Book For

Maharashtra Public Service Commission

MPSC Police Constable Reasoning Sample Paper

(1) In the series 2, 6, 18, 54, ... what will be the 8th term ?

[A] 4370

[B] 4374

[C] 7443

[D] 7434

Answer : [B]

Explanation:
Clearly, 2 x 3 = 6, 6 x 3 = 18, 18 x 3 = 54,.....
So, the series is a G.P. in which a = 2, r = 3.
Therefore 8th term = ar^{8-1} = ar^7 = 2 x 3^7 = (2 x 2187) = 4374.

(2) 1, 3, 4, 8, 15, 27, ?

[A] 37

[B] 44

[C] 50

[D] 55

Answer : [C]

Explanation:
The sum of any three consecutive terms of the series gives the next term.
So, missing number = 8 + 15 + 27 = 50.

(3) 22, 24, 28, ?, 52, 84

[A] 36

[B] 38

[C] 42

[D] 46

Answer : [A]

Explanation:
The pattern is + 2, + 4, + 8, + 16,.....
So, missing term = 28 + 8 = 36.

(4) 6, 18, 3, 21, 7, 56, ?

[A] 8

[B] 9

[C] 63

[D] 64

Answer : [A]

Explanation:
Each term at an even place in the series is the product of its two adjacent terms.
Thus, if the missing term be x, then we have : 7 x x = 56 or x = 56 ÷ 7 = 8.

(5) 45, 54, 47, ?, 49, 56, 51, 57, 53

[A] 48

[B] 50

[C] 55

[D] None of these

Answer : [C]

Explanation:
The given sequence is a combination of two series:
I. 45, 47, 49, 51, 53 and II. 54, ?, 56, 57
Clearly, II consists of consecutive natural numbers, starting from 54.
So, missing term = 55.

(6) 2, 5, 10, 50, 500, 5000

[A] 5

[B] 10

[C] 50

[D] 5000

Answer : [D]

Explanation:
Each term of the series is the product of the preceding two terms.
So, 5000 is wrong and must be replaced by (50 x 500) i.e. 25000.

(7) R, U, X, A, D, ?

[A] F

[B] G

[C] H

[D] I

Answer : [B]

Explanation:

(8) Pointing a photograph X said to his friend Y, "She is the only daughter of the father of my mother." How X is related to the person of photograph?

[A] Daughter

[B] Son

[C] Nephew

[D] Cannot be decided

Answer : [B]

Explanation:
'The only daughter of the father of X's mother' means mother of X.
Hence X is the son of the lady in the photograph.
Note: Still have doubt like "How X is a male?" - **Let's see the discussions.**

(9) Pointing to a person, Deepak said, "His only brother is the father of my daughter's father". How is the person related to Deepak?

[A] Father

[B] Grandfather

[C] Uncle

[D] Brother-in-law

Answer : [C]

Explanation:
Father of Deepak's daughter's father → Deepak's father.
Hence, the person in the brother of Deepak's father.
Therefore, the person is the uncle of Deepak.

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(10) M is the father of N who is the son of V. In order to know the relation of M to P, which of the statement/statements is/are necessary?

1. **P is the brother of V.**

2. **The daughter of N is the granddaughter of V.**

[A] Only (1)

[B] Only (2)

[C] Either (1) or (2)

[D] (1) and (2) both

Answer : [A]

Explanation:
M is the father of N and N is the son of V.
Hence, V is the mother of N.
From (1), P is the brother of V
Therefore, M is the brother-in-law of P because V is the wife of M.
From (2), the daughter of N, is the granddaughter of V. From this we do not get any relation of M to P.

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(11) Question: What is the code for 'is' in the code language ?
Statements:

I. **In the code language, 'shi tu ke' means 'pen is blue'.**

II. **In the same code language, 'ke si re' means 'this is wonderful'.**

[A] I alone is sufficient while II alone is not sufficient

[B] II alone is sufficient while I alone is not sufficient

[C] Either I or II is sufficient

[D] Neither I nor II is sufficient

[E] Both I and II are sufficient

Answer : [E]

Explanation:
In I and II, the common word is 'is' and the common code word is 'ke'. So, 'ke' is the code for 'is'.

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(12) Question: How is 'No' coded in the code language ?
Statements:

I. **'Ne Pa Sic Lo' means 'But No None And' and 'Pa Lo Le Ne' means 'If None And But'.**

II. **'Le Se Ne Sic' means 'If No None Will' and 'Le Pi Se Be' means 'Not None If All'.**

[A] I alone is sufficient while II alone is not sufficient

[B] II alone is sufficient while I alone is not sufficient

[C] Either I or II is sufficient

[D] Neither I nor II is sufficient

[E] Both I and II are sufficient

Answer : [A]

Explanation:
In the two statements given in I, the common words are 'But', 'None', 'And' and the
common code words are 'Ne', 'Pa', ,'Lo'. So, 'Ne', 'Pa' and 'Lo' are codes for 'But', 'None' and 'And'. Thus, in the first statement, 'Sic' is the code for 'No'.

