

MAH-CET - 2024

Slot-3

Logical Reasoning

MAH MBA CET 2024 SLOT 3

1. Question

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

7.9.66 12 14 66. 17

- a) 19 22
- b) 19 66
- c) 66 19
- d) 22 66
- e) 66 22

2. Question

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 and (R) is the correct explanation of (A).
- c) Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
- d) (A) is false but (R) is true.
- e) Both (A) and (R) are false

3. Question

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

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

4. Question

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) 2
- c) 3
- d) 5
- e) 6

5. Question

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 37 83 42 bench lower floor
- c) 13 upper 83 42 bench lower floor 37
- d) 83 42 bench 13 upper lower floor 37
- e) 83 37 42 bench 13 upper lower floor

6. Question

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 and (R) is the correct explanation of (A).
- c) Both (A) and (R) are correct but (R) is the NOT the correct explanation of (A)
- d) (A) is incorrect but (R) is correct.
- e) Both (A) and (R) are incorrect

7. Question

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

- a) FRACNOIT
- b) CARFNOIT
- c) NOITFRAC
- d) CARFTION
- e) TIONFRAC

8. Question

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)1
- c)3
- d)5
- e)2

9. Question

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

- a) WXYZAX
- b) AJMTVT
- c) AMJXVS
- d) MJXVSU
- e) ATTMUX

10. Question

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 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

11. Question

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)12
- c)33
- d)48
- e)10

12. Question

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 and (R) is the correct explanation of (A)
- c) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)..
- d) (A) is false but (R) is true.
- e)

13. Question

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)14TH
- c)15TH
- d)17TH
- e)18TH

14. Question

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)2
- c)4
- d)8
- e)1

15. Question

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)54
- c)43
- d)58
- e)48

16. Question

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)A
- c)B
- d)D
- e)E

17. Question

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 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

18. Question

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 I: 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) 14 27 91 car 85
- b) 14 91 car 85 27
- c) car 85 14 27 91
- d) 14 27 car 85 91
- e) Can not be determined

19. Question

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) CUS
- c) BRO

- d) STD
- e) TNH

20. Question

Som boys are sitting in a line. Manohar is at 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)41
- c)43
- d)44
- e)42

21. Question

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

40 42 38 35 33 28 31

- a) 25 23
- b) 26 24
- c) 25 22
- d) 25 20
- e) 26 22

22. Question

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) Grandfather
- c) Grandmother
- d) Daughter
- e) Mother

23. Question

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 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

24. Question

Given a Series 25,49,121,169,9

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

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

25. Question

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 in 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 and (R) is the correct explanation of (A)
- c) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- d) (A) is false but (R) is true
- e) Both (A) and (R) are false

26. Question

Find the number which will come in the place of the question mark in the given series 11,12,15,20,27,9

- a)30
- b)34
- c)36

- d)32
- e)35

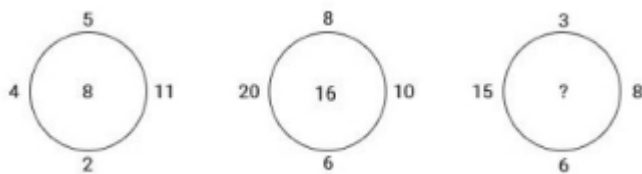
27. Question

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)D
- c)A
- d)C
- e)E

28. Question

Insert the missing number in the following question



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

29. Question

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)1
- c)2
- d)4
- e)5

30. Question

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)38
- c)82
- d)42
- e)114

31. Question

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)P
- c)Q
- d)S
- e)T

32. Question

- 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

33. Question

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)2
- c)4
- d)8
- e)1

34. Question

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?

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

35. Question

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

2 44 4 41 6 38 8

- a) 35 10
- b) 33 10
- c) 358
- d) 36 10
- e) 36 12

36. Question

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

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

37. Question

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) Sister
- c) Daughter
- d) Mother
- e) Daughter-in-law

38. Question

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

- a) North-West
- b)SOUTH

- c)EAST
- d)WEST
- e) South-East

39. Question

- a)
- b)
- c)
- d)
- e)

40. Question

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

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

41. Question

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 and (R) is the correct explanation of (A)
- c) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- d) (A) is false but (R) is true
- e) Both (A) and (R) are false

42. Question

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

- a) 57159413955
- b) 45038401854
- c) 56149512965
- d) 67250623076
- e) 45250640279

43. Question

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) North
- c) South
- d) West
- e) North West

44. Question

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 towing
 - 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 wrong statement

- a) There is gap of three days between the days on which cycling and rowing are done.
- b) Gymnasium is done immediate previous day of rowing.
- c) Jogging is done three days after boxing.
- d) There is two days gap between rest day and gymnasium
- e) Rowing is done on Friday.

45. Question

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 rest day?

- a) WENDNESDAY
- b) MONDAY
- c) TUESDAY
- d) Thursday
- e) FRIDAY

46. Question

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) One
- c) Two
- d) Four
- e) Five

47. Question

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) Monday
- c) Tuesday
- d) Thursday
- e) Friday

48. Question

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 Eart, Devdas is not at the end. Bheem is sitting to the immediate right of Eart. Ferguson is not at the right end
Who is fourth from the left end?

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

49. Question

Study the following information carefully and answer the questions that follow: Six friends-Alok, Bheem, Chandar, Devdas, Eart and Ferguson are sitting on a bench facing in the same direction. Chandar is sitting between Alok and Eart,. 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) Alok
- c) Bheem
- d) Earl
- e) Ferguson

50. Question

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 Eart. Ferguson is not at the right end.
Who is to the immediate right of Ferguson?

- a) Earl
- b) Devdas
- c) Alok
- d) Either Devdas or Alok
- e) Either Alok or Earl

51. Question

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 Eart, Devdas is not at the end. Bheem is sitting to the immediate right of Eart. Ferguson is not at the right end.
How many persons are there to the left of Chandar?

- a)THREE
- b)ONE
- c)TWO
- d)FOUR
- e)FIVE

52. Question

Study the following information and answer the questions that follow

- I. Six picture cards P, Q, R, S, T and U 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 is fifth from right and next to card having the picture of the prince
The picture of the palace is printed on which card?

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

53. Question

Study the following information and answer the questions that follow: 1. Six picture cards P, Q, R, S, T and U 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)
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 is fifth from right and next to card Q having the picture of the prince.
The picture of the joker is in which colour frame?

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

54. Question

Study the following information and answer the questions that follow
1. Six picture cards P, Q, R, S, T and U 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 is fifth from right and next to card 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) Third

- b) First
- c) Second
- d) Fourth
- e) Fifth

55. Question

Study the following information and answer the questions that follow Six picture cards P, Q, R, S, T and U 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 ill. 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 long in a grey frame and it is fifth from nght and next to card Q having the picture of the prince
Which is the correct combination of card and frame colours?

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

56. Question

57. Question

- a)
- b)
- c)
- d)
- e)

58. Question

- a)
- b)
- c)
- d)
- e)

59. Question

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) Brothers-in-law
- b) Brothers
- c) Cousins
- d) Sunil is Uncle and Surinder is the nephew
- e) Surinder is Uncle and Sunil is the nephew

60. Question

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 Rajinder related to Ashok?

- a) Cousin
- b) Father-in-law
- c) Maternal Uncle
- d) Brother
- e) Brother-in-law

61. Question

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) Aunt

- c) Sister
- d) Mother
- e) Cousin

62. Question

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 Kishanlal 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)A
- c)B
- d)D
- e)E

63. Question

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 square cannot be planted with wheat?

