



Analytical Skill

Lecture-03

IQ Based (Water and Mirror Image, Odd Man Out, Blood Relation, Figure Counting, Direction)

Water and Mirror Image

Water Image

1. Choose the alternative which is closely resembles the water-image of the given Combination.

PQ8AF5BZ9

- (1) Ɔ08VƆ2BZ0 (2) Ɔ08VƆ2BZ6
(3) Ɔ08VƆ9BZ9 (4) Ɔ08VƆ2BZ0

(A) 1 (B) 2 (C) 3 (D) 4

2. Choose the alternative which is closely resembles the water-image of the given Combination.

bridge

- (1) pɹıqɔe (2) pɹıqɔe
(3) pɹıqɔe (4) pɹıpɔe

(A) 1 (B) 2 (C) 3 (D) 4

3. Choose the alternative which is closely resembles the water-image of the given Combination.

E8t4e9C

- (1) Ǝ8ɹɹ00Ɔ (2) E8ɹɹ00Ɔ
(3) Ǝ8ɹɹ06C (4) E8ɹɹ00C

(A) 1 (B) 2 (C) 3 (D) 4

4. Choose the alternative which is closely resembles the water-image of the given Combination.

NUCLEAR

- (1) ƆVƆEƆCUI (2) ɹɹɹɹɹɹɹ
(3) ɹɹɹɹɹɹɹ (4) ɹɹɹɹɹɹɹ

(A) 1 (B) 2 (C) 3 (D) 4

Mirror Images

5. Choose the alternative which is closely resembles the mirror image of the given combination.

INFORMATIONS

- (1) ɹɹɹɹɹɹɹɹɹ (2) ɹɹɹɹɹɹɹɹɹ
(3) ɹɹɹɹɹɹɹɹɹ (4) ɹɹɹɹɹɹɹɹɹ

(A) 1 (B) 2 (C) 3 (D) 4

6. Choose the alternative which is closely resembles the mirror image of the given combination.

ANS43Q12

- (1) ɹɹɹɹɹɹɹɹɹ (2) ɹɹɹɹɹɹɹɹɹ
(3) ɹɹɹɹɹɹɹɹɹ (4) ɹɹɹɹɹɹɹɹɹ

(A) 1 (B) 2 (C) 3 (D) 4

7. Choose the alternative which is closely resembles the mirror image of the given combination.

MALAYALAM

- (1) MALAYALAM (2) MAJAYAJAM
(3) ɹɹɹɹɹɹɹɹɹ (4) ɹɹɹɹɹɹɹɹɹ

(A) 1 (B) 2 (C) 3 (D) 4

8. Choose the alternative which is closely resembles the mirror image of the given combination.

TARAIN1014A

- (1) ɹɹɹɹɹɹɹɹɹɹɹ (2) ɹɹɹɹɹɹɹɹɹɹɹ
(3) ɹɹɹɹɹɹɹɹɹɹɹ (4) ɹɹɹɹɹɹɹɹɹɹɹ

(A) 1 (B) 2 (C) 3 (D) 4

Odd Man Out

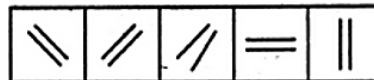
9. Choose the figure which is different from the rest.



(1) (2) (3) (4) (5)

(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

10. Choose the figure which is different from the rest.



(1) (2) (3) (4) (5)

(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

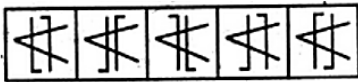
11. Choose the figure which is different from the rest.



(1) (2) (3) (4) (5)

(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

12. Choose the figure which is different from the rest.



(1) (2) (3) (4) (5)

(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

13. Choose the word which is different from the rest.

(A) Car (B) Scooter
(C) Helicopter (D) Aeroplane (E) Cycle

14. Choose the word which is different from the rest.

(A) Tomato (B) Carrot
(C) Ginger (D) Potato (E) Turmeric

15. Choose the odd one out.

(A) HSRI (B) MVUN
(C) OLKP (D) PJQX (E) WDCX

16. Choose the pair in which the words are differently related from the rest.

(A) Tree : Stem (B) Face : Eye
(C) Chair : Sofa (D) Plant : Flower

17. Choose the word which is different from the rest.

(A) Tonne (B) Pint
(C) Gallon (D) Litre

Blood Relation

18. Pointing to a photograph of a boy Suresh said, "He is the son of the only son of my mother." How is Suresh related to that boy?

