

MAH-MBA-CET-2024 Paper

Section 1: Logical Reasoning

1. Given below are two statements; one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

- **Assertion(A):**In winter, a glass tumbler breaks when hot water is poured into it.
- **Reason(R):**The outer surface of glass expands when hot water is poured into it.

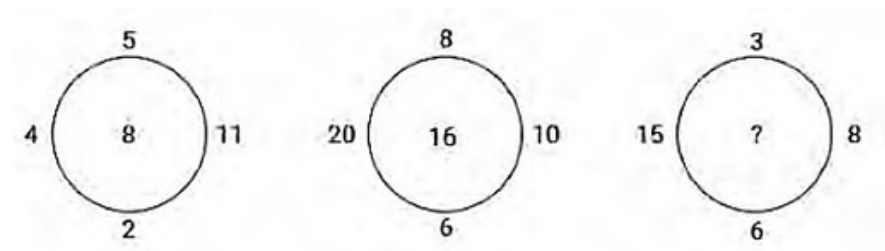
In light of the above statements, choose the correct answer from the options given below.

- A. (A) is true but (R) is false.
- B. Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
- C. Both (A) and (R) are true and (R) is the correct explanation of (A).
- D. (A) is false but (R) is true.
- E. Both (A) and (R) are false

Correct Option:

A. (A) is true but (R) is false.

2. Insert the missing number in the following question



- (a) 16 (b) 14 (c) 12 (d) 24 (e) 20

Correct Option:

(b) 14

3. Given below is a statement and two assumptions. These assumptions may or may not be implicit in the statement.

Statement: The best evidence of India's glorious past is the growing popularity of ayurvedic medicines in the world.

Assumption A: Ayurvedic medicines are more popular in India.

Assumption B: Ayurvedic medicines are not popular in India.

Determine whether one or both assumptions are implicit or not in the given statement and choose the correct option from the options given below:

- A. Neither Assumption A nor Assumption B are implicit
- B. Only Assumption B is implicit
- C. Only Assumption A is implicit
- D. Both Assumption A and Assumption B are implicit
- E. Either Assumption A or Assumption B is implicit

Correct Option:

- A. Neither Assumption A nor Assumption B are implicit

4. Study the following information carefully and then answer the question given below it. A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input - past back 32 47 19 own fear 25

Step I-19 past back 32 47 own fear 25 Step II 19 past 25 back 32 47 own fear

Step III-19 past 25 own 32 back 47 fear

Step IV-19 past 25 own 32 back 47 fear

Step V-19 past 25 own 32 fear back 47

Step VI-19 past 25 own 32 fear 47 back And Step VI is the last step.

As per rules followed in above steps, find out in each of the following questions, the appropriate step for the given input.

Input 83 42 bench lower 13 upper floor 37 Which of the following will be step III?

- A. 83 42 bench lower floor 37 13 upper
- B. 13 upper 83 42 bench lower floor 37
- C. 13 upper 37 83 42 bench lower floor
- D. 83 42 bench 13 upper lower floor 37

E. 83 37 42 bench 13 upper lower floor

Correct Option:

C. 13 upper 37 83 42 bench lower floor

5. A is B's sister. C is B's mother D is C's father. E is D's mother. Then, how is A related to D?

(a)Granddaughter (b)Grandmother (c)Grandfather (d)Daughter (e)Mother

Correct Option:

(a) Granddaughter

6. Kishanlal has a larger square field divided into nine smaller squares, all equal, arranged in three rows of three fields each. One side of the field runs exactly east-west. The middle square must be planted with rice because it is wet. The wheat and barley should be continuous so that they can be harvested all at once by the mechanical harvester Two of the fields should be planted with soyabeans. The north-westernmost field should be planted with peanuts and the southern third of the field is suitable only for vegetables.

Which plot cannot be planted with soyabeans?

A. The square immediately north of the rice

B. The square immediately east of the rice

C. The square immediately west of the rice

D. The square immediately north east of the rice

E. The square immediately north West of the rice

(a)C (b)B (c)A (d)D (e)E

Correct Option:

(d)D

7. Kishanlal has a larger square field divided into nine smaller squares, all equal, arranged in three rows of three fields each. One side of the field runs exactly east-west. The middle square must be planted with rice because it is wet. The wheat and barley should be continuous so that they can be harvested all at once by the mechanical harvester Two of the fields should be planted with soyabeans. The north-westernmost field should be planted with peanuts and the southern third of the field is suitable only for vegetables.

If Krishanlal decides to plant the wheat next to the peanuts, in which square will the barley be?

- A. The square immediately north of the rice
- B. The square immediately east of the rice
- C. The square immediately west of the rice
- D. The square immediately north east of the rice
- E. The square immediately north West of the rice

(a)C (b)B (c)A (d)D (e)E

Correct Option:

(d)D

8. Kishanlal has a larger square field divided into nine smaller squares, all equal, arranged in three rows of three fields each. One side of the field runs exactly east-west. The middle square must be planted with rice because it is wet. The wheat and barley should be continuous so that they can be harvested all at once by the mechanical harvester Two of the fields should be planted with soyabeans. The north-westernmost field should be planted with peanuts and the southern third of the field is suitable only for vegetables.

If Krishanlal decides to plant the wheat next to the peanuts, in which square will the barley be?

- A. The square immediately north of the rice
- B. The square immediately east of the rice
- C. The square immediately west of the rice
- D. The square immediately north east of the rice
- E. The square immediately north West of the rice

(a)C (b)B (c)A (d)D (e)E

Correct Option:

(a)C

9. Given a series 25, 49, 121, 169?

Find what number would come in place of the question mark (?)

(a)289 (b)225 (c)300 (d) 250 (e) 361

Correct Option:

(a) 289

10. In a dance academy there are 240 dancers. All the dancers are numbered 1 to 120. All even numbered dancers learn Salsa. Dancers whose numbers are divisible by 5 learn Ballet and those whose numbers are divisible by 7 learn Hip Hop. How many learn none of the three dance forms?

(a)56 (b)82 (c)38 (d)42 (e)114

Correct Option:

(b) 82

11. Ram is 7 ranks ahead of Shyam in a class of 39. If Shyam's rank is 17th from the last, what is Ram's rank from the start?

(a)16th (b)15th (c)14th (d)17th (e)18th

Correct Option:

(a) 16th

12. Study the following information carefully and then answer the question given below it. A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input - past back 32 47 19 own fear 25

Step I-19 past back 32 47 own fear 25

Step II 19 past 25 back 32 47 own fear

Step III 19 past 25 own 32 back 47 fear

Step IV-19 past 25 own 32 back 47 fear

Step V-19 past 25 own 32 fear back 47

Step VI-19 past 25 own 32 fear 47 back

And Step VI is the last step. As per rules followed in above steps, find out in each of the following questions, the appropriate step for the given input.

Step IV of an input is 24 stop 27 pick 94 85 76 bring down.

How many more steps will be required complete the rearrangement?

(a)4 (b)3 (c)2 (d)5 (e)6

Correct Option:

(a)4

13. In a survey, it is found that 21 people read English newspaper, 26 people read Hindi newspaper, and 29 people read regional language newspaper. If 14 people read both English and Hindi newspapers; 15 people read both Hindi and regional language newspapers; 12 people read both English and regional language newspaper and 8 read all types of newspapers. How many people were surveyed?

(a)36 (b)43 (c)54 (d)58 (e)48

Correct Option:

(b) 43

14. If DELHI is coded as CCIDD, how would you encode BOMBAY

(a)WXYZAK (b)AMJXVS (c)AJMTVT (d)MJXVSU (e) ATTMUX

Correct Option:

(b) AMJXVS

15. Given below are two statements; one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A): Cotton is grown in alluvial soils.

Reason (R): Alluvial soils are very fertile.

In light of the above statements, choose the correct answer from the options given below.

- A. (A) is true but (R) is false.
- B. Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
- C. Both (A) and (R) are true and (R) is the correct explanation of (A).
- D. (A) is false but (R) is true.
- E. Both (A) and (R) are false.

Correct Option:

D. (A) is false but (R) is true.

16. Som boys are sitting in a line. Manohar is 17th place from left and Surendra is at 18th place from right. There are 8 boys between them. How many boys are there in the line?

- (a)40 (b)43 (c)41 (d)44 (e)42

Correct Option:

- (b) 43

17. A solid cube has been painted yellow, blue and red on pairs of opposite faces. The cube is then cut into 343 smaller blocks of size (1x1x1).

Find the number of blocks that will have 0 side painted?

- (a)250 (b)300 (c)125 (d)240 (e)64

Correct Option:

- (c) 125

18. Study the information below to answer the question.

Seema, Rajinder and Surinder are children of Mr. and Mrs. Aggarwal. Renu, Raju and Sunil are children of Mrs. and Mr. Malhotra. Sunil and Seeta are a married couple and Ashok and Sanjay are their children. Geeta and Rakesh are children of Mr. and Mrs. Gupta. Geeta is married to Surinder and has three children named Rita, Sonu and Raju.

Who is Rajinder related to Ashok?

- (a)Cousin (b)Maternaluncle (c)Father-in-law(d)Brother (e)Brother-in-law

Correct Option:

- (b) Maternal uncle

19. One evening just before sunset two friends Sanju and Manju were talking to each other face to face. If Manju's shadow was exactly to her left side, which direction was Sanju facing?

- (a)East (b)South (c)North (d)West (e)NorthWest

Correct Option:

- (c) North

20. A solid cube has been painted yellow, blue and red on pairs of opposite faces. The cube is then cut into 343 smaller blocks of size (1x1x1).