- 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

- a)C
- b)A
- c)B

- d)D
e)E

64. Question

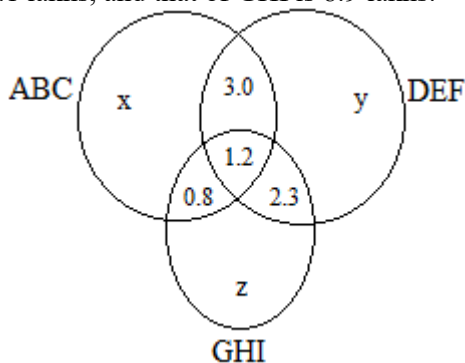
Kishanlal has a larger square field divided into nine smaller squares, all equal, arranged in three rows of three fields each. One side of the field runs exactly east-west. The middle square must be planted with rice because it is wet. The wheat and barley should be continuous so that they can be harvested 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)A
c)B
d)D
e)E

65. Question

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

- a) 21.57 %
b) 31.33%
c) 28.21%
d) 38%
e)0

66. Question

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 mean time, 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) East
c) West
d) South
e) Can't say

67. Question

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 mean time, 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) 55KM
c)65KM
d)85KM
e)95KM

68. Question

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)44
c)43
d)45
e)36

69. Question

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) 125
- c) 300
- d) 240
- e) 64

70. Question

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) 9X9X9
- b) 3X3X3
- c) 7X7X7
- d) 11X11X11
- e) 5X5X5

71. Question

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) 4
- c) 8
- d) 32
- e) 64

72. Question

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) Vandana
- c) Wadhwaran
- d) Kamini
- e) Mira

73. Question

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) Manohar Manara
- c) Mahesh- Sita
- d) Roy - Mira
- e) Manohar-Sita

74. Question

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) Vandana is Kalini's child
- c) Roy is Sita's child
- d) Sita has less than two nephews
- e) Indira is Manara's niece

75. Question

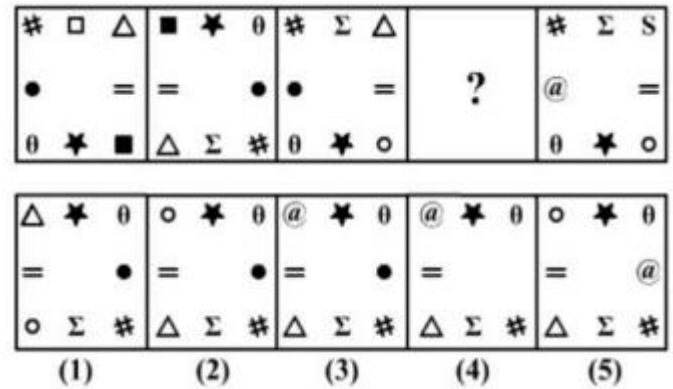
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Gajodhar's brother is Mahesh, who has two nephews and two nieces one being Laila
Vandana, Mahesh's sister has two children.
Manara, who is sister-in-law to Mahesh has four nephews and nieces Manohar, who is married to Sita in the family, has a daughter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

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

Abstract Reasoning

76. Question

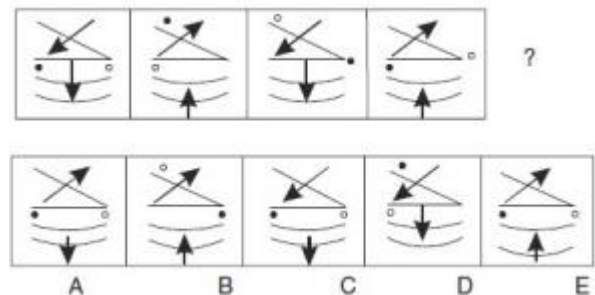
Select the figure from the given option can replace the qustion mark (?) to complete the series.



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

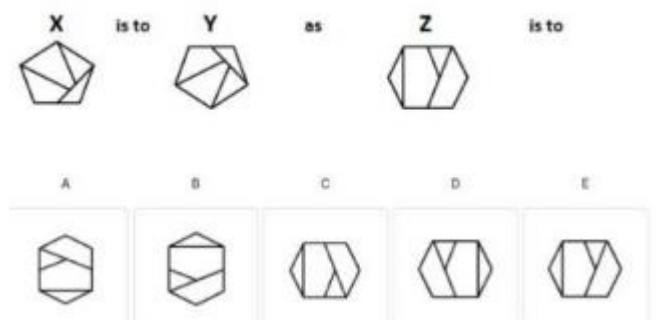
77. Question

Which figure from the options completes the series?



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

78. Question

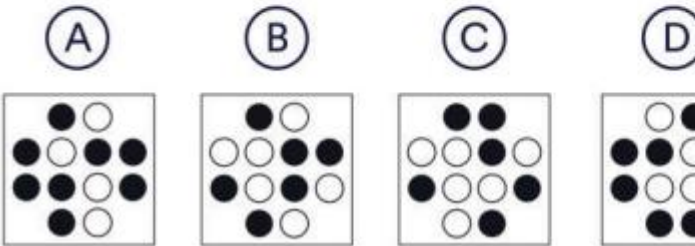
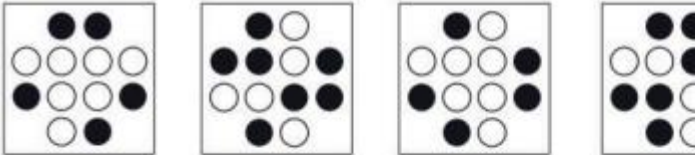


- a)C
- b)A
- c)B

- d)D
- e)E

79. Question

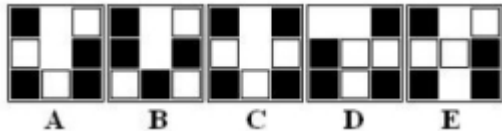
Which shape comes next in the sequence?



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

80. Question

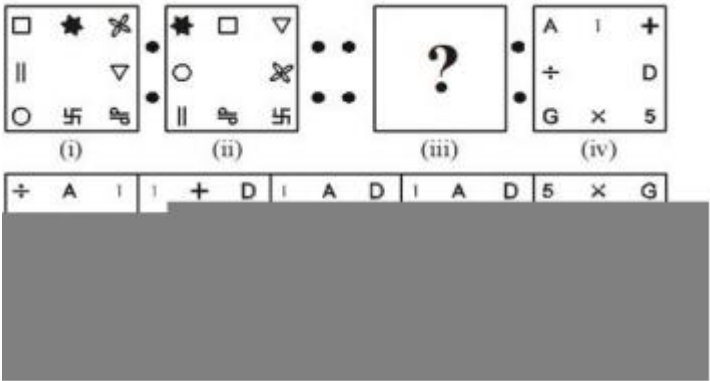
Which figure is the odd one out?



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

81. Question

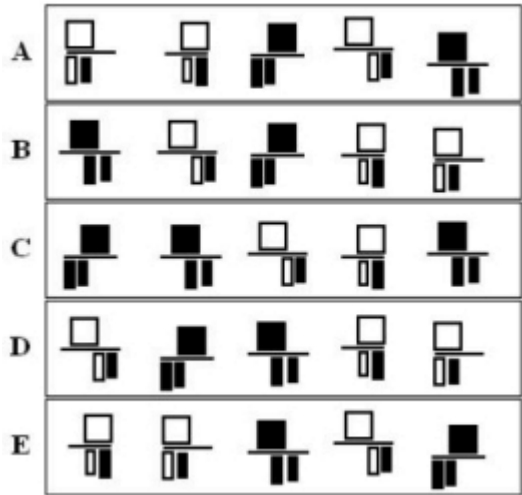
Figure (i) and (ii) are related to each other in some way. Using the same logic find figure (iii) from given option that shares same relationship with figure (iv)



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

82. Question

Which figure is the odd one out?



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

83. Question

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

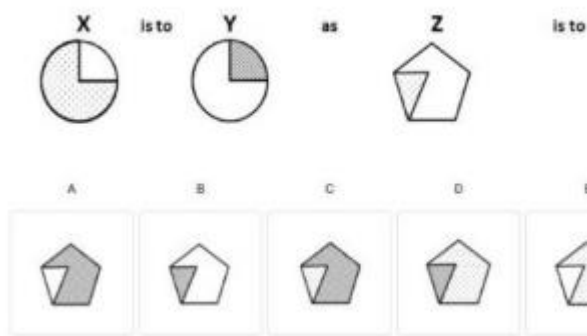
84. Question

Which figure is the odd one out?"



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

85. Question



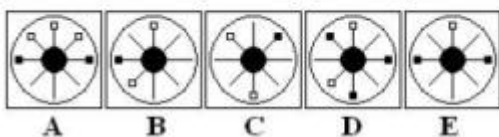
- a)C
- b)A
- c)B
- d)D
- e)E

86. Question

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

87. Question

Which figure is the odd one out?