A. Brother B. Uncle
C. Cousin D. Father

19. If $A + B$ means A is the mother of B; $A - B$ means A is the brother of B; $A \% B$ means A is the father of B and $A \times B$ means A is the sister of B, which of the following shows that P is the maternal uncle of Q?

A. $Q - N + M \times P$ B. $P + S \times N - Q$
C. $P - M + N \times Q$ D. $Q - S \% P$

20. P is the mother of K; K is the sister of D; D is the father of J. How is P related to J?

A. Mother B. Grandmother
C. Aunt D. Data inadequate

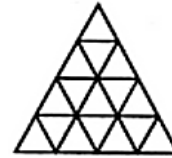
21. A is the son of C; C and Q are sisters; Z is the mother of Q and P is the son of Z. Which of the following statements is true?

A. P and A are cousins
B. P is the maternal uncle of A
C. Q is the maternal grandfather of A
D. C and P are sisters

Figure Counting

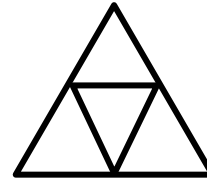
Triangle Shape

22. How many triangles are there in the figure



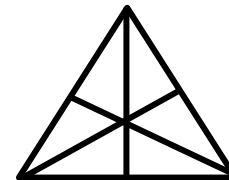
(A) 20 (B) 27 (C) 41 (D) None

23. How many triangles are there in the figure



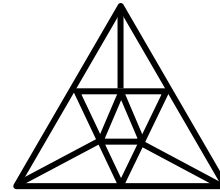
(A) 4 (B) 5 (C) 6 (D) 7

24. How many triangles are there in the figure



(A) 12 (B) 16 (C) 20 (D) 22

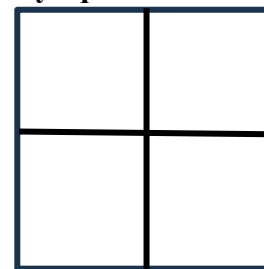
25. How many triangles are there in the figure



(A) 15 (B) 18 (C) 20 (D) 25

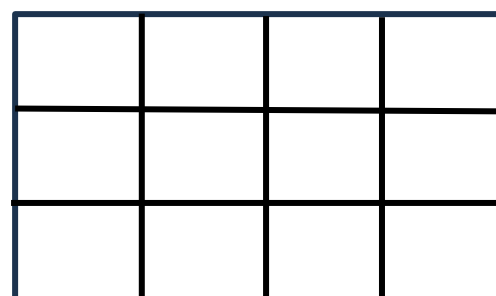
Square Shape

26. How many squares are there in this figure?



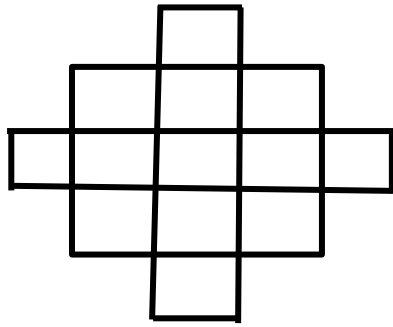
(A) 4 (B) 5 (C) 7 (D) 10

27. How many squares are there in this figure?



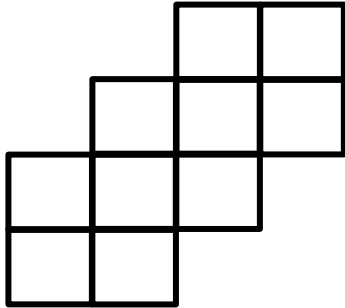
(A) 12 (B) 16 (C) 20 (D) None

28. How many squares are there in this figure?



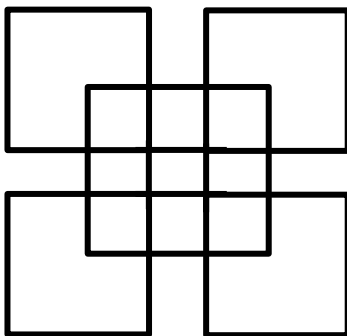
- (A) 16 (B) 18 (C) 22 (D) None

29. How many squares are there in this figure?



- (A) 12 (B) 13 (C) 15 (D) None

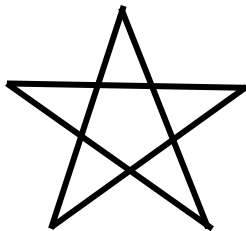
30. How many squares are there in this figure?