Find the number of blocks that will have 3 sides painted with 3 different colours?

- (a)16 (b)8 (c)4 (d)32 (e)64

Correct Option:

(b)8

21. Given below is a statement and two assumptions. These assumptions may or may not be implicit in the statement.

Statement: The Government has decided to levy 2 percent on the tax amount payable for funding drought relief programmes.

Assumption A: The Government does not have sufficient money to fund drought relief programmes.

Assumption B: The amount collected by way of surcharge may be adequate to fund these drought relief programmes.

Determine whether one or both assumptions are implicit or not in the given statement and choose the correct option from the options given below:

A. Neither Assumption A nor Assumption B are implicit

B. Only Assumption A is implicit

C. Only Assumption B is implicit

D. Both Assumption A and Assumption B are implicit

E. Either Assumption A or Assumption B is implicit

Correct Option:

D. Both Assumption A and Assumption B are implicit

22. If SYSTEM is coded as SYSMET and NEARER as AENRER, then FRACTION will be coded as

- A.FRACNOIT B.NOITFRAC C.CARFNOIT D.CARFTION E.TIONFRAC

Correct Option:

C. CARFNOIT

23. Given below are two statements; one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A): Vaccines prevent diseases.

Reason (R): Vaccines must be given to children.

In light of the above statements, choose the most appropriate answer from the options given below.

- A. (A) is correct but (R) is incorrect.
- B. Both (A) and (R) are correct but (R) is the NOT the correct explanation of (A).
- C. Both (A) and (R) are correct and (R) is the correct explanation of (A).
- D. (A) is incorrect but (R) is correct.
- E. Both (A) and (R) are incorrect

Correct Option:

- B. Both (A) and (R) are correct but (R) is the NOT the correct explanation of (A).

24. In a large group of 20 adults, there are 8 males and 9 vegetarians. Find the number of female non-vegetarians if the group contains 5 male vegetarians.

- (a)5
- (b)12
- (c)8
- (d)6
- (e)10

Correct Option:

- (c)8

25. Two cars start from the opposite places of a main road, 150 km apart. Car B is facing west. 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 meantime, due to minor break down the other car B has run only 35 km along the main road.

What would be the distance between two cars at this point?

- (a)75km
- (b)65km
- (c)55km
- (d)85km
- (e)95km

Correct Option:

- (b) 65km

26. In a certain coding system, '816321' means 'the brown dog frightened the cat'; '64851' means 'the frightened cat ran away'; '7621' means 'the cat was brown'; '341' means 'the dog ran'. What is the code for 'frightened'?

- (a)6 (b)4 (c)2 (d)8 (e)1

Correct Option:

(d)8

27. If MOBILITY is coded as 46293927 then EXAMINATION is coded as?

- A.57159413955 B.56149512965 C.45038401854 D.67250623076
E. 45250640279

Correct Option:

B. 56149512965

28. P said to Q: "You are as old as R was when I was twice as old as S and will be as old as T was when he was as old as R is now". Q said to P: "You may be older than U but V is as old as I was when you were as old as V is, and S will be as old as U was when U is as old as V.

Who is the youngest?

- (ba))RQ (c)P (d)S (e)T

Correct Option:

(d)S

29. Look carefully for the pattern, and then choose which pair of numbers comes next.

2, 44, 4, 41, 6, 38, 8

- (a)3510 (b)358 (c)3310 (d)3610 (e)3612

Correct Option:

(a) 35 10

30. Study the given information and answer the following questions:

When a word and number arrangement machine is given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of input and the rearrangement.

Input: 40 made butter 23 37 cookies salt extra 52 86 92 fell now 19

Step: butter 19 40 made 23 37 cookies salt extra 52 86 92 fell now

Step II: cookies 23 butter 19 40 made 37 salt extra 52 86 92 fell now

Step III: extra 37 cookies 23 butter 19 40 made salt 52 86 92 fell now

Step IV: fell 40 extra 37 cookies 23 butter 19 made salt 52 86 92 now

Step V: made 52 fell 40 extra 37 cookies 23 butter 19 salt 86 92 now

Step VI: now 86 made 52 fell 40 extra 37 cookies 23 butter 19 salt 92

Step VII: salt 92 now 86 made 52 fell 40 extra 37 cookies 23 butter 19

Step VII is the last step of the above arrangement as the intended arrangement is obtained. As per the rules followed in the given steps, find out the appropriate steps for the given input.

Step III of an input is: 91 car 85 14 27 Which of the following is definitely the input?

(a) 142791car85

(b) car85142791

(c) 1491car8527

(d) 1427car8591

(e) Cannot be determined

Correct Option:

(e) Can not be determined

31. Rahul put his timepiece on the table in such a way that at 6 P.M. hour hand points to North. In which direction the minute hand will point at 9.15 P.M.?

(a) North-West

(b) East

(c) South

(d) West

(e) South-East

Correct Option:

(d) West

32. Given below is a statement and two assumptions. These assumptions may or may not be implicit in the statement.

Statement: Shivam wrote to his brother at Delhi to collect personally the application form for the research degree in Microbiology from the University.

Assumption A: It may possible that Shivam's brother may receive the form well before the last date of collecting application forms.

Assumption B: It may possible that the University may issue the application forms to a person other than the prospective student.

Determine whether one or both assumptions are implicit or not in the given statement and choose the correct option from the options given below:

A. Neither Assumption A nor Assumption B are implicit

B. Only Assumption B is implicit

C. Only Assumption A is implicit

D. Both Assumption A and Assumption B are implicit

E. Either Assumption A or Assumption B is implicit

Correct Option:

D. Both Assumption A and Assumption B are implicit

33. In a certain coding system, RBM STD BRO PUS means 'the cat is beautiful' TNH PUS DIM STD means 'the dog is brown: PUS DIM BRO PUS CUS means 'the dog has the cat'. What is the code for 'has'?

(a)DIM

(b)BRO

(c)CUS

(d)STD

(e)TNH

Correct Option:

(e) TNH

34. Find the number which will come in the place of the question mark in the given series 11,12,15,20, 27?

(a)30

(b)36

(c)34

(d)32

(e)35

Correct Option:

(b) 36

35. Given below is a statement and two assumptions. These assumptions may or may not be implicit in the statement.

Statement: If you will trouble me, I will slap you" - A father warns his child.

Assumption A: Because of warning, the may child may stop troubling him.

Assumption B: All children are usually naughty.

Determine whether one or both assumptions are implicit or not in the given statement and choose the correct option from the options given below:

- A. Neither Assumption A nor Assumption B are implicit
- B. Only Assumption B is implicit
- C. Only Assumption A is implicit
- D. Both Assumption A and Assumption B are implicit
- E. Either Assumption A or Assumption B is implicit

Correct Option:

- C. Only Assumption A is implicit

36. Look carefully for the pattern, and then choose which pair of numbers comes next.

796612146617

- (a)1922 (b)6619 (c)1966 (d)2266 (e)6622

Correct Option:

- (c) 19 66

37. Five friends A, B, C, D & E went to college, each of them reached at different times. If B reached after C and D, A and E reached before C and D, then who was the last person to reach?

- (a)C (b)B (c)A (d)D (e)E

Correct Option:

- (b)B

38. Given below are two statements; one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A): India has a tropical monsoon type climate.

Reason (R): India is located exactly between the tropical latitudes.

In light of the above statements, choose the correct answer from the options given below.

- A. (A) is true but (R) is false.

B. Both (A) and (R) are true but (R) is NOT the correct explanation of (A).

C. Both (A) and (R) are true and (R) is the correct explanation of (A).

D. (A) is false but (R) is true.

E. Both (A) and (R) are false

Correct Option:

A. (A) is true but (R) is false.

39. P said to Q: "You are as old as R was when I was twice as old as S and will be as old as T was when he was as old as R is now". Q said to P "You may be older than U but V is as old as I was when you were as old as V is, and S will be as old as U was when U is as old as V

Who is the eldest?

(a)R

(b)Q

(c)P

(d)S

(e)T

Correct Option:

(e)T

40. Study the information below to answer the question.

Seema, Rajinder and Surinder are children of Mr. and Mrs. Aggarwal Renu. Raju and Sunil are children of Mrs. and Mr. Malhotra. Sunil and Seeta are a married couple and Ashok and Sanjay are their children. Geeta and Rakesh are children of Mr. and Mrs. Gupta Geeta is married to Surinder and has three children named Rita, Sonu and Raju.

Sunil and Surinder are related as?

(a)Brother-in-law

(b)Cousins

(c)Brother

(d)Sunil is uncle and Surinder is the nephew

(e) Surinder is uncle and Sunil is the nephew

Correct Option:

(a) Brother-in-law

41. Study the information below to answer the question.

Seema, Rajinder and Surinder are children of Mr. and Mrs. Aggarwal Renu. Raju and Sunil are children of Mrs. and Mr. Malhotra. Sunil and Seeta are a married couple and Ashok and Sanjay are their children. Geeta and Rakesh are children of Mr. and Mrs. Gupta Geeta is married to Surinder and has three children named Rita, Sonu and Raju.

How is Renu related to Sanjay?

- (a) Sister-in-law (b) sister (c) Aunt (d) Mother (e) Cousin

Correct Option:

- (c) Aunt

42. In a family, there are six members A, B, C, D, E and F.

A and B are a married couple, A being the male member. D is the only son of C, who is the brother of A. E is the sister of D. B is the daughter-in-law of F, whose husband has died.
How is E related to C?