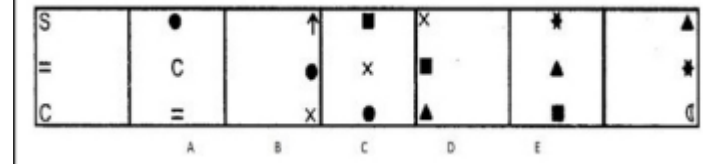


- a)C
- b)A

- c)B
- d)D
- e)E

88. Question

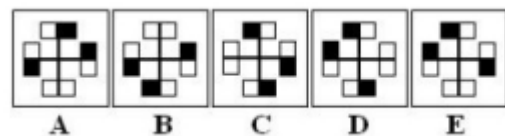
Which figure from the options is the odd one out?



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

89. Question

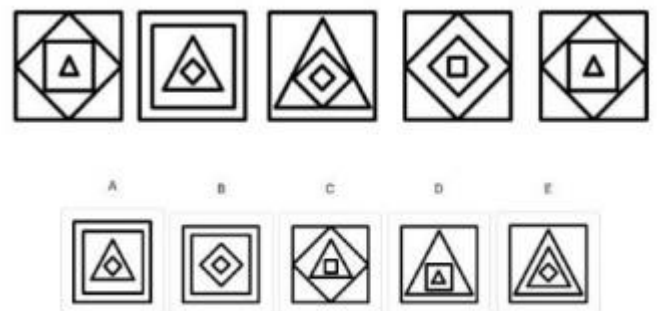
Which figure is the odd one out?



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

90. Question

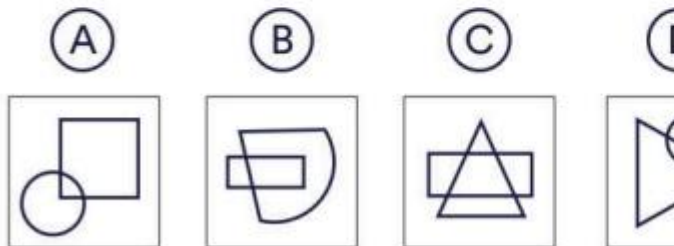
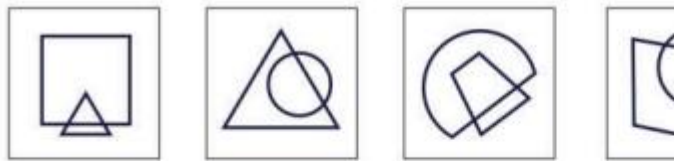
Choose the image that completes the pattern (From left to right):



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

91. Question

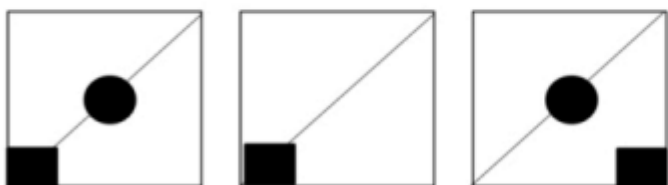
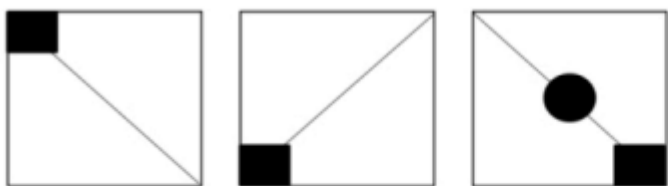
Which shape comes next in the sequence?



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

92. Question

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



A

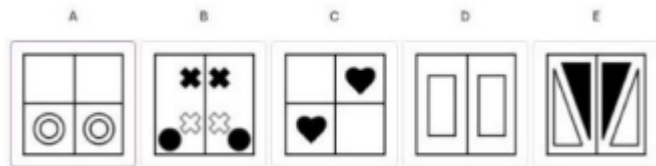
B

C

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

93. Question

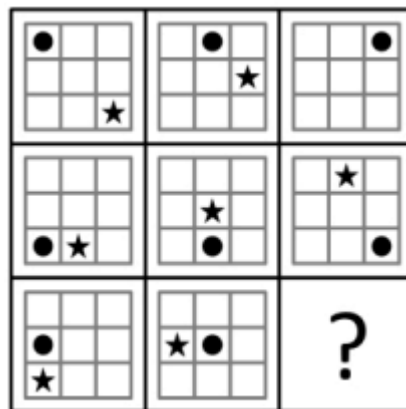
Choose the odd one out



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

94. Question

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



A



B



C



D



E

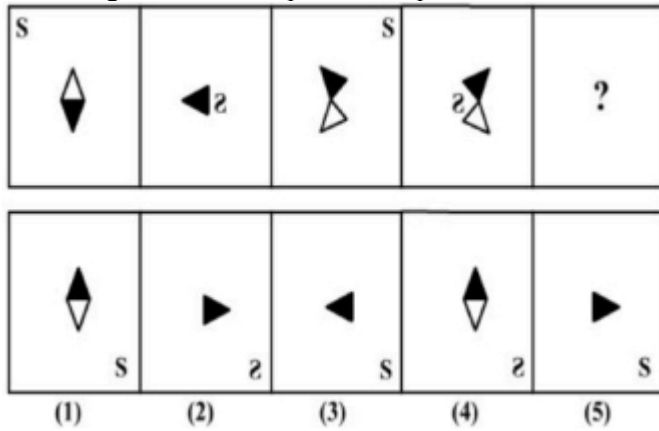


- a)C
- b)A
- c)B

- d)D
- e)E

95. Question

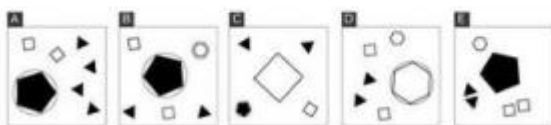
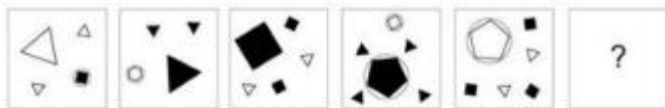
Which figure from the options complete the series?



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

96. Question

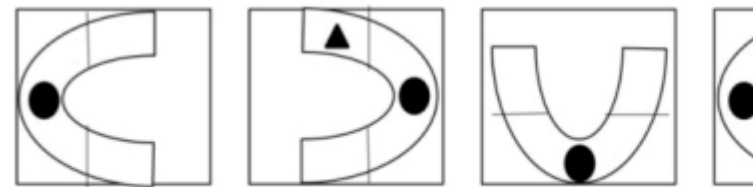
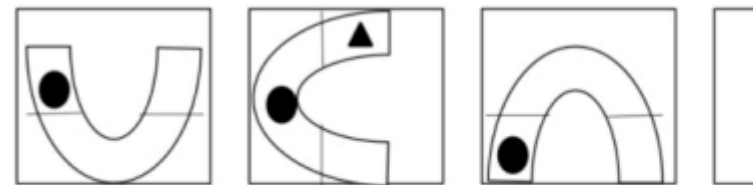
Which of the following options should replace the question mark to complete the pattern?



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

97. Question

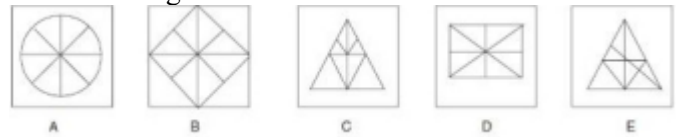
The figures in the top row follow some pattern. Which option from the bottom row follows next in the sequence?



