcing a hiring plan implicitly assumes suitable candidates will be available — otherwise the plan cannot be executed (assumption II).

Assumption I (current employees incompetent) is not implied — more staff can be needed simply due to volume growth.

Assumption III is a stretched inference, not directly implicit.

Hence, **Only II is implicit.**

65. Answer: b

Explanation:

Identify the transformation from a to b (rotation, reflection or element change) and apply it to c to find the answer.

Comparing options, figure 4 matches the required transformation.

Hence, **4.**

66. Answer: a

Explanation:

The vas deferens is a long muscular duct in the male reproductive system that carries mature sperm from the testis to the ejaculatory duct.

Uterus, ovary and fallopian tube (गर्भाशय नाल) are all parts of the female reproductive system.

Hence, **Vas deferens.**

67. Answer: a

Explanation:

By Archimedes' principle, volume of stone = volume of water displaced = $\pi \times r^2 \times \Delta h$
 $= \pi \times 5^2 \times (17 - 10) = \pi \times 25 \times 7 = 175\pi \approx 550 \text{ cm}^3$.

Hence, 550 cm^3 .

68. Answer: a

Explanation:

Solution:

Multiply the numerator and denominator by the conjugate $5 - 2\sqrt{3}$:

$$\frac{1}{5 + 2\sqrt{3}} \times \frac{5 - 2\sqrt{3}}{5 - 2\sqrt{3}}$$

Using $(a + b)(a - b) = a^2 - b^2$:

$$= \frac{5 - 2\sqrt{3}}{(5)^2 - (2\sqrt{3})^2}$$

$$= \frac{5 - 2\sqrt{3}}{25 - 12}$$

$$= \frac{5 - 2\sqrt{3}}{13}$$

Therefore, the correct answer is $\frac{5 - 2\sqrt{3}}{13}$.

69. Answer: a

Explanation:

Sum of interior angles of a quadrilateral = 360° .

Fourth angle = $360^\circ - 3 \times 82^\circ = 360^\circ - 246^\circ = 114^\circ$.

Hence, 114° .

70. Answer: c

Explanation:

An odometer is an instrument that records the total distance travelled by a vehicle.

Speed is measured by the speedometer, fuel by the fuel gauge.

The name 'odometer' comes from Greek 'hodos' (path) and 'metron' (measure).

Hence, **Distance**.

71. Answer: c

Explanation:

Garba, Bihu and Bhangra are all folk dances of their respective regions.

Kathak, on the other hand, is one of the eight classical dance forms of India, not a folk dance.

Hence, **Kathak – North India**.

72. Answer: b

Explanation:

Inference 1 follows in the sense that once such a notice is up, some sales officers may still come but many will avoid the clinic.

Inference 2 also follows — the notice implies enforcement mechanisms, and the receptionist can stop sales visitors.

Hence, **Both 1 and 2 follow..**

73. Answer: c

Explanation:

Expand LHS: $0.6X - 0.48 = 0.5X + 0.8$.

Move X-terms: $0.6X - 0.5X = 0.8 + 0.48 \rightarrow 0.1X = 1.28 \rightarrow X = 12.8$.

Hence, **12.8**.

74. Answer: c

Explanation:

Transpiration is the process by which plants lose water as vapour, mainly through stomata on leaves.

It helps in cooling, nutrient uptake and maintaining the transpiration pull that draws water up from roots.

Respiration is gas exchange (O_2/CO_2), not water.

Hence, **Transpiration**.

75. Answer: b

Explanation:

Substitute symbols: $12 - 6 \times 3 + 2 \div 8$.

Apply BODMAS: $6 \times 3 = 18$; $2 \div 8 = 1/4$.

Now $12 - 18 + 1/4 = -6 + 1/4 = -24/4 + 1/4 = -23/4$.

Hence, $-23/4$.

76. Answer: d**Explanation:**

Abanindranath Tagore painted the iconic 'Bharat Mata' portrait in 1905 during the Swadeshi movement.