- (A) 17 (B) 18 (C) 19 (D) None

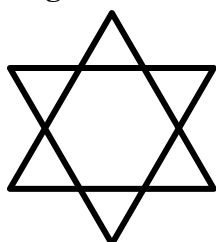
Star Shape

31. How many triangles are there in this figure?



- (A) 5 (B) 7 (C) 8 (D) 10

32. How many triangles are there in this figure?



- (A) 6 (B) 8 (C) 10 (D) 12

Direction

33. Y is in the East of X which is in the North of Z. If P is in the South of Z, then in which direction of Y, is P?

- (A) North (B) South
(C) South-East (D) None of these

34. A man walks 5 km toward south and then turns to the right. After walking 3 km he turns to the left and walks 5 km. Now in which direction is he from the starting place?

- (A) West (B) South
(C) North-East (D) South-West

35. Rasik walked 20 m towards north. Then he turned right and walks 30 m. Then he turns right and walks 35 m. Then he turns left and walks 15 m. Finally he turns left and walks 15 m. In which direction and how many metres is he from the starting position?

- (A) 15 m West (B) 30 m East
(C) 30 m West (D) 45 m East

Student Work

Water and Mirror Image

1. Choose the alternative which is closely resembles the mirror image of the given combination.

Nu56p7uR

- (1) ИuḡḡqṽuЯ (2) ЯnṽqḡḡnИ
(3) ЯuṽqḡḡuИ (4) ЯuṽḡḡḡuИ

- (A) 1 (B) 2 (C) 3 (D) 4

Answer: Option C

2. Choose the alternative which is closely resembles the mirror image of the given combination.

GEOGRAPHY

- (1) YHPARGOEG (2) YHPARGOEG
(3) AHPARGOEG (4) YHPARGOEG

- (A) 1 (B) 2 (C) 3 (D) 4

Answer: Option A

3. Choose the alternative which is closely resembles the mirror image of the given combination.

UTZFY6KH

- (1) HKḡYḡḡḡḡḡḡ (2) ḡḡḡḡḡḡḡḡḡ
(3) HKḡḡḡḡḡḡḡḡḡ (4) HKḡḡḡḡḡḡḡḡḡ

- (A) 1 (B) 2 (C) 3 (D) 4

Answer: Option D

4. Choose the alternative which is closely resembles the water-image of the given combination.

RAJ589D8

- (1) BVḡḡḡḡḡḡḡḡḡ (2) BVḡḡḡḡḡḡḡḡḡ
(3) BVḡḡḡḡḡḡḡḡḡ (4) BVḡḡḡḡḡḡḡḡḡ

- (A) 1 (B) 2 (C) 3 (D) 4

Answer: Option A

5. Choose the alternative which is closely resembles the water-image of the given combination.

VAYU8436

(1) ΛVΛΠ84ε9 (2) ΛVΛΠ843ε

(3) ΛVΛΠ8439 (4) ΛVΛΠ84εε

(A) 1 (B) 2 (C) 3 (D) 4

Answer: Option B

6. Choose the alternative which is closely resembles the water-image of the given combination.

monday

(1) yadnom (2) ysbnom

(3) λe quow (4) wouqsl

(A) 1 (B) 2 (C) 3 (D) 4

Answer: Option D

Odd Man Out

7. 2, 5, 10, 17, 26, 37, 50, 64

(A) 50 (B) 26 (C) 37 (D) 64

Answer: Option D

Explanation:

$(1*1)+1$, $(2*2)+1$, $(3*3)+1$, $(4*4)+1$, $(5*5)+1$, $(6*6)+1$, $(7*7)+1$, $(8*8)+1$

But, 64 is out of pattern.

8. 6, 9, 15, 21, 24, 28, 30

(A) 28 (B) 21 (C) 24 (D) 30

Answer: Option A

Explanation:

Each of the numbers except 28, is a multiple of 3.

9. Choose the word which is different from the rest.

(A) Kiwi (B) Eagle (C) Emu (D) Ostrich

Answer: Option B

Explanation:

All except Eagle are flightless birds.

10. Choose the word which is different from the rest.

(A) Pine (B) Spruce (C) Banyan (D) Deodar

Answer: Option C

Explanation:

All except Banyan are coniferous trees.