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

98. Question

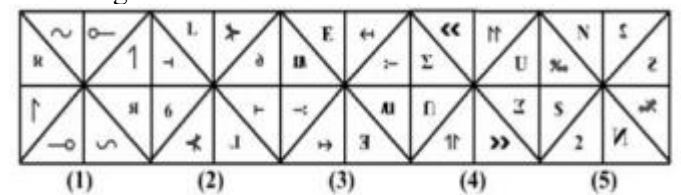
Choose the figure which is the odd one out



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

99. Question

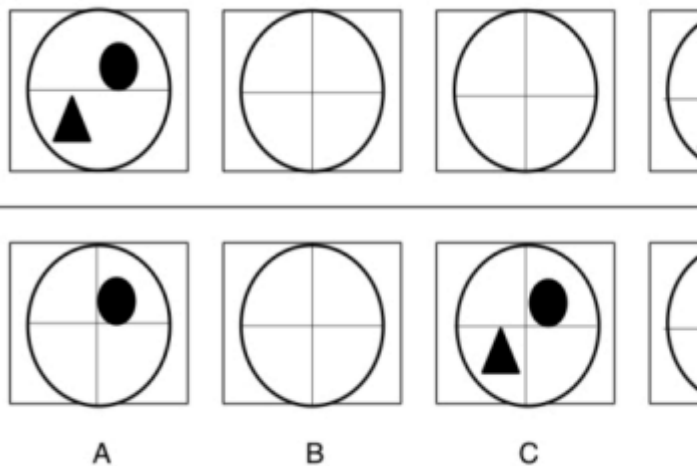
Which figure is the odd one out?



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

100. Question

Which of the boxes comes next in the sequence?



- a) 16(6/11) minutes past 9
- b) 16(4/11) minutes past 9
- c) 15(5/11) minutes past 9
- d) 14(4/11) minutes past 9
- e) 16(5/11) minutes past 9

103. Question

A rectangular field of dimension 180m x 105m is to be paved by identical square tiles. Find the number of tiles required to cover the field fully leaving no area unpaved.

- a)62
- b)75
- c)84
- d)92
- e)54

104. Question

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

- a) 69.5°
- b) 68.5°
- c) 67.5°
- d) 70.5°
- e) 77.5°

105. Question

If 1461 is divisible by 5, then find the maximum value of n

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

106. Question

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)85M
- c)80M
- d)90M
- e)95M

107. Question

Quantitative Aptitude

101. Question

There is 60% increase in an amount in 6 years at simple interest. What will be the compound interest of Rs 12,000 after 3 years at the same rate?

- a) Rs 2983
- b) Rs 2160
- c) Rs. 2962
- d) Rs 3972
- e) Rs 3160

102. Question

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

$(0.2 \times 0.2 + 0.01) (0.1 \times 0.1 + 0.02)$ is equal to

- a) $\frac{9}{5}$
- b) $\frac{5}{3}$
- c) $\frac{11}{5}$
- d) $\frac{5}{7}$
- e) $\frac{5}{9}$

108. Question

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

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

109. Question

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) 19
- c) 28
- d) 46
- e) 55

110. Question

The profit earned after selling an article for Rs. 1680 is the same as the loss incurred after selling the article for Rs. 1512. What is the approx% of the profit or loss?

- a) 9
- b) 6
- c) 8
- d) 7
- e) 5

111. Question

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

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

112. Question

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

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

113. Question

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) $\frac{10}{49}$
- b) $\frac{11}{52}$
- c) $\frac{11}{50}$
- d) $\frac{10}{50}$
- e) $\frac{12}{52}$

114. Question

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 75/8%. What did the third motor car cost him?

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

115. Question

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

116. Question

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

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

117. Question

Find the number of divisors of 1420

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

118. Question

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) 36,8
- c) 33,6
- d) 30,13
- e) 32,8

119. Question

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) $\frac{7}{12}$
- b) $\frac{7}{21}$
- c) $\frac{5}{12}$
- d) $\frac{5}{22}$
- e) $\frac{7}{22}$

120. Question

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
- b) 5:7
- c) 8:7
- d) 3:5
- e) 4:9

121. Question

The last digit of the number obtained by multiplying the numbers $81 * 82 * 83 * 84 * 85 * 86 * 87 * 88 * 89$; be

- a) 2
- b) 0
- c) 1
- d) 2
- e) 3

122. Question

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 135.33 m/min
- b) A runs faster at $133.33\pi \text{ m} / \text{m} * \text{in}$
- c) B runs faster at $133.33\pi \text{ m} / \text{m} * \text{in}$
- d) B runs faster at $133.04\pi \text{ m} / \text{m} * \text{un}$
- e) Both A and B run at $130.33\pi \text{ m} / \text{m} * \text{in}$

123. Question

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

- a) 3:2
- b) 4:1
- c) 3.1
- d) 5:1
- e) 5:3

124. Question

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) 70 m
- c) 50 m
- d) 75M
- e) 55M

125. Question

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

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

126. Question

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

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

127. Question

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) 280
- c) 240
- d) 200
- e) 220

128. Question

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) 90 cm
- b) 80 cm
- c) 60 cm
- d) 70 cm
- e) 100 cm

129. Question

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) 140 Hours
- b) 100 Hours
- c) 200 Hours

- d) 120 Hours
- e) 160 Hours

130. Question

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

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

131. Question

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

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

132. Question

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

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

133. Question

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

- a) 12,3
- b) 10,5
- c) 11,4
- d) 13,2
- e) 14,1

134. Question

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

- a) 3
- b) 0
- c) 1

- d)2
- e)6

135. Question

What is the remainder when 128^{100} is divided by 153?

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

136. Question

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

- a)6
- b)2
- c)4
- d)5
- e)9

137. Question

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. 2480
- c) Rs. 2175
- d) Rs. 3000
- e) Rs 3200

138. Question

How many numbers less than 100 have exactly four factors?

- a)30
- b)34
- c)32
- d)28
- e)36

139. Question

Find the number of zeroes at the end of 10901

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

140. Question

Find the remainder when the number 9^{100} is divided by 8

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

141. Question

In a 5000-meter race, if runner A runs at a speed of 12 meters per second and runner B runs at a speed of 15 meters per second, how many seconds will it take for runner B to finish the race if runner A finishes the race in 20 minutes?

- a) 18 minutes
- b) 15 MINUTES
- c) 16 minutes
- d) 20 minutes
- e) 22 minutes

142. Question

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) 34 seconds
- c) 39 seconds
- d) 37 seconds
- e) 32 seconds

143. Question

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%
- c) 10.25%
- d) 10.75%
- e) 11%

144. Question

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) 3:5
- c) 6:5
- d) 2.5
- e) 3.7

145. Question

- a) 4.03 pm
- b) 4.00 pm.
- c) 4.02 p.m.
- d) 4.05 pm.
- e) 4.08 p.m.

146. Question

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. 90
- c) Rs. 280
- d) Rs 120
- e) Rs 210

147. Question

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

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

148. Question

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) 7%
- c) 10%
- d) 20%
- e) 12.5%

149. Question

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) 32.m
- b) 30 m
- c) 36 m
- d) 38 m
- e) 40 m

150. Question

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

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

VERBAL

151. Question

Select the synonym of the word:
RECUPERATE

- a) discover
- b) recapture
- c) recover
- d) reclaim
- e) regain

152. Question

Select the synonym of the word
LOQUACIOUS

- a) ambiguous
- b) jealous
- c) verbose
- d) difficult
- e) emotional

153. Question

Select the synonym of the word:
BLITHE

- a) grudging
- b) cheerful
- c) joyless
- d) somnolent
- e) awake

154. Question

Choose the best option to fill in the blank.
The miser gazedat the pile of gold coins in front of him

- a) avidly
- b) admiringly
- c) thoughtfully
- d) earnestly
- e) eagerly

155. Question

Choose the best option to fill in the blank
He is SO..... that he immediately believed my story of ghosts.

- a) vociferous
- b) blessed
- c) credulous
- d) credible
- e) innocent

156. Question

Select the odd one out from the given options

- a) Iguana
- b) Herring
- c) Trout
- d) Pirhana
- e) Mackerel

157. Question

Select the odd one out from the given options.

- a) Sesame
- b) Poppy
- c) Mustard
- d) Linseed
- e) Castor

158. Question

Select the synonym of the word
WEARY

- a) fallible
- b) fatigued
- c) emotional
- d) sentimental
- e) capable

159. Question

- a) celebrating success
- b) a paradoxical situation
- c) a resolution
- d) spectacular
- e) learning from failure

160. Question

Choose the best option to fill in the blank.
Irony can sometimes become a mode of escape to laugh at terrors of life is, in a way, tothem.