- (a) Cousin (b) Daughter (c) Sister (d) Mother (e) Daughter-in-law

Correct Option:

- (b) Daughter

43. Look carefully for the pattern, and then choose which pair of numbers comes next

42 40 38 35 33 31 28

- (a) 2523 (b) 2522 (c) 2624 (d) 2520 (e) 2622

Correct Option:

- (c) 26 24

44. Two cars start from the opposite places of a main road, 150 km apart. Car B is facing west. 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 meantime, due to minor break down the other car B has run only 35 km along the main road.

What direction is car A facing now?

- (a) North (b) West (c) East (d) South (e) Can't Say

Correct Option:

- (c) East

45. There are six persons A, B, C, D, E and F. C is the sister of F. B is the brother of E's husband. D is the father of A and grandfather of F. There are two fathers, three brothers and a mother in the group. Who is the mother?

- (a)B (b)A (c)D (d)C (e)E

Correct Option:

- (e)E

46. Given below is a statement and two assumptions. These assumptions may or may not be implicit in the statement.

Statement: Vitamin D tablets improve bones.

Assumption A: People like strong bones.

Assumption B: Health becomes dull in the absence of healthy bones.

Determine whether one or both assumptions are implicit or not in the given statement and choose the correct option from the options given below:

- A. Neither Assumption A nor Assumption B are implicit
B. Only Assumption B is implicit
C. Only Assumption A is implicit
D. Both Assumption A and Assumption B are implicit
E. Either Assumption A or Assumption B is implicit

Correct Option:

- A. Neither Assumption A nor Assumption B are implicit

47. A solid cube has been painted yellow, blue and red on pairs of opposite faces. The cube is then cut into 343 smaller blocks of size (1x1x1).

Find the number of blocks that will have 2 sides painted in a way that 1 is painted yellow and other one is painted either red or blue.

- (a)40 (b)43 (c)44 (d)45 (e)36

Correct Option:

- (a) 40

48. Four families decided to go for a picnic to Jhumri Talaiya and agreed to meet at a place called Rani ka Talab before moving for the picnic. One family has no kid, while the others have at least one kid each. Amongst each family with kids, at least one kid goes to the picnic. Following is the information about the families.

1. The family with two kids came just before the family with no kids.

ii. D who does not have any kids reached just before C's family.

iii. P and his wife reached last with their only kid.

iv. Q is not B's husband.

v. Q and S are fathers.

vi. C's and A's daughters go to the same school.

vii. B came before D and met A when she reached the fixed place.

viii. R stays farthest from the place and he is a good singer.

ix. S explained that his son could not come because of exams.

Who amongst the females arrived third?

(a)C

(b)B

(c)A

(d)D

(e)E

Correct Option:

(d)D

49. Four families decided to go for a picnic to Jhumri Talaiya and agreed to meet at a place called Rani ka Talab before moving for the picnic. One family has no kid, while the others have at least one kid each. Amongst each family with kids, at least one kid goes to the picnic. Following is the information about the families.

1. The family with two kids came just before the family with no kids.

ii. D who does not have any kids reached just before C's family.

iii. P and his wife reached last with their only kid.

iv. Q is not B's husband.

v. Q and S are fathers.

vi. C's and A's daughters go to the same school.

vii. B came before D and met A when she reached the fixed place.

viii. R stays farthest from the place and he is a good singer.

ix. S explained that his son could not come because of exams.

Whose daughter goes to the same school?

- (a) Q and S (b) P and R (c) Q and R (d) P and S (e) P and Q

Correct Option:

- (e) P and Q

50. Four families decided to go for a picnic to Jhumri Talaiya and agreed to meet at a place called Rani ka Talab before moving for the picnic. One family has no kid, while the others have at least one kid each. Amongst each family with kids, at least one kid goes to the picnic. Following is the information about the families.

- i. The family with two kids came just before the family with no kids.
- ii. D who does not have any kids reached just before C's family.
- iii. P and his wife reached last with their only kid.
- iv. Q is not B's husband.
- v. Q and S are fathers.
- vi. C's and A's daughters go to the same school.
- vii. B came before D and met A when she reached the fixed place.
- viii. R stays farthest from the place and he is a good singer.
- ix. S explained that his son could not come because of exams.

Which of the correct pair of husband and wife?

- (a) S and C (b) P and C (c) S and D (d) Q and C (e) S and A

Correct Option:

- (b) P and C

51. There are 60 children admitted to a Music Academy. Some children can play only Guitar and some can play only Sitar 15 children can play both Guitar and Sitar. If the number of children who can play Guitar is 27 then how many children can play only Sitar?

- (a) 27 (b) 33 (c) 12 (d) 48 (e) 10

Correct Option:

- (b) 33

52. How many independent words can 'HEARTLESS' be divided into without changing the order of the letters and using each letter only once?

- (a)3 (b)2 (c)1 (d)4 (e)5

Correct Option:

- (a)3

53. Given below are two statements; one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A): Downpour of rain helps lessen the humidity in the atmosphere.

Reason (R): Rains are caused when atmosphere cannot hold more moisture.

In light of the above statements, choose the correct answer from the options given below.

- A. (A) is true but (R) is false.
B. Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
C. Both (A) and (R) are true and (R) is the correct explanation of (A).
D. (A) is false but (R) is true.
E. Both (A) and (R) are false

Correct Option:

- D. (A) is false but (R) is true.

54. If South East becomes North East becomes West and so on What will West become?

- (a)SouthEast (b)NorthWest (c)NorthEast (d)SouthWest (e)South

Correct Option:

- (a) South East

55. In a certain coding system, '816321' means 'the brown dog frightened the cat'; '64851' means 'the frightened cat ran away'; '7621' means 'the cat was brown'; '341' means 'the dog ran'.

What is the code for 'brown'?

- (a)6 (b)4 (c)2 (d)8 (e)1

Correct Option:

(c)2

56. Study the following information very carefully to answer the questions that follow: 1) Shivam's fitness

schedule consists of cycling rowing, gymnasium, jogging and boxing from Monday to Saturday, each workout is on one day, one day being rest day.

2) Gymnasium is done neither on the first nor on the last day but is done earlier than rowing.

3) Jogging is done on the immediate next day of the rowing day.

4) Cycling is done on the immediate previous day of the rest day

5) Jogging and boxing were done with a two day gap between them.

6) Boxing was done on the following day the rest day

Which of the following is the rest day?

(a)Wednesday (b)Tuesday (c)Monday (d)Thursday (e)Friday

Correct Option:

(b) Tuesday

57. Study the following information very carefully to answer the questions that follow: 1) Shivam's fitness

schedule consists of cycling rowing, gymnasium, jogging and boxing from Monday to Saturday, each workout is on one day, one day being rest day.

2) Gymnasium is done neither on the first nor on the last day but is done earlier than rowing.

3) Jogging is done on the immediate next day of the rowing day.

4) Cycling is done on the immediate previous day of the rest day

5) Jogging and boxing were done with a two day gap between them.

6) Boxing was done on the following day the rest day.

On which day boxing is done?

(a)Wednesday (b)Tuesday (c)Monday (d)Thursday (e)Friday

Correct Option:

(a) Wednesday

58. Study the following information very carefully to answer the questions that follow: 1) Shivam's fitness

schedule consists of cycling rowing, gymnasium, jogging and boxing from Monday to Saturday, each workout is on one day, one day being rest day.

2) Gymnasium is done neither on the first nor on the last day but is done earlier than rowing.

3) Jogging is done on the immediate next day of the rowing day.

4) Cycling is done on the immediate previous day of the rest day

5) Jogging and boxing were done with a two day gap between them.

6) Boxing was done on the following day the rest day.

Which of the following is the wrong statement?

A. There is gap of three days between the days on which cycling and rowing are done.

B. Jogging is done three days after boxing.

C. Gymnasium is done immediate previous day of rowing

D. There is two days gap between rest day and gymnasium.

E. Rowing is done on Friday.

Correct Option:

D. There is two days gap between rest day and gymnasium.

59. Study the following information very carefully to answer the questions that follow: 1) Shivam's fitness

schedule consists of cycling rowing, gymnasium, jogging and boxing from Monday to Saturday, each workout is on one day, one day being rest day.

2) Gymnasium is done neither on the first nor on the last day but is done earlier than rowing.

3) Jogging is done on the immediate next day of the rowing day.

4) Cycling is done on the immediate previous day of the rest day

5) Jogging and boxing were done with a two day gap between them.

6) Boxing was done on the following day the rest day.

Cycling and jogging days have a gap of how many days between them?

- (a) Three (b) Two (c) One (d) Four (e) Five

Correct Option:

- (d) Four

60. Study the following information carefully and answer the questions that follow.

Six friends-Alok, Bheem, Chandar, Devdas, Earl and Ferguson are sitting on a bench facing in the same direction. Chandar is sitting between Alok and Earl;. Devdas is not at the end. Bheem is sitting to the immediate right of Earl. Ferguson is not at the right end.

Who is fourth from the left end?

- (a)Chandar (b)Bheem (c)Alok (d)Devdas (e)Earl

Correct Option:

- (a) Chandar

61. Study the following information carefully and answer the questions that follow.

Six friends-Alok, Bheem, Chandar, Devdas, Earl and Ferguson are sitting on a bench facing in the same direction. Chandar is sitting between Alok and Earl;. Devdas is not at the end. Bheem is sitting to the immediate right of Earl. Ferguson is not at the right end.

Who is to the immediate right of Ferguson?