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(13) Question: The Chairman of a big company visits one department on Monday of every week except for the Monday of third week of every month. When did he visa/the Purchase department ?
Statements:

  I. **He visited Accounts department in the second week of September after having visited Purchase department on the earlier occasion.**

  II. **He had visited Purchase department immediately after visiting Stores department but before visiting Accounts department.**

[A] I alone is sufficient while II alone is not sufficient

[B] II alone is sufficient while I alone is not sufficient

[C] Either I or II is sufficient

[D] Neither I nor II is sufficient

[E] Both I and II are sufficient

Answer : [A]

Explanation:
From I, we can conclude that the Chairman visited Purchase department on Monday of the first week of September.
The time of visit of no department is mentioned in II, which is, therefore, insufficient.

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(14) Question: In a certain code, 'nop al ed' means They like flowers'. Which code word means 'flowers' ?
Statements:

  I. **'id nim nop' means 'They are innocent'.**

  II. **'gob ots al' means 'We like roses'.**

[A] I alone is sufficient while II alone is not sufficient

[B] II alone is sufficient while I alone is not sufficient

[C] Either I or II is sufficient

[D] Neither I nor II is sufficient

[E] Both I and II are sufficient

Answer : [E]

Explanation:
In the given statement and I, the common word is 'They' and the common code word is 'nop'. So, 'nop' is the code for 'They'.
In the given statement and II, the common word is 'like' and the common code word is 'al'. So, 'al' is the code for 'like'.
Thus, in the given statement, 'ed' is the code for 'flowers'.

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(15) Question: Among P, Q, R, S and T, Q is the second tallest and S is immediate taller than the shortest. Who among them is in the middle when they stand in the order of their heights ?
Statements:

  I. **T is not the shortest.**

  II. **R is taller than S but shorter than Q.**

  III. **P ranks third in height above S when all are arranged in the order of height.**

[A] Only I and II

[B] Either II only or I and III only

[C] Only II

[D] Only II and III

[E] None of these

Answer : [B]

Explanation:
From the given statement, the descending order of heights is : __, Q, __, S, __.
From II, we have the order: _, Q, R, S,__. Thus, R is in the middle.
From III, we have the order : P, Q,__, S,__. But, according to I, T is not the shortest.
So, R is the shortest. Thus, we have the order : P, Q, T, S, R. So, T is in the middle.

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(16) One morning Udai and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Udai, which direction was Udai facing?
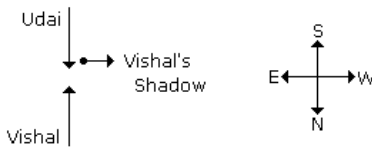
[A] East

[B] West

[C] North

[D] South

Answer : [C]

Explanation:

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(17) 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 : [A]

Explanation:
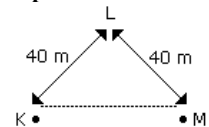
Hence M is in the East of K.

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(18) A man walks 2 km towards North. Then he turns to East and walks 10 km. After this he turns to North and walks 3 km. Again he turns towards East and walks 2 km. How far is he from the starting point?
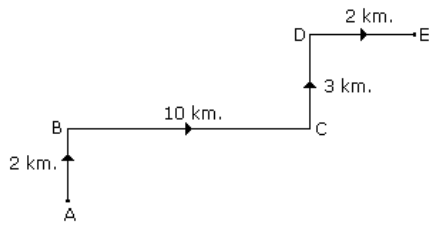
[A] 10 km

[B] 13 km

[C] 15 km

[D] None of these

Answer : [B]

Required distance = AE

$$= \sqrt{5^2 + 12^2}$$

Explanation: $= 13\,\text{km}.$

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(19) A child went 90 m in the East to look for his father, then he turned right and went 20 m. After this he turned right and after going 30 m he reached to his uncle's house. His father was not there. From there he went 100 m to his north and met his father. How far did he meet his father from the starting point?
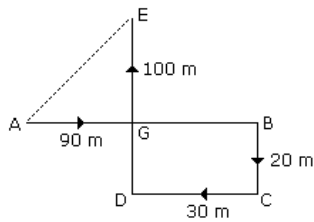
[A] 80 m

[B] 100 m

[C] 140 m

[D] 260 m

Answer : [B]

Required distance = AE

$$= \sqrt{AG^2 + EG^2}$$

$$= \sqrt{(90-30)^2 + (100-20)^2}$$

$$= \sqrt{(60)^2 + (80)^2}$$

$$= \sqrt{3600 + 6400}$$

$$= \sqrt{10000}$$

Explanation: $= 100\,\text{m}$

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(20) Radha moves towards South-East a distance of 7 km, then she moves towards West and travels a distance of 14 km. From here she moves towards North-West a distance of 7 km and finally she moves a distance of 4 km towards east. How far is she now from the starting point?
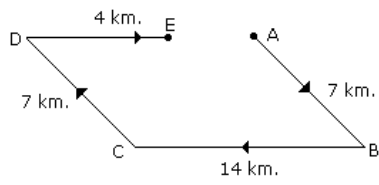
[A] 3 km

[B] 4 km

[C] 10 km

[D] 11 km

Answer : [C]

Required distance = AE

= 14 - 4

Explanation: = 10 km.