Blood Relation

11. Which of the following means F is the mother of K?

1. B5D means B is the father of D.
2. B9D means B is the sister of D.
3. B4D means B is the brother of D.
4. B3D means B is the wife of D.

(A) F3M5K (B) F5M3K
(C) F9M4N3K (D) F3M5N3K

Answer: Option A

Explanation:

F3M → F is the wife of M

M5K → M is the father of K

Therefore, F is the mother of K.

12. A's son B is married with C whose sister D is married to E the brother of B. How D is related to A?

(A) Sister (B) Daughter's-in-law
(C) Sister-in-law (D) Cousin

Answer: Option B

Explanation:

Since E is the brother of B

Therefore, A is the father of E

but D is the wife of E.

Hence, D is the daughter-in-law of A.

13. Introducing a man, a woman said, "He is the only son of the mother of my mother." How is the woman related to the man?

(A) Mother (B) Sister
(C) Niece (D) Maternal aunt

Answer: Option C

Explanation:

The man is the only son of the mother of the woman. Hence, the man is the maternal uncle of the woman. So, the woman is the niece of the man.

14. Pointing towards a girl, Abhisek says, "This girl is the daughter of only a child of my father." What is the relation of Abhisek's wife to that girl?

(A) Daughter (B) Mother
(C) Aunt (D) Sister

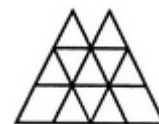
Answer: Option B

Explanation:

Only the child of my father means 'Abhisek' himself. This means the girl is the daughter of Abhisek. Hence, Abhisek's wife is the mother of the girl.

Figure Counting

15. Count the number of parallelogram in the given figure.

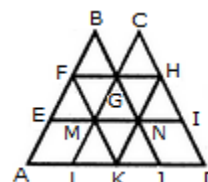


(A) 23 (B) 22 (C) 21 (D) 18

Answer: Option A

Explanation:

The figure may be labelled as shown.



The simplest parallelograms are EMLA and NIDJ i.e. 2 in number.

The parallelograms composed of two components each are BFMG, CGNH, GMKN, FGME, GHNM, MNKL, FGNM, GHIN and MNJK i.e. 9 in number.

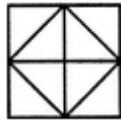
The parallelograms composed of three components each are FGLA, ENKA, GHDJ and MIDK i.e. 4 in number.

The parallelograms composed of four components each are FGJK, GHKL, FBKN, CHKM, EFHN and MFHI i.e. 6 in number.

The parallelograms composed of seven components each are FHKA and FHDK i.e. 2 in number.

Total number of parallelograms in the figure = $2 + 9 + 4 + 6 + 2 = 23$.

16. Count the number of convex pentagons in the adjoining figure.



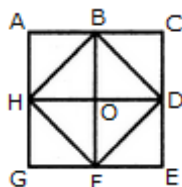
- (A) 16 (B) 12 (C) 8 (D) 4

Answer: Option B

Explanation:

A convex pentagon has no angles pointing inwards. More precisely, no internal angles can be more than 180° .

The figure may be labelled as shown.



The pentagons in the figure, are ABDFH, CDFHB, EFHBD, GHBDF, ACDFG, CEFHA, EGHBC, GABDE, BDEGH, DFGAB, FHACD and HBCEF. Clearly, these are 12 in number.

17. Count the number of parallelogram in the given figure.

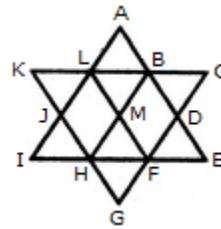


- (A) 8 (B) 11 (C) 12 (D) 15

Answer: Option D

Explanation:

The figure may be labelled as shown.



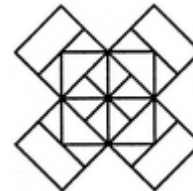
The simplest parallelograms are LMHJ and BDFM i.e. 2 in number. The parallelograms composed of two components each are ABML and MFGH i.e. 2 in number.

The parallelograms composed of three components each are LBHI, LBEF, BDGH, DFLA, BCFH, KLFH, A6HJ and LFGJ i.e. 8 in number.

The parallelograms composed of six components each are LCFI, KBEH and ADGJ i.e. 3 in number.

Total number of parallelograms in the figure = $2 + 2 + 8 + 3 = 15$.