- ((ac))DEaervld a (b)Alok (d)EitherDevdasorAlok (e)EitherAlokorEarl

Correct Option:

- (c) Devdas

62. Study the following information carefully and answer the questions that follow.

Six friends-Alok, Bheem, Chandar, Devdas, Earl and Ferguson are sitting on a bench facing in the same direction. Chandar is sitting between Alok and Earl;. Devdas is not at the end. Bheem is sitting to the immediate right of Earl. Ferguson is not at the right end.

How many persons are there to the left of Chandar?

- (a) Three (b) Two (c) One (d) Four (e) Five

Correct Option:

- (a) Three

63. Study the following information carefully and answer the questions that follow.

Six friends-Alok, Bheem, Chandar, Devdas, Earl and Ferguson are sitting on a bench facing in the same direction. Chandar is sitting between Alok and Earl; Devdas is not at the end. Bheem is sitting to the immediate right of Earl. Ferguson is not at the right end.

Who is at the left end?

- (a)Chandar (b)Bheem (c)Alok (d)Earl (e)Ferguson

Correct Option:

- (e) Ferguson

64. Study the following information and answer the questions that follow

1. Six picture cards P, Q, R, S, T and J are framed in six different colours - blue, red green, grey yellow and brown and are arranged from left to right (not necessarily in the same order).

ii. The pictures are of king, princess, queen, palace, joker and prince.

iii. The picture of the palace is in the blue colour frame but is not on card S and card P which is of the queen, is in the brown frame and is placed at the extreme right

iv. The picture of the princess is neither on card S nor on card T and is not in either the green or the yellow frame. Card R has a picture of the king in a grey frame and it's fifth from right and next to card Q having the picture of the prince.

The picture of the place is printed on which card?

- (a)R (b)Q (c)P (d)S (e)T

Correct Option:

- (e)T

65. Study the following information and answer the questions that follow

1. Six picture cards P, Q, R, S, T and J are framed in six different colours - blue, red green, grey yellow and brown and are arranged from left to right (not necessarily in the same order).
- ii. The pictures are of king, princess, queen, palace, joker and prince.
- iii. The picture of the palace is in the blue colour frame but is not on card S and card P which is of the queen, is in the brown frame and is placed at the extreme right
- iv. The picture of the princess is neither on card S nor on card T and is not in either the green or the yellow frame. Card R has a picture of the king in a grey frame and it's fifth from right and next to card Q having the picture of the prince.

The picture of the joker is in which color frame?

- (a)Blue (b)Green (c)Yellow (d)Red (e)Data inadequate

Correct Option:

- (e) Data inadequate

66. Study the following information and answer the questions that follow

1. Six picture cards P, Q, R, S, T and J are framed in six different colours - blue, red green, grey yellow and brown and are arranged from left to right (not necessarily in the same order).
- ii. The pictures are of king, princess, queen, palace, joker and prince.
- iii. The picture of the palace is in the blue colour frame but is not on card S and card P which is of the queen, is in the brown frame and is placed at the extreme right
- iv. The picture of the princess is neither on card S nor on card T and is not in either the green or the yellow frame. Card R has a picture of the king in a grey frame and it's fifth from right and next to card Q having the picture of the prince.

If the princess's card is immediately between the cards of the palace and the prince, then at what number is the joker's card placed from left?

- (a)Three (b)Second (c)First (d)Fourth (e)Five

Correct Option:

- (c) First

67. Study the following information and answer the questions that follow

1. Six picture cards P, Q, R, S, T and J are framed in six different colours - blue, red green, grey yellow and brown and are arranged from left to right (not necessarily in the same order).

ii. The pictures are of king, princess, queen, palace, joker and prince.

iii. The picture of the palace is in the blue color frame but is not on card S and card P which is of the queen, is in the brown frame and is placed at the extreme right

iv. The picture of the princess is neither on card S nor on card T and is not in either the green or the yellow frame. Card R has a picture of the king in a grey frame and it's fifth from night and next to card Q having the picture of the prince.

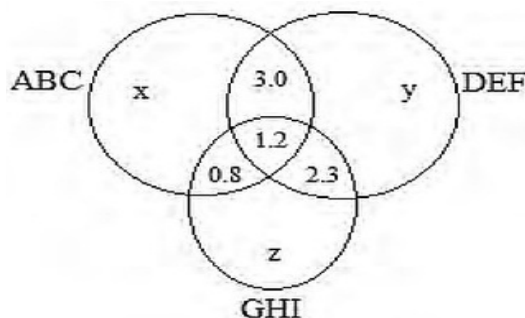
Which is the correct combination of card and frame color?

- (a)Q-Green (b)U-Red (c)T-Yellow (d)T-Brown (e)U-Yellow

Correct Option:

- (b) U – Red

68. The Venn diagram given below shows the estimated readership (in lakhs) of 3 leading newspaper dailies (ABC, DEF, and GHI) in the city M&M, which has an estimated population of 8.9 million. It is also known that the total readership of ABC is 9.7 lakhs, DEF is 9.1 lakhs, and that of GHI is 8.9 lakhs.



What percentage of the total population of M&M reads at least one of these three newspapers?

- (a)21.57% (b)28.21% (c)31.33% (d)38% (e)25.52%

Correct Option:

- (a) 21.57%

69. A solid cube has been painted yellow, blue and red on pairs of opposite faces. The cube is then cut into 343 smaller blocks of size (1x1x1).

What are the dimensions of the bigger cube?

- (a) $9 \times 9 \times 9$ (b) $7 \times 7 \times 7$ (c) $3 \times 3 \times 3$ (d) $11 \times 11 \times 11$ (e) $5 \times 5 \times 5$
- (b) $7 \times 7 \times 7$

70. Read the information given below and answer the questions.

Chand and his wife Kalini have a family of three generations comprising thirteen members of whom six are female members. Some of Chand's children are married, but none of his grandchildren are married. Kalini has a daughter-in-law named Manara and two sons-in-law, one being Wadhwaran.

Gajodhar's brother is Mahesh, who has two nephews and two nieces - one being Laila

Vandana, Mahesh's sister has two children. Manara, who is sister-in-law to Mahesh has four nephews and nieces. Manohar, who is married to Sita in the family, has a daughter Mira and a son. Roy has a sister and two cousins, Akash and Mira

Amongst the following, which one is false?

- A. Akash is Gajodhar's nephew
- B. Roy is Sita's child.
- C. Vandana is Kalini's child
- D. Sita has less than two nephews.
- E. Indira is Manara's niece.

Correct Option:

- B. Roy is Sita's child.

71. Read the information given below and answer the questions.

Chand and his wife Kalini have a family of three generations comprising thirteen members of whom six are female members. Some of Chand's children are married, but none of his grandchildren are married. Kalini has a daughter-in-law named Manara and two sons-in-law, one being Wadhwaran.

Gajodhar's brother is Mahesh, who has two nephews and two nieces - one being Laila

Vandana, Mahesh's sister has two children. Manara, who is sister-in-law to Mahesh has four nephews and nieces. Manohar, who is married to Sita in the family, has a daughter Mira and a son. Roy has a sister and two cousins, Akash and Mira

Laila is the niece of

(a) Gajodhar (b) Wadhwaran (c) Vandana (d) Kamini (e) Mira

Correct Option:

(a) Gajodhar

72. Read the information given below and answer the questions.

Chand and his wife Kalini have a family of three generations comprising thirteen members of whom six are female members. Some of Chand's children are married, but none of his grandchildren are married. Kalini has a daughter-in-law named Manara and two sons-in-law, one being Wadhwaran.

Gajodhar's brother is Mahesh, who has two nephews and two nieces - one being Laila

Vandana, Mahesh's sister has two children. Manara, who is sister-in-law to Mahesh has four nephews and nieces. Manohar, who is married to Sita in the family, has a daughter Mira and a son. Roy has a sister and two cousins, Akash and Mira

Which of the following pairs is a brother and a sister?

(a) Laila-Akash (b) Mahesh-Sita (c) Manohar-Manara (d) Roy-Mira (e) Manohar-Sita

Correct Option:

(b) Mahesh-Sita

73. Read the information given below and answer the questions.

Chand and his wife Kalini have a family of three generations comprising thirteen members of whom six are female members. Some of Chand's children are married, but none of his grandchildren are married. Kalini has a daughter-in-law named Manara and two sons-in-law, one being Wadhwaran.

Gajodhar's brother is Mahesh, who has two nephews and two nieces - one being Laila

Vandana, Mahesh's sister has two children. Manara, who is sister-in-law to Mahesh has four nephews and nieces. Manohar, who is married to Sita in the family, has a daughter Mira and a son. Roy has a sister and two cousins, Akash and Mira

Akash is the son of?

(a) Mahesh (b) Gajodhar (c) Sita (d) Vandana (e) Chand

Correct Option:

(c) Sita

74. One day Ravi left home and cycled 10km southwards then turned right and cycled 5km and turned right and cycled 10km and turned left and cycled 10km. How many kilometers will he have to cycle to reach his home straight?

- (a)20km (b)15km (c)10km (d)5km (e)25km

Correct Option:

- (b) 15km

75. How many such pairs of digits are there in the number 95137248 each of which has as many digits between them in the number as when they are arranged in ascending order?