- a) evade
- b) bolster
- c) approve
- d) foster
- e) avail

161. Question

Select the antonym of the word
RETRIBUTION

- a) grudge
- b) forgiveness
- c) compensation
- d) attendance
- e) hesitation

162. Question

Select the meaning of the idiom
To bury the hatchet

- a) to resolve a mystery
- b) end a friendship
- c) end a conflict
- d) to hide
- e) to doubt one's abilities

163. Question

Select the antonym of the word
GARISH

- a) tasteful
- b) vulgar
- c) beautiful
- d) violent
- e) scenic

164. Question

Select the meaning of the idiom
To cut corners

- a) To break record
- b) To do something perfunctorily
- c) To do something diligently
- d) To invite trouble
- e) To excel

165. Question

In the questions, the sentence is split into four parts and named A, B, C and D. These four parts are not given in their proper order. Read the sentence and find out which of the four combinations is correct.

- (A) Something magical is happening to our plant.
- (B) Some are calling it a paradigm shift.
- (C) It's getting smaller.
- (D) Others call it business transformation

He was a versatile writer who (A)/ that are all considered the best in their spheres (B)/ Tagore was a

poet before everything else but (C)/ wrote novels, dramas, essays, and short stories (D)

- a) ACBD
- b) ABCD
- c) ADBC
- d) BACD
- e) CABD

166. Question

Choose the best option to fill in the blank.
Astudent is unlikely to gain admission to a top-level institution

- a) vicarious
- b) mediocre
- c) putative
- d) commerce
- e) wise

167. Question

Select the meaning of the idiom like a duck in a thunderstorm

- a) trapped
- b) hopeless
- c) peaceful
- d) sad
- e) wise

168. Question

Select the meaning of the idiom
A cloud on the horizon

- a) Unfinished task
- b) Sorrow in time of joy
- c) Trouble on the way
- d) Confusion
- e) To follow a legacy

169. Question

Select the antonym of the word:
VACILLATE

- a) amplify
- b) indelible
- c) consistent
- d) stimulate
- e) amaze

170. Question

Select the odd one out from the given options

- a) rush
- b) shove
- c) push
- d) thrust
- e) move

171. Question

Select the odd one out from the given options

- a) Government
- b) Aristocracy
- c) Monarchy
- d) Oligarchy
- e) Plutocracy

172. Question

Select the synonym of the word:
TACITURNITY

- a) reserve
- b) dumbness
- c) support
- d) change
- e) hesitation

173. Question

Choose the odd one out from the given options

- a) retaliation
- b) vendetta
- c) revenge
- d) destruction
- e) rebut

174. Question

Select the option with same analogy
REBELLIOUS ;CONFIRMIST ::

- a) acquiescent;rebel
- b) accepting;taking
- c) courtesan;rude
- d) darkness;lamp
- e) laughter;barn

175. Question

In the questions, the sentence is split into four parts and named A, B, C and D. These four parts are not given in their proper order. Read the sentence and find out which of the four combinations is correct

- (A) He was a versatile writer who
- (B) That are all considered the best in their spheres
- (C) Tagore was a poet before everything else but
- (D) Wrote novels, dramas, essays, and short stories

- a) CADB
- b) BADC
- c) CABD
- d) CBAD
- e) ABDC

176. Question

Read the following passage and answer the questions below

"The emancipation of women", James Joyce told one of his friends, "has caused the greatest revolution in our time. Other modernists agree: Virginia Woolf, claiming that in about 1910 human character changed and illustrating the new balance between the sexes, urged, "Read the 'Agamemnon' and see whether your sympathies are not almost entirely with Clytemnestra". D.H. Lawrence wrote "perhaps the deepest fight for 200 years and more has been the fight for women's independence". But if modernist writers considered women's revolt against men's domination as one of their "greatest and "deepest themes, only recently, perhaps in the past 15 years has literary criticism begun to catch up with it. Not that the images of sexual antagonism that abound in modern literature have gone unremarked far from it. We are able to see in literary works the perspective we bring to them and now that women are enough to make a difference in reforming canons and interpreting literature, the landscapes of literary history and the features of individual books have begun to change. The author's attitude towards women's reformation of literary canons can best be described as one of

- a) Indifference
- b) Ambivalence
- c) Antagonism
- d) Endorsement
- e) Hatred

177. Question

Read the following passage and answer the questions below

"The emancipation of women", James Joyce told one of his friends, "has caused the greatest revolution in our time. Other modernists agree: Virginia Woolf, claiming that in about 1910 human character changed and illustrating the new balance between the sexes, urged, "Read the 'Agamemnon' and see whether your sympathies are not almost entirely with Clytemnestra. D.H. Lawrence wrote "perhaps the deepest fight for 200 years and more has been the fight for women's independence. But if modernist writers considered women's revolt against men's domination as one of their "greatest and "deepest themes, only recently, perhaps in the past 15 years has literary criticism begun to catch up with it. Not that the images of sexual antagonism that abound in modern literature have gone unremarked far from it. We are able to see in literary works the perspective we bring to them and now that women are enough to make a difference in reforming canons and interpreting literature, the landscapes of literary history and the features of individual books have begun to change. Which of the following titles best describes the contents of the passage?

- a) Transforming Literature
- b) Modernist writers and the search of equality
- c) The meaning of Literature
- d) Women Authors
- e) Sympathy in Literary

178. Question

Read the following passage and answer the questions below

"The emancipation of women", James Joyce told one of his friends, "has caused the greatest revolution in our time." Other modernists agree. Virginia Woolf, claiming that in about 1910 human character changed and illustrating the new balance between the sexes, urged, "Read the 'Agamemnon' and see whether your sympathies are not almost entirely with Clytemnestra. D.H. Lawrence wrote "perhaps the deepest fight for 200 years and more has been the fight for women's independence". But if modernist writers considered women's revolt against men's domination as one of their greatest and "deepest themes, only recently, perhaps in the past 15 years has literary criticism begun to catch up with it. Not that the images of sexual antagonism that abound in modern literature have gone unremarked far from it. We are able to see in literary works the perspective we bring to them and now that women are enough to make a difference in reforming canons and interpreting literature, the landscapes of literary history and the features of individual books have begun to change

According to the passage, modernists are changing literary criticism by

- a) studying the works of early twentieth-century writers
- b) noting instances of hostility between men and women
- c) seeing literature from fresh points of view
- d) reviewing books written by feminists
- e) being judgemental about the literary writing

179. Question

Read the following passage and answer the questions below

"The emancipation of women", James Joyce told one of his friends, "has caused the greatest revolution in our time." Other modernists agree. Virginia Woolf, claiming that in about 1910 "human character changed and illustrating the new balance between the sexes, urged, "Read the 'Agamemnon' and see whether your sympathies are not almost entirely with Clytemnestra." D.H. Lawrence wrote "perhaps the deepest fight for 200 years and more has been the fight for women's independence". But if modernist writers considered women's revolt against men's domination as one of their greatest and "deepest themes, only recently, perhaps in the past 15 years has literary criticism begun to catch up with it. Not that the images of sexual antagonism that abound in modern literature have gone unremarked far from it. We are able to see in literary works the perspective we bring to them and now that women are enough to make a difference in reforming canons and interpreting literature, the landscapes of literary history and the features of individual books have begun to change. The author quotes James Joyce, Virginia Woolf, and D.H. Lawrence primarily in order to show that

- a) before the twentieth century, there was little interest in women's literature.
- b) they were feminist writers
- c) although well-meaning, they were ineffectual
- d) literary writings and literary criticism have changed.
- e) they were philosophical

180. Question

Read the short passage below and answer the questions that follow

Marie was born in 1867 in Warsaw, Poland, where her father was a Professor of Physics. At an early age, she displayed a brilliant mind and a bit of the personality. Her great exuberance for learning prompted her to continue with her studies after high school. She became disgruntled, however, when she learned that the

university in Warsaw was closed to women. Determined to receive a higher education, she defiantly left Poland and in 1891 entered the Sorbonne, a French university, where she earned her master's degree and doctorate in physics. Marie was fortunate to have studied at the Sorbonne with some of the greatest scientists of her day, one of whom was Pierre Curie. Marie and Pierre were married in 1895 and spent many productive years working together in the physics laboratory. A short time after they discovered radium, Pierre was killed by a horse-drawn wagon in 1906. Marie was stunned by this horrible misfortune and endured heartbreaking anguish. Despondently she recalled their close relationship and the joy that they had shared in scientific research. The fact that she had two young daughters to raise by herself greatly increased her distress.