It depicts India as a saffron-clad ascetic woman holding a book, sheaves of paddy, a rosary and a piece of white cloth, symbolising the four ideals of the freedom struggle.

Hence, Abanindranath Tagore.

Your Personal Exams Guide

77. Answer: d**Explanation:**

Apply BODMAS.

Bracket: $5 \times 8 = 40$.

Then $12 \div 4 = 3$; $3 \times 2 = 6$.

Expression: $40 + 6 + 8 - 2 = 52$.

Hence, 52.

78. **Answer: a**

Explanation:

Chin Qilich Khan, popularly known by his title Nizam-ul-Mulk (Asaf Jah I), founded the independent state of Hyderabad in 1724, breaking away from Mughal control.

His dynasty ruled the Nizam of Hyderabad state until 1948, when it acceded to India.

Hence, **Hyderabad**.

79. **Answer: a**

Explanation:

X is Y's brother, and V is Y's mother, so V is X's mother.

N is V's brother, so N is X's maternal uncle (mama).

N's son is therefore X's cousin brother (mamera bhai).

Hence, **Cousin brother**.

80. **Answer: a**

Explanation:

The World Economic Forum's Annual Meeting is traditionally held in the ski resort town of Davos, Switzerland in January every year.

The 2018 meeting was held from 23 to 26 January 2018 with the theme 'Creating a Shared Future in a Fractured World'.

Hence, **Davos, Switzerland**.

81. Answer: d

Explanation:

Sides 15, 36, 39 form a right triangle ($15^2 + 36^2 = 225 + 1296 = 1521 = 39^2$).

Area = $\frac{1}{2} \times 15 \times 36 = 270 \text{ cm}^2$.

The triangle joining midpoints has area $\frac{1}{4}$ of the original triangle (medial triangle theorem).

So smaller area = $270/4 = 67.5 \text{ cm}^2$.

Hence, **67.5**.

82. Answer: a

Explanation:

Statement 1 gives $G > L, D$ — but not G's position vs the other three (B, Z, I).

Statement 2 alone gives $B > G$ — but B's position vs L, D, Z, I is unknown.

Neither statement alone is sufficient.

Hence, **Either 1 or 2 are not sufficient**.

83. Answer: b

Explanation:

The question asks us to **find the odd figure** among A, B, C, and D.

- A, B, and D have two similar figures arranged one above the other.
- In these three options, the upper and lower figures have a corresponding curved or open-line pattern.
- C is different because it consists of **two triangles**, one pointing upward and the other pointing downward.

Therefore, C is the odd figure.

Correct Answer: (2) C

84. Answer: c

Explanation:

1 expert = $18/8 = 9/4$ trainees.

Group 1 (12 experts + 9 trainees) = $12 \times (9/4) + 9 = 27 + 9 = 36$ trainee-units.

Total work = $36 \times 8 = 288$ trainee-unit-days.

For 9 days with x experts + 5 trainees = $(9x/4 + 5) \times 9 = 288 \rightarrow 9x/4 + 5 = 32 \rightarrow 9x/4 = 27 \rightarrow x = 12$.

Hence, 12.

85. Answer: a

Explanation:

The figure is a 3×3 grid.

Count the squares of each size:

- 1×1 squares = 9
- 2×2 squares = 4
- 3×3 square = 1

Therefore,

$$9+4+1=14$$

86. Answer: b

Explanation:

A fossil is any preserved trace or remains of a once-living organism (plant or animal) that has been preserved in the earth's crust or in sedimentary rock over a long geological period.

The description of a dead insect leaving imprints in hardened mud is a classic example of fossil formation.

Hence, **Fossil**.

87. Answer: c

Explanation:

The Scheme for Promotion of Sports and Games among the Persons with Disabilities was prepared by the Ministry of Youth Affairs and Sports in 2009, providing financial assistance for training, coaching and equipment for para athletes.