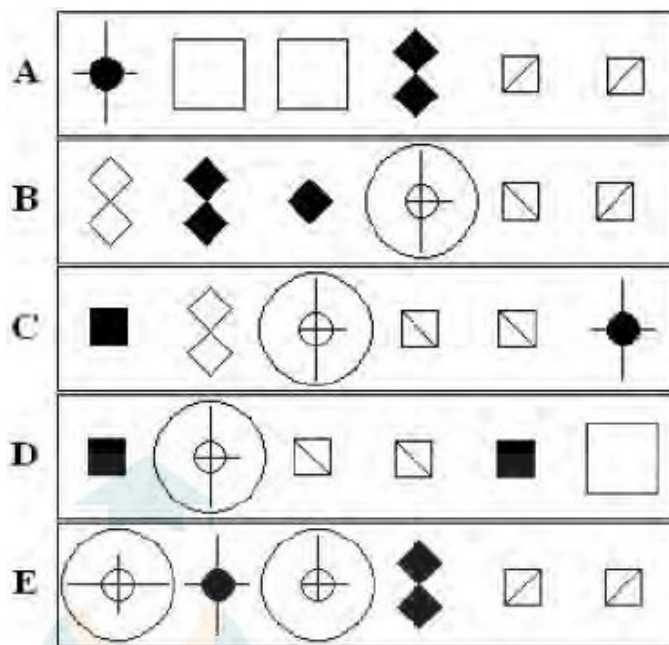
- (a)4 (b)3 (c)1 (d)5 (e)2

Correct Option:

- (b)3

ABSTRACT REASONING

1. Which figure is the odd one out?

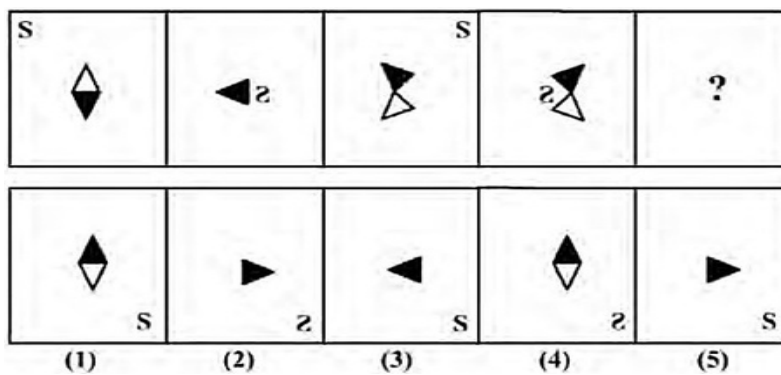


- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(b)B

2. Which figure from the options complete the series?



(a)3

(b)2

(c)1

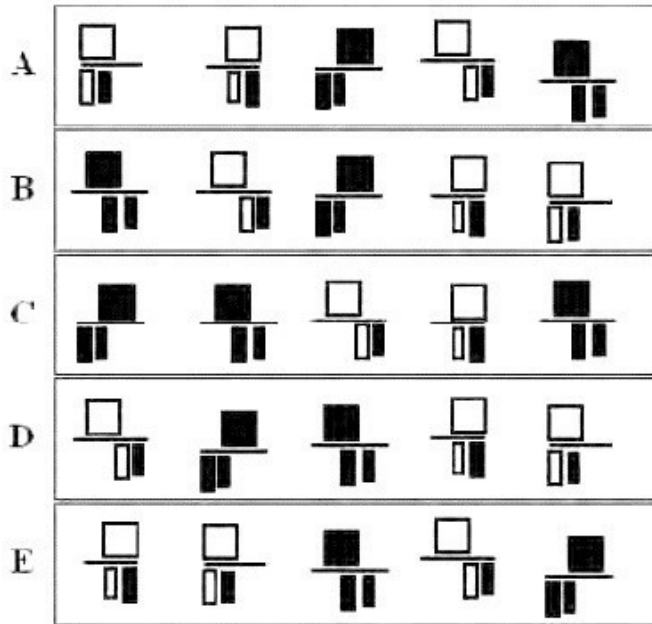
(d)4

(e)5

Correct Option:

(e)5

3. Which figure is the odd one out?



(a)C

(b)B

(c)A

(d)D

(e)E

Correct Option:

(b)B

4. Choose the image that completes the pattern (From left to right):



A

B

C

D

E



(a)C

(b)B

(c)A

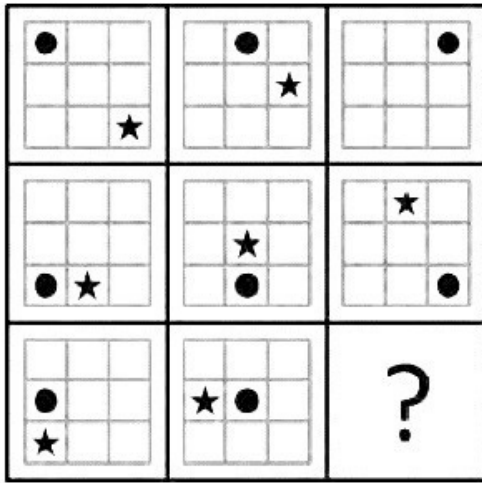
(d)D

(e)E

Correct Option:

(d)D

5.



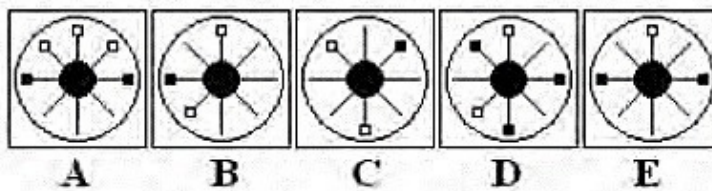
Which of the following boxes should replace the question mark (?) to complete the pattern?

- A. B. C. D. E.
- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(e)E

6. Which figure is the odd one out?

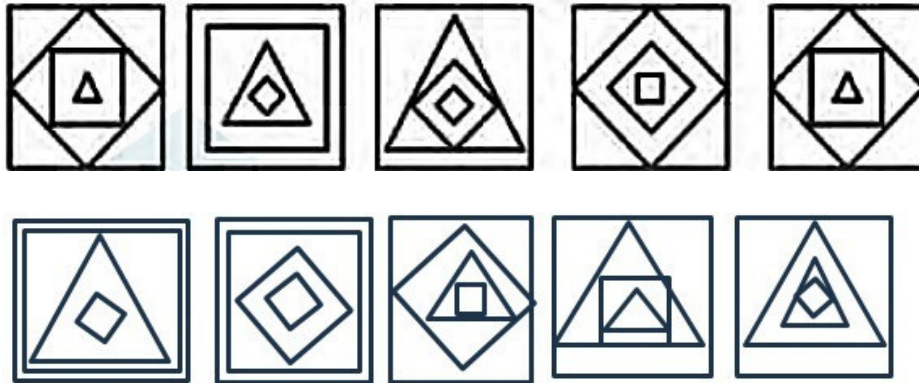


- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(d)D

7. Choose the image that completes the pattern (From left to right):



(a)C

(b)B

(c)A

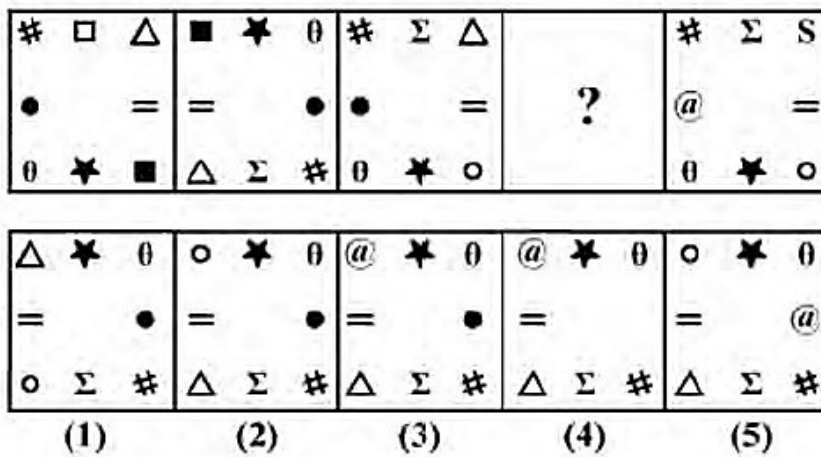
(d)D

(e)E

Correct Option:

(c)A

8. Select the figure from the given option can replace the question mark (?) to complete the series.



(a)3

(b)2

(c)1

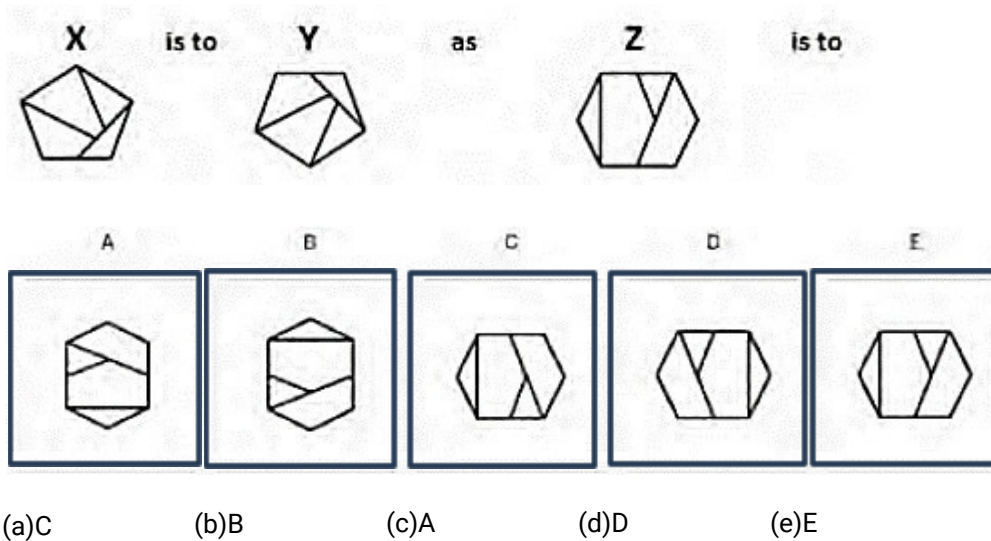
(d)4

(e)5

Correct Option:

(e)5

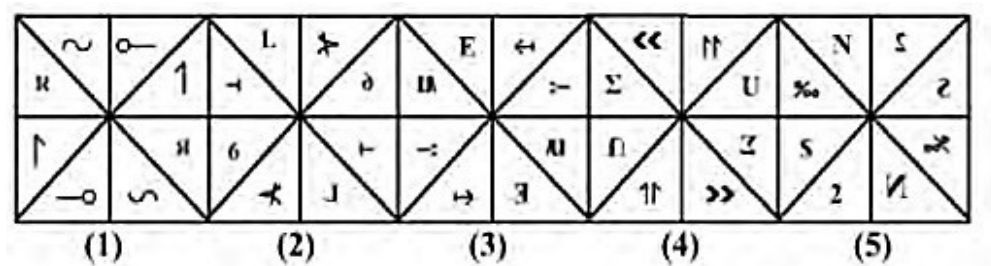
9.