Curie's feeling of desolation finally began to fade when she was asked to succeed her husband as a physics professor at the Sorbonne. She was the first woman to be given a professorship at the world-famous university. In 1911 she received the Nobel Prize in chemistry for isolating radium. Although Marie Curie eventually suffered a fatal illness from her long exposure to radium, she never became disillusioned about her work. Regardless of the consequences, she had dedicated herself to science and to revealing the mysteries of the physical world.

When Marie learned that she could not attend the university in Warsaw, she felt

- a) Depressed
- b) Hopeless
- c) Annoyed
- d) Worried
- e)-

181. Question

Read the short passage below and answer the questions that follow

Marie was born in 1867 in Warsaw, Poland, where her father was a Professor of Physics. At an early age, she displayed a brilliant mind and a blithe personality. Her great exuberance for learning prompted her to continue with her studies after high school. She became disgruntled, however, when she learned that the university in Warsaw was closed to women. Determined to receive a higher education, she defiantly left Poland and in 1891 entered the Sorbonne, a French university where she earned her master's degree and doctorate in physics. Marie was fortunate to have studied at the Sorbonne with some of the greatest scientists of her day, one of

whom was Pierre Curie. Marie and Pierre were married in 1895 and spent many productive years working together in the physics laboratory. A short time after they discovered radium, Pierre was killed by a horse-drawn wagon in 1906. Marie was stunned by this horrible misfortune and endured heartbreaking anguish. Despondently she recalled their close relationship and the joy that they had shared in scientific research. The fact that she had two young daughters to raise by herself greatly increased her distress.

Curie's feeling of desolation finally began to fade when she was asked to succeed her husband as a physics professor at the Sorbonne. She was the first woman to be given a professorship at the world-famous university. In 1911 she received the Nobel Prize in chemistry for isolating radium. Although Marie Curie eventually suffered a fatal illness from her long exposure to radium, she never became disillusioned about her work. Regardless of the consequences, she had dedicated herself to science and to revealing the mysteries of the physical world. Marieby leaving Poland and travelling to France to enter the Sorbonne.

- a) showed disrespect
- b) challenged authority
- c) showed intelligence
- d) behaved wrong
- e) was distressed

182. Question

Read the short passage below and answer the questions that follow

Marie was born in 1867 in Warsaw, Poland, where her father was a Professor of Physics. At an early age, she displayed a brilliant mind and a blithe personality. Her great exuberance for learning prompted her to continue with her studies after high school. She became disgruntled, however, when she learned that the university in Warsaw was closed to women. Determined to receive a higher education, she defiantly left Poland and in 1891 entered the Sorbonne, a French university, where she earned her master's degree and doctorate in physics. Marie was fortunate to have studied at the Sorbonne with some of the greatest scientists of her day, one of whom was Pierre Curie. Marie and Pierre were married in 1895 and spent many productive years working together in the physics laboratory. A short time after they discovered radium, Pierre was killed by a horse-drawn wagon in 1906. Marie was stunned by this horrible misfortune and endured heartbreaking anguish. Despondently she recalled their close relationship and the joy that they had shared in

scientific research. The fact that she had two young daughters to raise by herself greatly increased her distress

Curie's feeling of desolation finally began to fade when she was asked to succeed her husband as a physics professor at the Sorbonne. She was the first woman to be given a professorship at the world-famous university. In 1911 she received the Nobel Prize in chemistry for isolating radium. Although Marie Curie eventually suffered a fatal illness from her long exposure to radium, she never became disillusioned about her work. Regardless of the consequences, she had dedicated herself to science and to revealing the mysteries of the physical world.

.....she remembered their joy together

- a) Tearfully
- b) Happily
- c) Sadly
- d) Surprisingly
- e) Dejectedly

183. Question

Read the short passage below and answer the questions that follow:

Marie was born in 1867 in Warsaw, Poland, where her father was a Professor of Physics. At an early age, she displayed a brilliant mind and a blithe personality. Her great exuberance for learning prompted her to continue with her studies after high school. She became disgruntled, however, when she learned that the university in Warsaw was closed to women. Determined to receive a higher education, she defiantly left Poland and in 1891 entered the Sorbonne, a French university, where she earned her master's degree and doctorate in physics. Marie was fortunate to have studied at the Sorbonne with some of the greatest scientists of her day, one of whom was Pierre Curie. Marie and Pierre were married in 1895 and spent many productive years working together in the physics laboratory. A short time after they discovered radium, Pierre was killed by a horse-drawn wagon in 1906. Marie was stunned by this horrible misfortune and endured heartbreaking anguish. Despondently she recalled their close relationship and the joy that they had shared in scientific research. The fact that she had two young

daughters to raise by herself greatly increased her distress

Curie's feeling of desolation finally began to fade when she was asked to succeed her husband as a physics professor at the Sorbonne. She was the first woman to be given a professorship at the world-famous university. In 1911 she received the Nobel Prize in chemistry for isolating radium. Although Marie Curie eventually suffered a fatal illness from her long exposure to radium, she never became disillusioned about her work. Regardless of the consequences, she had dedicated herself to science and to revealing the mysteries of the physical world. Marie had a bright mind and

a.....personality

- a) Lighthearted
- b) Strong
- c) Strange
- d) Humorous
- e) Detached

184. Question

A sanctuary may be defined as a place where Man is passive and the rest of Nature active. Till quite recently Nature had her sanctuaries, where man either did not go at all or only as a tool-using animal in comparatively small numbers. But now, in this machinery age, there is no place left where man cannot go with overwhelming forces at his command. He can strangle to death all the nobler wildlife in the world today. Tomorrow he certainly will have done so, unless he exercises due foresight and self-control in the meantime.

There is not the slightest doubt that birds and mammals are now being killed off much faster than they can breed. And it is always the largest and noblest forms of life that suffer most. The whales and elephants, lions and eagles, go. The rats and flies, and all mean parasites, remain. This is inevitable in certain cases. But it is wanton killing off that I am speaking of tonight. Civilized man begins by destroying the very forms of wildlife he learns to appreciate most when he becomes still more civilized. The obvious remedy is to begin conservation at an earlier stage, when it is easier and better in every way, by enforcing laws for close seasons, game preserves, the selective protection of certain species, and sanctuaries.

I have just defined a sanctuary as a place where man is passive and the rest of Nature active. But this general definition is too absolute for any special case. The mere fact that man has to protect a sanctuary does away with his purely passive attitude. Then, he can be beneficially active by destroying pests and parasites, like bot-flies or mosquitoes, and by finding antidotes

for diseases like the epidemic which periodically kills off the rabbits and thus starves many of the Carnivora to death. But, except in cases where the experiment has proved his intervention to be beneficial, the less he upsets the balance of Nature the better, even when he tries to be an earthly Providence.

It can be inferred that the passage is.....

- a) part of a speech delivered to an educated audience
- b) part of an article in a scientific journal
- c) extracted from the minutes of a nature club
- d) a speech delivered in a court of law
- e) from a polemical article published in a magazine

185. Question

- a)
- b)
- c)
- d)
- e)

186. Question

- a)
- b)
- c)
- d)
- e)

187. Question

- a)
- b)
- c)
- d)
- e)

188. Question

- a)
- b)
- c)
- d)
- e)

189. Question

- a)
- b)
- c)
- d)
- e)

190. Question

- a)
- b)
- c)
- d)
- e)

191. Question

- a)

- b)
- c)
- d)
- e)

192. Question

- a)
- b)
- c)
- d)
- e)

193. Question

- a)
- b)
- c)
- d)
- e)

194. Question

- a)
- b)
- c)
- d)
- e)

195. Question

- a)
- b)
- c)
- d)
- e)

196. Question

- a)
- b)
- c)
- d)
- e)

197. Question

- a)
- b)
- c)
- d)
- e)

198. Question

- a)
- b)
- c)
- d)
- e)

199. Question

- a)
- b)
- c)
- d)
- e)

200. Question

- a)
- b)
- c)

- d)
e)

SOLUTIONS

Logical Reasoning

1. Solution (B)

This is an alternating addition series with repetition, in which a random number, 66, is interpolated as every third number. The regular series adds 2, then 3, then 2, and so on, with 66 repeated after each "add 2" step

2. Solution(C)

Assertion (A): Cotton is grown in alluvial soils
Cotton is grown in alluvial soils as well as in black soil.
Therefore, the assertion is not completely correct or it is incorrect.