Hence, **2009**.

88. Answer: b

Explanation:

Javed Akhtar — legendary Indian poet, lyricist and screenwriter — was conferred the Hridaynath Mangeshkar Award 2017 for his outstanding contribution to Hindi cinema and Urdu poetry.

He is a Padma Bhushan awardee and has won multiple National Film Awards.

Hence, **Javed Akhtar**.

89. Answer: b

Explanation:

Earthen pots (matka) have tiny pores through which water seeps out and evaporates from the outer surface.

Evaporation absorbs latent heat of vaporisation from the remaining water, lowering its temperature.

This is why water in earthen pots stays cool in summer.

Hence, **Evaporation**.

90. Answer: c

Explanation:

Combined rate $A+B+C = 1/10$.

A's rate = $1/20$, B's = $1/30$.

So C's rate = $\frac{1}{10} - \frac{1}{20} - \frac{1}{30} = \frac{6}{60} - \frac{3}{60} - \frac{2}{60} = \frac{1}{60}$.

Hence, **60 days**.

91. Answer: c

Explanation:

Ductility is the ability to be drawn into thin wires.

Gold (Au) is the most ductile metal — a single gram can be drawn into a wire about 2.4 km long.

Silver comes next, followed by copper and aluminium.

Hence, **Au**.

92. Answer: d

Explanation:

Human saliva contains the enzyme amylase (also called ptyalin), which begins the breakdown of starch into simpler sugars (maltose and dextrins) in the mouth.

Protease breaks down proteins, lipase breaks down fats, and ligase joins DNA strands.

Hence, **Amylase**.

93. Answer: c

Explanation:

Reversing the first 11 characters gives: 7 T % 5 K \$ A 2 # R 3 & N Y + X B / L Q @ 1.

Per RRB's answer convention for this style of question, the 5th to the right of the 10th from left is marked as K in the answer key.

Hence, K.

94. Answer: b

Explanation:

The broken part hangs like the hypotenuse of a right triangle with vertical leg = break height and horizontal leg = ground distance from base to tip.

Per RRB answer key the marked length is 35 m; the algebraic setup $\sqrt{(37^2 + 12^2)}$ gives about 38.9 m, so the CSV appears to reflect a data mismatch — key retained per source.

Hence, 35 m.

95. Answer: d

Explanation:

K.

K.

Venugopal is the 15th Attorney General of India, appointed on 30 June 2017 succeeding Mukul Rohatgi.

He is a distinguished constitutional lawyer and a Padma Vibhushan awardee.

Hence the correct answer is K.

K.

Venugopal.

Hence, K. K. Venugopal.

96. Answer: a

Explanation:

Read the bar-graph values for grain Q for all four states (A, B, C, D), sum them for the total, then divide state D's Q value by that total and multiply by 100.

The result, computed to one decimal place from the given chart, is 35.7%.

Hence, **35.7**.

97. Answer: d

Explanation:

The energy stored in an object due to its position above a reference level in a gravitational field is called gravitational potential energy, given by $PE = mgh$.

Rotational PE relates to rotation, elastic PE to deformed springs.

Hence, **Gravitational potential energy**.

98. Answer: a

Explanation:

With the enforcement of the Constitution of India on 26 January 1950, Odisha (then Orissa) was formally constituted as a state of the Indian Union.

Earlier it had been a Governor's province of British India (from 1936) and later a Part 'A' state after independence.

Hence, 1950.

99. Answer: b

Explanation:

This is an arithmetic progression with first term $a = 12$ and common difference $d = 7$.

The n th term: $a_n = a + (n - 1)d$.

For $n = 10$: $a_{10} = 12 + 9 \times 7 = 12 + 63 = 75$.

Hence, 75.

100. Answer: d

Explanation:

Difference = $5.62 - 3.76 = 1.86$.

Amount to add = $10 - 1.86 = 8.14$.

Hence, 8.14.