Correct Option:

(a)C

10. Which figure is the odd one out?



(a)(3)

(b)(2)

(c) (1)

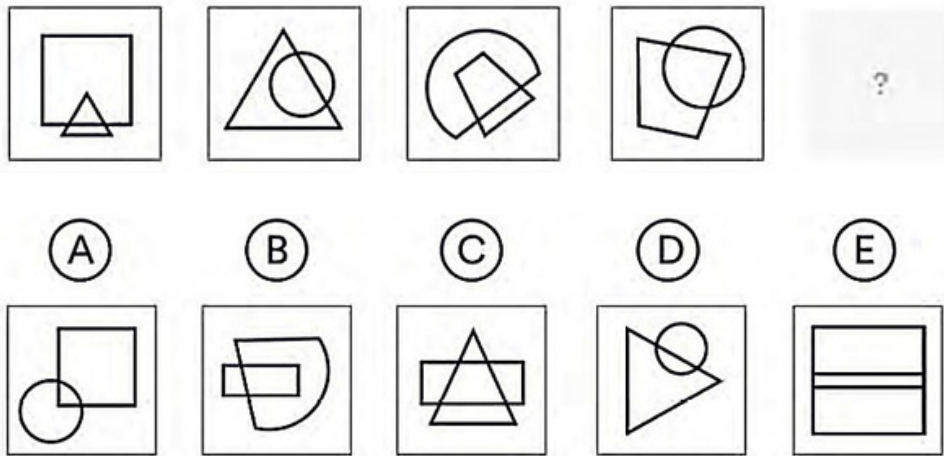
(d) (4)

(e) (5)

Correct Option:

(d) (4)

11. Which shape comes next in the sequence?



(a)C

(b)B

(c)A

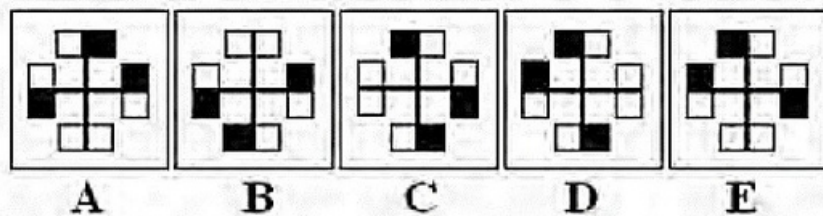
(d)D

(e)E

Correct Option:

(b)B

12. Which figure is the odd one out?



(a)C

(b)B

(c)A

(d)D

(e)E

Correct Option:

(e)E

13. Choose the figure which is the odd one out.

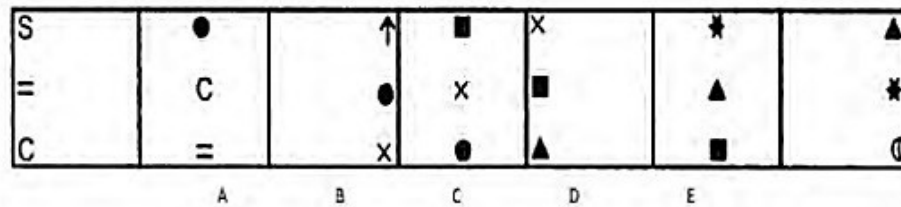


(a)C (b)B (c)A (d)D (e)E

Correct Option:

(e)E

14. Which figure from the options is the odd one out?

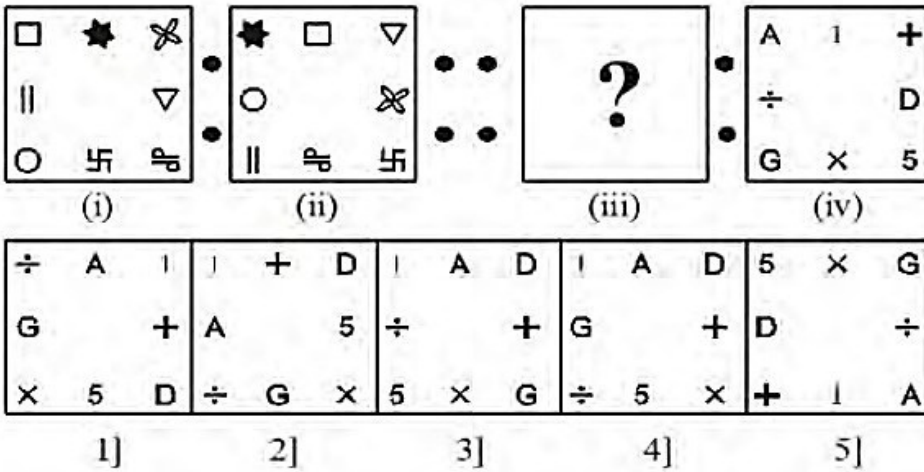


(a)C (b)B (c)A (d)D (e)E

Correct Option:

(b)B

15. Figure (i) and (ii) are related to each other in some way. Using the same logic find figure (iii) from given option that shares same relationship with figure (iv).

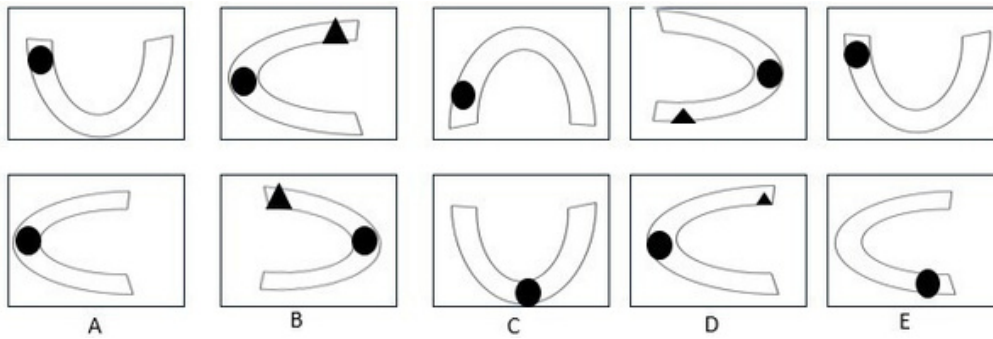


- (a)3 (b)2 (c)1 (d)4 (e)5

Correct Option:

(d)4

16. The figures in the top row follow some pattern. Which option from the bottom row follows next in the sequence?

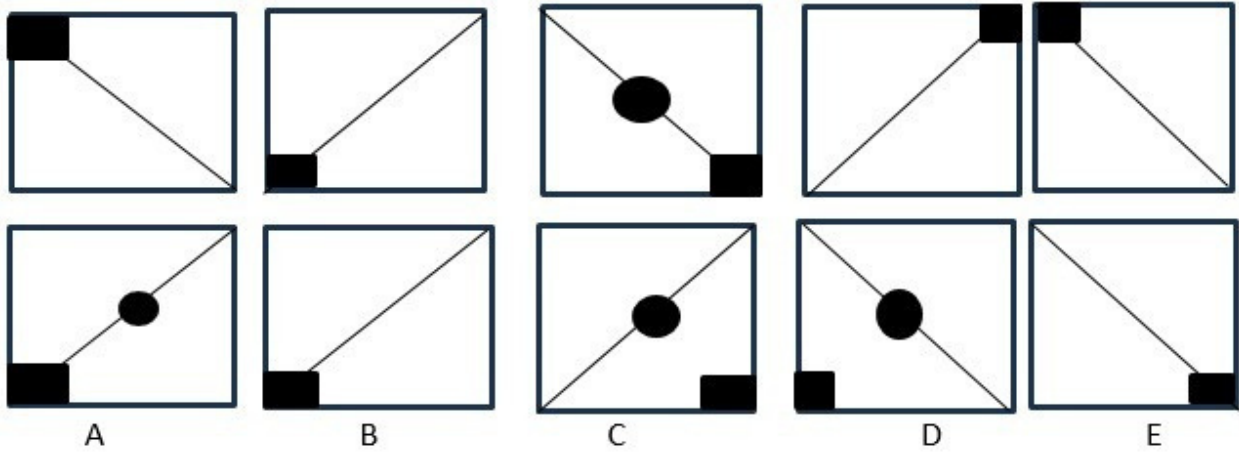


- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(d)D

17. The figure in the top row follow some pattern. Which option from the bottom row next in the sequence?

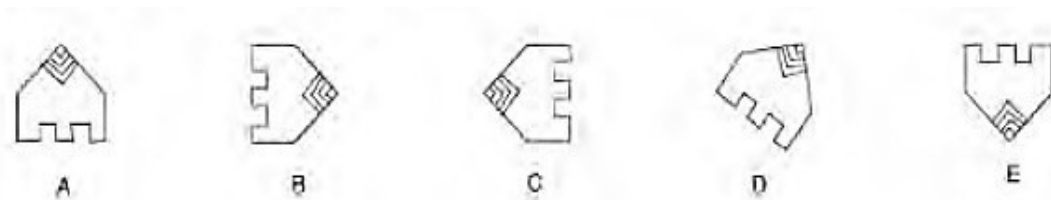


- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(c)A

18. Which figure is the odd one out?

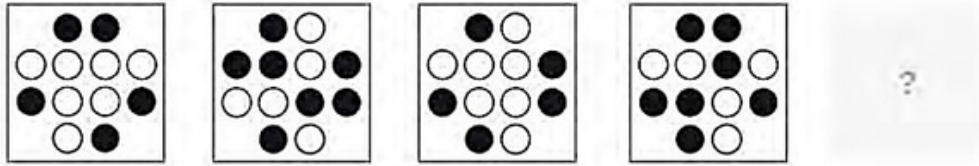


- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(d)D

19. Which shape comes next in the sequence?



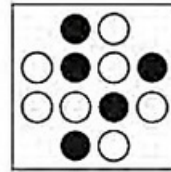
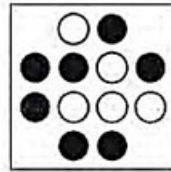
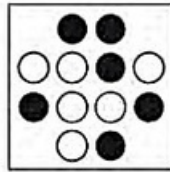
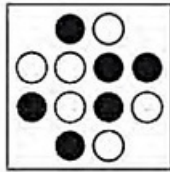
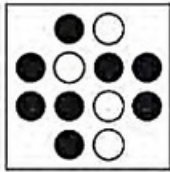
(A)

(B)

(C)

(D)

(E)



(a)C

(b)B

(c)A

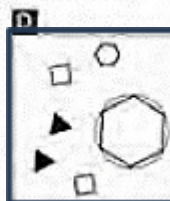
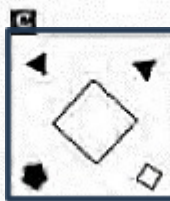
(d)D

(e)E

Correct Option:

(e)E

20. Which of the following options should replace the question mark to complete the pattern?



(a)C

(b)B

(c)A

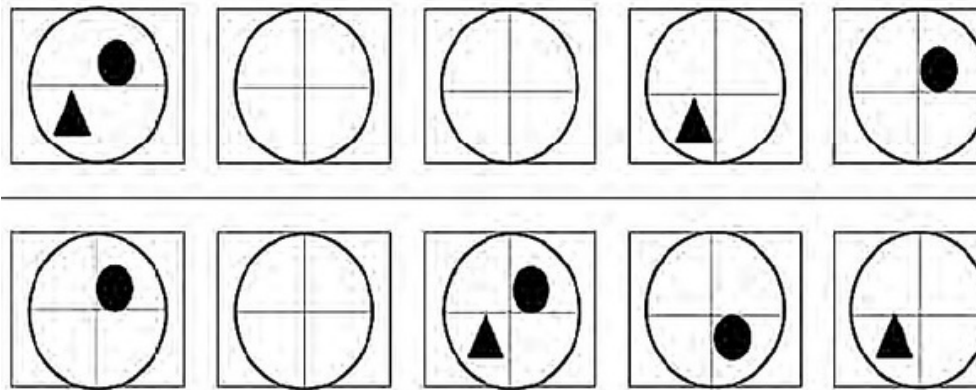
(d)D

(e)E

Correct Option:

(b)B

21. Which of the boxes comes next in the sequence?

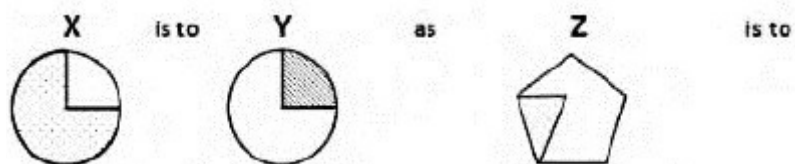


- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(b)B

22.

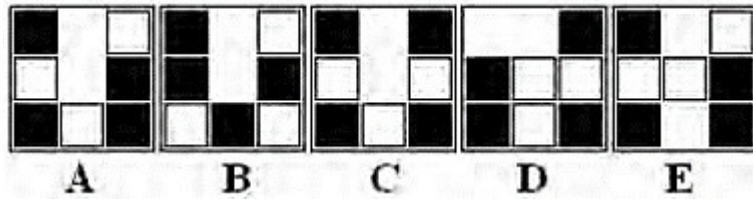


- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(c)A

23. Which figure is the odd one out?

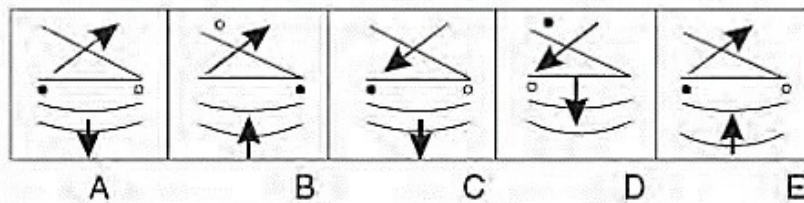
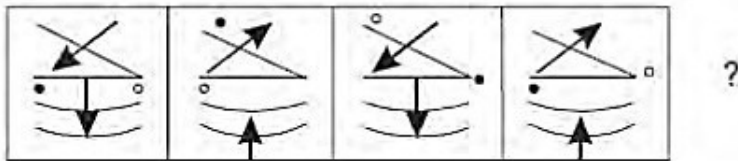


- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(a)C

24. Which figure from the options completes the series?

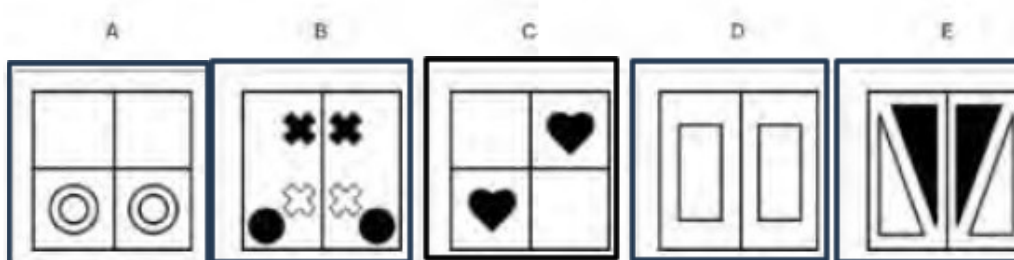


- (a)C (b)B (c)A (d)D (e)E

Correct Option:

(d)D

25. Choose the odd one out



(a)C (b)B (c)A (d)D (e)E

Correct Option:

(a)C

QUANTITATIVE APTITUDE

1. Find the largest four-digit number exactly divisible by 15, 21 and 28.

(a)9660 (b)9880 (c)9990 (d)9440 (e) 9770

Correct Option:

(a) 9660

2. There are two concentric circular tracks of radii 100m and 102m respectively. A runs on the inner track and goes once round the track in 1 minute 30 seconds while B runs on outer track in 1 minute 32 seconds. Who runs faster and at what speed?

A. A runs faster at 135.33π m/min

B. B runs faster at 133.33π m/min

C. A runs faster at 133.33π m/min

D. B runs faster at 133.04π m/min

E. Both A and B run at 130.33π m/min

Correct Option:

C. A runs faster at 133.33π m/min

3. Find the remainder when the number $\frac{100}{9}$ is divided by 8.

(a)3 (b)2 (c)1 (d)4 (e)5

Correct Option:

(c)1

4. The ratio of money with Rohan and Sohan is 3: 4 and that with Sohan and Mohan is 3:7. If money with Sohan is Rs. 120, How much money does Mohan have?

- (a)Rs.40 (b)Rs.280 (c)Rs.90 (d)Rs.120 (e)Rs.210

Correct Option:

- (b) Rs.280

5. Find the 15th term of the sequence 20, 15, 10.....

- (a)-50 (b)-45 (c)-40 (d) - 55 (e) - 60

Correct Option:

- (a) - 50

6. Three pipes A, B and C are connected to a tank Out of the three, A and B are the inlet pipes and C is the outlet pipe. If opened separately, A fills the tank in 10 hours and B fills the tank in 30 hours. If all three are opened simultaneously, it takes 30 minutes extra than if only A and B are opened. How much time does it take to empty the tank if only C is opened?

- (a)140Hours (b)200Hours (c)100Hours (d)120Hours (e)160Hours

Correct Option:

- (d) 120 Hours

7. A seller offers his customer a discount of 30%. If the price is 50% above cost price, how much profit does the seller make?

- (a)5% (b)10% (c)7% (d)20% (e)12.5%

Correct Option:

- (a) 5%

8. The sum of two numbers is 15 and their gematric mean is 20% lower than their arithmetic mean. Find the numbers.

- (a)12,3 (b)11,4 (c)10,4 (d)13,2 (e)14,1

Correct Option:

- (a) 12, 3

9. $(0.5 \times 0.2 + 0.01)(0.1)^{-1}$ is equal to:
- (a) $9/5$ (b) $11/5$ (c) $5/3$ (d) $5/7$ (e) $5/9$

Correct Option:

(c) $5/3$

10. If $381A$ is divisible by 9, find the value of the smallest natural number A .

(a) 3 (b) 2 (c) 0 (d) 1 (e) 6

Correct Option:

(e) 6

11. A bag contains 5 red, 4 green and 3 black balls. Three balls are drawn out from it at random. Find the probability of drawing exactly 2 red balls.