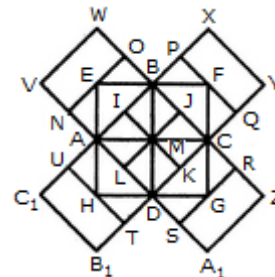
18. Count the number of squares in the given figure.



- (A) 22 (B) 20 (C) 18 (D) 14

Answer: Option C

Explanation:



The figure may be labelled as shown.

The squares composed of two components each are BJMI, CKMJ, DLMK and AIML i.e. 4 in number.

The squares composed of three components each are EBMA, BFCM, MCGD and AMDH i.e. 4 in number.

The squares composed of four components each are VWBA, XYCB, ZA₁DC and B₁C₁AD i.e. 4 in number.

The squares composed of seven components each are NOJL, PQKI, RSLJ and TUIK i.e. 4 in number.

There is only one square i.e. ABCD composed of eight components.

There is only one square i.e. EFGH composed of twelve components.

Total number of squares in the figure = $4 + 4 + 4 + 4 + 1 + 1 = 18$.

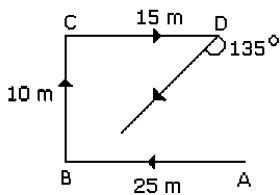
Direction

19. P started from his house towards west. After walking a distance of 25 m. He turned to the right and walked 10 m. He then again turned to the right and walked 15 m. After this he is to turn right at 135° and to cover 30 m. In which direction should he go?

(A) West (B) South
(C) South-West (D) South-East

Answer: Option C

Explanation:



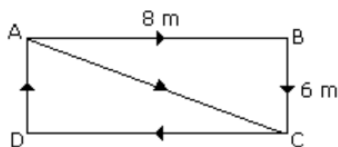
Hence he should go in the South-West direction.

20. The length and breadth of a room are 8 m and 6 m respectively. A cat runs along all the four walls and finally along a diagonal order to catch a rat. How much total distance is covered by the cat?

(A) 10 (B) 14 (C) 38 (D) 48

Answer: Option C

Explanation:



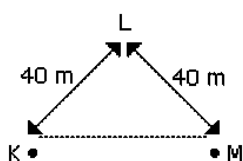
$$\begin{aligned}\text{Required distance} &= 8 + 6 + 8 + 6 + \sqrt{8^2 + 6^2} \\ &= 28 + \sqrt{100} \\ &= 28 + 10 \\ &= 38 \text{ m}\end{aligned}$$

21. K is 40 m South-West of L. If M is 40 m South-East of L, then M is in which direction of K?

(A) East (B) West
(C) North-East (D) South

Answer: Option A

Explanation:



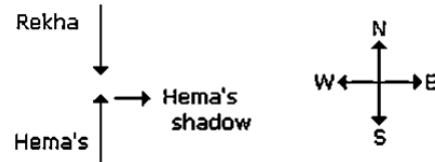
Hence M is in the East of K.

22. One evening before sunset Rekha and Hema were talking to each other face to face. If Hema's shadow was exactly to the right of Hema, which direction was Rekha facing?

(A) North (B) South
(C) East (D) Data is inadequate

Answer: Option B

Explanation:



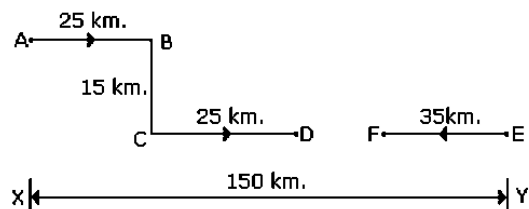
In the evening sun sets in West. Hence then any shadow falls in the East. Since Hema's shadow was to the right of Hema. Hence Rekha was facing towards South.

23. Two cars start from the opposite places of a main road, 150 km apart. First car runs for 25 km and takes a right turn and then runs 15 km. It then turns left and then runs for another 25 km and then takes the direction back to reach the main road. In the mean time, due to minor break down the other car has run only 35 km along the main road. What would be the distance between two cars at this point?

(A) 65 km (B) 75 km (C) 80 km (D) 85 km

Answer: Option A

Explanation:



$$\begin{aligned}\text{Required distance} &= DF \\ &= 150 - (25 + 25 + 35) \\ &= 150 - 85 \\ &= 65 \text{ km.}\end{aligned}$$



Turning Point Job Aid Mirpur-10