Reason (R): Alluvial soils are very fertile

Alluvial soils are very fertile because it contains silt and sand carried by the water of rivers. Therefore, the reason is correct.

Hence, the correct answer is A is false and R is true

3. Solution

Given:-

- Number of adults = 20
- Number of males = 8
- Number of vegetarian = 9
- It contains 5 male vegetarian.

To find:-

- the number of female non-vegetarian

Solution :-

So, number of females will be 12 and number of vegetarian female will be 4.

Number of non-vegetarian female will be,
= Total number of females - total number of vegetarian females

$$= 12 - 4$$

$$= 8$$

4. Solution(A)

$$= 4$$

5. Solution(B)

13 upper 37 83 42 bench lower floor

6. Solution(C)

Vaccines prevent diseases by developing immunity inside the body and vaccines must be given to children to build in them a resistance against diseases. Hence, option B is correct.

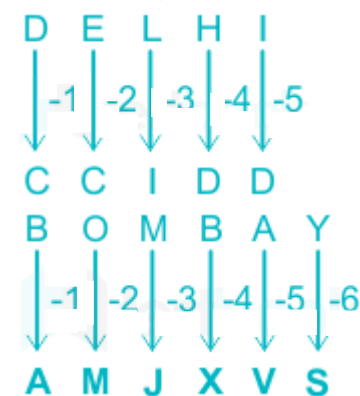
7. Solution(C)

Divided the word in half parts and reverse them.
so answer is CARFNOIT

8. Solution (C)

$$= 3$$

9. Solution (C)



10. Solution (A)

= Neither Assumption A nor Assumption B are implicit

11. Solution (C)

.

Given:

- $(G = 27)$ (the number of children who can play Guitar),
- $(B = 15)$ (the number of children who can play both Guitar and Sitar), and
- $(\text{Total children}) = 60$,

we can use the principle of inclusion-exclusion to find (S) :

$$\text{Total children} = G + S - B$$

Substituting the given values:

$$60 = 27 + S - 15$$

Now, let's solve for (S) :

$$\begin{aligned} 60 &= 27 + S - 15 \\ 60 &= 12 + S \\ S &= 60 - 12 \\ S &= 48 \end{aligned}$$

It seems I made a calculation error. Let me correct it:

$$\begin{aligned} S &= 60 - 12 \\ S &= 48 \end{aligned}$$

So, there are indeed 48 children who can play only Sitar. But the correct number of children who can play only Sitar should be:

$$S = 60 - 27 + 15 = 48 - 15 = 33$$

There are 33 children who can play only Sitar. Thanks for pointing that out!

12. Solution (A)

Rains are caused when the atmosphere in upper reaches cannot hold more water. But the downpour of rain increases the humidity in the atmosphere near the earth's surface. Hence, option A is correct

13. Solution (A)

The correct option is D 16
Ram is 7 ranks ahead of Shyam in a class of 39. Shyam's rank is 17th from the bottom. It means Ram's rank is $17 + 7 = 24$ th from the bottom. Ram's rank from the top, $= 39 - 24 + 1 = 16^{\text{th}}$

14. Solution (B)

1. 816321 ----> The brown dog frightened the cat. 'The' appears twice in the sentence. In the code '1' appears twice as well. Therefore, 1 = The.
2. 64851 ----> The frightened cat ran away.
3. 7621 ----> The cat was brown. The common words and numbers in above two statements are 'the', 'cat' and '1', '6' respectively. Since 1 corresponds to 'The', 6 = cat
4. 341 ----> The dog ran. The common words and numbers in statement (2) and (4) are 'The', 'ran' and '1', '4' respectively. This implies, 4 = ran and 3 = dog

5. Comparing statements (3) and (1), we can conclude in similar way that 2 = brown. Therefore, 7 = was.

6. Comparing statements (1) and (2), 8 = frightened

15. Solution (C)

=43

16. Solution (OPTION C)

Five friends A, B, C, D & E went to college, each one of them reached at different times.

1) B reached after C & D

$B < C \& D$

2) A and E reached before C & D

$B < C \& D < A \text{ and } E$

Clearly, B is the last person to reach

Hence, 'B' is the correct answer.

17. Solution (B)

The correct option is B Only assumption I is implicit
The statement says that mother is warning child and in assumption I there is possibility that with warning, child may stop troubling her. So assumption I is implicit

In assumption II it defines nature of children which is not given in statement. So option B is correct.

18. Solution (E)

Cannot be determined

From the given step III, it is not possible to determine the input.

19. Solution (B)

From the 3rd statement, the code word for 'the' is 'pus' because each occur twice.

From 1st and 3rd statement 'bro' stands for 'cat'.

From 2nd and 3rd statement, 'dim' stands for 'dog'.

Thus in the 3rd Statement, 'cus' stands for 'has'.

20. Solution (C)

Total boys

$= [\text{Mahendra's place from left} + \text{Surendra's place from right}] + [\text{Boys between them}]$

$= [17 + 18] + 8 = 43$

21. Solution(B)

$42 - 40 = 2$, $40 - 38 = 2$, $38 - 35 = 3$, $35 - 33 = 2$, $33 - 31 = 2$, $31 - 28 = 3$, $28 - 26 = 2$, $26 - 24 = 2$, option (B) **26,24** is correct answer.

22. Solution(A)

The correct option is D Grand daughter

D is the father of C and C is the mother of B.

Thus, A is the granddaughter of D.

23. Solution (A)

=Neither Assumption A nor Assumption B are implicit

24. Solution (A)

=289

25. Solution (D)

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

A is true but R is false. When in winter, hot water is poured in the glass tumbler, its inner surface tends to expand while the outer surface in contact with cold atmosphere does not. This opposite interaction causes the tumbler to break. So in winter a glass tumbler breaks when the hot water is poured in it. So the assertion in winter, a Glass tumbler breaks when hot water is poured in it is true but the reason the outer surface of glass expands when hot water is poured into it is false.

26. Solution (C)

= 36

Here, the series follows a pattern of the sum of consecutive odd numbers.

$$11+1=12$$

$$12+3=15$$

$$15+5=20$$

$$20+7=27$$

$$27+9=36.$$

Hence, the missing number would be 36.

27. Solution (E)

A is married to C and is the father of F.

C is married to A and is the mother of F.

D is the father of A and F's grandfather.

B is the brother of A and E's husband.

E is married to B.

F is the child of A and C, and the grandchild of D.

28. Solution (C)

=14

29. Solution (A)

=3

The correct option is B 3

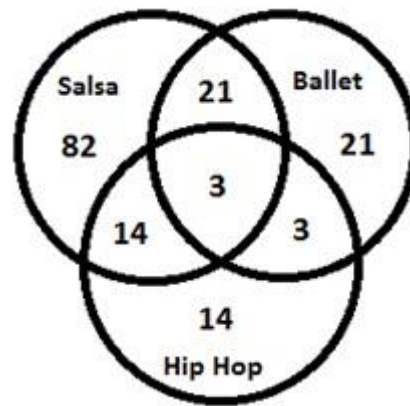
Original word: HEARTLESS

Independent words are: HE, LESS and ART without using the letters twice. Otherwise there are many words.

Thus, there are 3 independent words.