(a) $7/12$ (b) $5/12$ (c) $7/21$ (d) $5/22$ (e) $7/22$

Correct Option:

(e) $7/22$

12. How many times does the 29th day of the month occur in 400 consecutive years?

(a) 4400 (b) 4497 (c) 4498 (d) 4020 (e) 4687

Correct Option:

(b) 4497

13. Find the number of zeroes at the end of $1090!$

(a) 260 (b) 270 (c) 240 (d) 280 (e) 220

Correct Option:

(b) 270

14. Find the day of the week on 16th July, 1776.

- (a) Wednesday (b) Tuesday (c) Monday (d) Thursday (e) Friday

Correct Option:

- (b) Tuesday

15. What is the remainder when 1281000 is divided by 153?

- (a) 64 (b) 52 (c) 103 (d) 145 (e) 118

Correct Option:

- (b) 52

16. At what time between 9 o'clock and 10 o'clock will the hand of a clock point in opposite direction?

- (a) $16\frac{6}{11}$ minutes past 9 (b) $15\frac{5}{11}$ minutes past 9 (c) $16\frac{4}{11}$ minutes past 9
(d) $14\frac{4}{11}$ minutes past 9 (e) $16\frac{5}{11}$ minutes past 9

Correct Option: (c) $16\frac{4}{11}$

minutes past 9

17. A certain number of capsules were purchased for Rs. 216. 15 more capsules could have been purchased in the same amount if each capsule was cheaper by Rs. 10. What was the number of capsules purchased?

- (a) 15 (b) 12 (c) 10 (d) 8 (e) 20

Correct Option:

- (b) 12

18. If the integers a and b are chosen at random from 1 to 100, then the probability that a number of the form $7a+7b$ is divisible by 5, equals to:

- (a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{1}{8}$ (d) $\frac{1}{3}$ (e) $\frac{1}{9}$

Correct Option:

- (b) $\frac{1}{4}$

19. How many terms are there in the A.P. 20, 25, 30,, 130?

- (a)25 (b)23 (c)21 (d)20 (e) 22

Correct Option:

- (b) 23

20. Out of a pack of 52 cards one is lost, from the remainder of the pack, two cards are drawn and are found to be spades Find the chance that the missing card is a spade?

- (a)10/49 (b)11/50 (c)11/52 (d)10/50 (e)12/52

Correct Option:

- (b) 11/50

21. A well with 7 m inside diameter is dug 22.5 m deep and the earth taken out of it has been spread around it to a width of 10.5 m to form an embankment. Find the height of the embankment so formed.

- (a)1.3m (b)1.5m (c)1.6m (d)1.4m (e)1.8m

Correct Option:

- (b) 1.5m

22. Pure milk costs Rs.16 per liter. After adding water, the milkman sells the mixture Rs.15 per liter and thereby makes a profit of 25%. In what respective ratio does he mix milk with water?

- (a)3:2 (b)3:1 (c)4:1 (d)5:1 (e)5:3

Correct Option:

- (b) 3:1

23. 21 articles were bought for Rs.6531 and sold for Rs. 9954. How much was the approximate profit percentage per article?

- (a)56% (b)52% (c)54% (d)58% (e)53%

Correct Option:

- (b) 52%

24. Four years ago, a man was 6 times as old as his son. After 16 years he will be twice as old as his son. What is the present age of man and his son?

- (a) 34, 9 (b) 33, 6 (c) 36, 8 (d) 30, 13 (e) 32, 8

Correct Option:

- (a) 34, 9

25. Find the length of the plank which can be used to measure exactly the lengths 4 m 50 cm, 9 m 90 cm, and 16 m 20 cm in the least time.

- (a) 9600 cm (b) 80 cm (c) 70 cm (d) 100 cm

Correct Option:

- (a) 90 cm

26. The sum of the digits of a two-number digit is 10. When the digits are reversed, the number decreases by 54. Find the changed number.

- (a) 37 (b) 28 (c) 19 (d) 46 (e) 55

Correct Option:

- (b) 28

27. What is the angle at which hands of a clock are inclined at 15 minutes past 5?

- (a) 69.50 (b) 67.50 (c) 68.50 (d) 70.50 (e) 77.50

Correct Option:

- (b) 67.50

28. The ratio of the ages of Minu and Meera is 4:2. If the sum of their ages is 6 years, find the ratio of their ages after 8 years.

- (a) 4:3 (b) 6:5 (c) 3:5 (d) 2:5 (e) 3:7

Correct Option:

- (b) 6: 5

29. Find the number of divisors of 1420.

- (a) 14 (b) 12 (c) 10 (d) 16 (e) 18

Correct Option:

- (b) 12

30. From the top of a tower 100m high, a person observes that the angle of elevation of the top of another tower is 60° and the angle of depression of the bottom of the tower is 30° . Then the height (in meters) of the second tower approximately is.

- (a) 60m (b) 75m (c) 70m (d) 50m (e) 55m

Correct Option:

- (b) 75 m

31. If $146!$ is divisible by n , then find the maximum value of n

- (a) 37 (b) 35 (c) 32 (d) 36 (e) 30

Correct Option:

- (b) 35

32. In measuring the side of a square, an error of 5% in excess is made.

The error % in the calculated area is:

- (a) 10.5% (b) 10.25% (c) 10% (d) 10.75% (e) 11%

Correct Option:

- (b) 10.25%

33. Find the largest number which divides 64, 136, and 238 to leave the same remainder in each case.

- (a) 7 (b) 6 (c) 4 (d) 5 (e) 11

Correct Option:

- (b) 6

34. If A381 is divisible by 11, find the value of the smallest natural number A.

- (a)5 (b)3 (c)1 (d)7 (e)9

Correct Option:

- (d)7

35. A watch which gains 5 seconds in 3 minutes was set right at 7:00 a.m. In the afternoon of the same day, when the watch indicated quarter past 4 o'clock, the true time is

- (a) 4:00pm (b) 4:02pm (c) 4:00pm (e) 4:08pm

Correct Option:

- (c) 4: 00pm

36. The horizontal distance between two towers is 75 m and the angular depression of the top of the first tower as seen from the top of the second which is 160 m high is 45° . Find the height of the first tower.

- (a)75m (b)80m (c)85m (d)90m (e)95m

Correct Option:

- (c) 85 m

37. A man sells three motors for ₹ 5,400, ₹ 3,300 and ₹ 4,350 respectively.

He makes 20% profit on the first and 10% profit on the second but on the whole, he loses $\frac{75}{8}\%$. What did the third motor car cost him?

- (a)₹8700 (b)₹9200 (c)₹6500 (d)₹6900 (e)₹5800

Correct Option:

- (d) ₹ 6900

38. The cost of 8 kg of cashew nuts is equal to the cost of 50 kg of guavas. The cost of 19 kg of grapes is Rs. 456. The cost of 1 kg of guava is twice the cost of 2 kg of grapes. What is the total cost of 3 kg of cashew nuts and 4 kg of guavas together?

- (a)Rs.2184 (b)Rs.2175 (c)Rs.2480 (d)Rs.3000 (e)Rs.3200

Correct Option:

(a) Rs.2184

39. There are two poles, one on each side of the road. The higher pole is 54 m high. From the top of this pole, the angle of depression of the top and bottom of the shorter pole is 30 and 60 degrees respectively. Find the height of the shorter pole.

(a)32m (b)36m (c)30m (d)38m (e)40m

Correct Option:

(b) 36 m

40. A train passes a station platform in 36 seconds and a man standing on the platform in 20 seconds. If the speed of the train is 54 km/hr. what is the length of the platform? (in m)

(a)180 (b)240 (c)280 (d)200 (e)220

Correct Option:

(b) 240

41. The last digit of the number obtained by multiplying the numbers $81 \times 82 \times 83 \times 84 \times 85 \times 86 \times 87 \times 88 \times 89$ will be

(a)2 (b)1 (c)0 (d)3 (e)4

Correct Option:

(c)0

42. Find the 1st term of an A.P. whose 8th and 12th terms are 39 and 59 respectively.

(a)6 (b)4 (c)2 (d)3 (e)9

Correct Option:

(b)4

43. Find the greatest number which on dividing 70 and 50 leaves remainders 1 and 4 respectively.

(a)25 (b)23 (c)21 (d)20 (e)13

Correct Option:

(b) 23

44. The distance from Y to Z is thrice that from X to Y. Two trains A and B travel from X to Z via Y. The speed of train B is double that of train A while traveling from X to Y and their speeds are interchanged while traveling from Y to Z. The ratio of the time taken by train A to that taken by train B in traveling from X to Z is?

(a) 7:9

Correct Option: (b) 8:7 (c) 5:7 (d) 3:5 (e) 4:9

(c) 5: 7

45. Time required by two pipes A and B working separately to fill a tank is 36 seconds and 45 seconds respectively. Another pipe C can empty the tank in 30 seconds. Initially, A and B are opened and after 7 seconds, C is also opened. In how much more time the tank would be completely filled?

(a) 33 seconds (b) 39 seconds (c) 34 seconds (d) 37 seconds (e) 32 seconds

Correct Option:

(b) 39 seconds

Note: This is a memory based question paper. Since MAH CET doesn't release the paper, you can refer to this paper for your preparation.