30. Solution (C)

=82



From the above diagram, following equations can be formed:

$$\text{Dancers who learn Salsa} = \frac{240}{2} = 120$$

$$\text{Dancers who learn Ballet} = \frac{240}{5} = 48$$

$$\text{Dancers who learn Hip Hop} = \frac{240}{7} = 34$$

The 10th, 20th, 30th..... Numbered dancers learn both Salsa and

The 14th, 28th, 42nd..... Numbered dancers learn both Salsa and

The 35th, 70th.... Numbered dancers learn both Ballet and Hip

And 3 dancers, the 70th, 140th, 210th numbered, learn all the three

Dancers who learn none of the three dance forms = 240-158 =

31. Solution (E)

= T

From the first statement,

"You are as old as R was" $\Rightarrow Q < R$

"I was twice as old as S" $\Rightarrow P > S$

"and will be as old as T was" $\Rightarrow Q < T$

"T was when he was as old as R is now" $\Rightarrow T > R \Rightarrow P >$

S, $T > R > Q$

From the second statement,

"You may be older than U" $\Rightarrow P > U$

"but V is as old as I was when you were as old as V is"

$\Rightarrow Q = P > V$

"S will be as old as U" $\Rightarrow U > S$

"when U is as old as V" $\Rightarrow V > U$

$\Rightarrow Q = P > V > U > S$

Combining the two results, we get: $T > R > Q = P > V > U > S$

So, T is the eldest sister

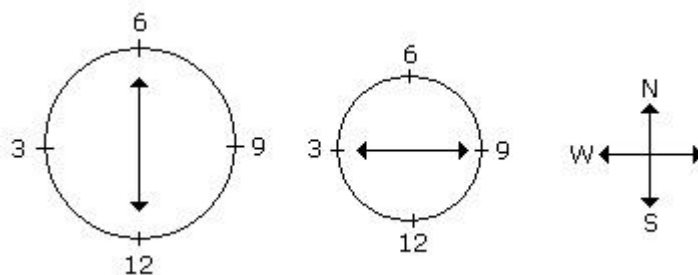
32. Solution (D)

=Both Assumption A and Assumption B are implicit

33. Solution (D)

= 8

the first statement, the code digit '1' as well as the word 'the' occurs twice. So, '1' is the code for 'the'.



39. Solution

40. Solution (C)

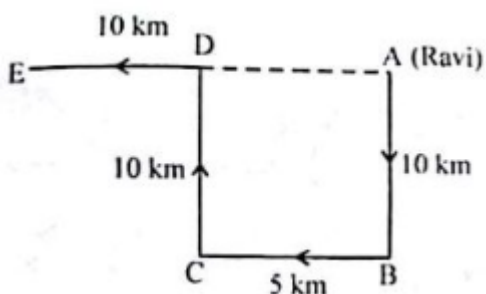
= The correct option is C 15 km

Here, Ravi starts from home at A, moves 10 km southwards up to B, turns right and moves 10 km up to C, turns right again and moves 10 km up to D and finally turns left and moves 10 km up to E.

Thus, his distance from initial position A = AE

= AD + DE

= BC + DE = (5 + 10) km = 15 km.



41. Solution (A)

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

- India is situated north of the equator between $8^{\circ}4'$ N to $37^{\circ}6'$ N latitude and $68^{\circ}7'$ east to $97^{\circ}25'$ east longitude. That is, India lies entirely in the Northern Hemisphere.

- The tropical region of the Earth is generally defined geographically as the area between the Tropic of Cancer, situated at 23.5° N latitude, and the Tropic of Capricorn at 23.5° S. The tropics are also sometimes said to be the latitudes that lie between and partly include the subtropical high- pressure regions centered on average at about $30-35^{\circ}$ N and S latitudes. Thus, the reason is false.

- India hosts two climatic subtypes- tropical monsoon climate, tropical wet and dry climate that fall under this group.

- The most humid is the tropical wet climate, also known as tropical monsoon climate, covering a strip of southwestern lowlands abutting the Malabar Coast, the Western Ghats, and southern Assam.

Thus, India does have a tropical monsoon-type climate.

Hence, the assertion is true and the reason is false.

42. Solution (C)

56149512965

43. Solution (b)

= North

The correct option is A North

In the evening, as the sun is in the west, so the shadows fall towards the east.

Now, since Manju's shadow fell exactly to her left side, therefore Manju is facing south.

Hence, Sanju standing face to face with Manju, was facing north.

44. Solution (D)

= There is two days gap between rest day and gymnasium

Workouts are cycling, rowing, gymnasium, jogging and boxing. From the second and third clues (gymnasium workout is done neither on the first nor on the last day but was done earlier than rowing and jogging was done on the day immediately following the rowing day), we know that rowing and jogging should be together and also that gymnasium has to be somewhere before this. Visually this can be represented as:



From the fourth and sixth clues we have: C-Rest day-B

Note: Putting it in a box signifies that there is no break between the items in the box. Once we have these two visual representations we can go back to our original figure and think as follows:

Monday	Tuesday	Wednesday	Thursday
--------	---------	-----------	----------

Since gymnasium has to precede rowing and jogging, and gymnasium is not on the first day we can have 3 possibilities for placing gymnasium—viz: Tuesday, Wednesday or Thursday. Possibility 1:

Monday	Gymnasium
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

This case is rejected because, once we place gymnasium we would need to place rowing and

boxing in either Wednesday-Thursday or Thursday-Friday or Friday- Saturday. In each of these cases, we would also need to place a 3 day period having Cycling-Rest day-Boxing.It can be easily seen that in any of these 3 situations under Possibility 1, we do not have a completely free 3 day period anywhere in the week. Thus, we can reject Possibility 1. Possibility 2:

Monday	Gymnasium
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

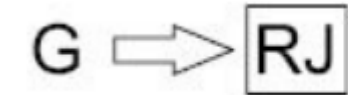
Rejected on the same logic as Possibility 1. There is no availability of a 3 day window to place Cycling-Rest day-Boxing. Possibility 3
This is the only possibility that would work as in this case, the respective work outs ordering would be

Monday	Cycling Rest Boxing Gymnasium Rowing Jogging
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

45. Solution (C)

= TUESDAY

Workouts are cycling, rowing, gymnasium, jogging and boxing. From the second and third clues (gymnasium workout is done neither on the first nor on the last day but was done earlier than rowing and jogging was done on the day immediately following the rowing day), we know that rowing and jogging should be together and also that gymnasium has to be somewhere before this. Visually this can be represented as:



From the fourth and sixth clues we have: C-Rest day-B
Note: Putting it in a box signifies that there is no break between the items in the box. Once we have these two visual representations we can go back to our original figure and think as follows:

Monday	Tuesday	Wednesday	Thursday
--------	---------	-----------	----------

Since gymnasium has to precede rowing and jogging, and gymnasium is not on the first day we can have 3 possibilities for placing gymnasium—viz: Tuesday, Wednesday or Thursday. Possibility 1:

Monday	Gymnasium
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

This case is rejected because, once we place gymnasium we would need to place rowing and boxing in either Wednesday-Thursday or Thursday-Friday or Friday- Saturday. In each of these cases, we would also need to place a 3 day period having Cycling-Rest day-Boxing.It can be easily seen that in any of these 3 situations under Possibility 1, we do not have a completely free 3 day period anywhere in the week. Thus, we can reject Possibility 1. Possibility 2:

Monday	Gymnasium
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

Rejected on the same logic as Possibility 1. There is no availability of a 3 day window to place Cycling-Rest day-Boxing. Possibility 3
This is the only possibility that would work as in this case, the respective work outs ordering would be

Monday	Cycling Rest Day Boxing Gymnasium Rowing Jogging
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

46. Solution (D)
=FOUR
Workouts are cycling, rowing, gymnasium, jogging and boxing. From the second and third clues (gymnasium workout is done neither on the first nor on the last day but was done earlier than rowing and jogging was done on the day immediately following the rowing day), we know that rowing and jogging should be together and also that gymnasium has to be somewhere before this. Visually this can be represented as:



From the fourth and sixth clues we have: C-Rest day-B
 Note: Putting it in a box signifies that there is no break between the items in the box. Once we have these two visual representations we can go back to our original figure and think as follows:

Monday	Tuesday	Wednesday	Thursday

Since gymnasium has to precede rowing and jogging, and gymnasium is not on the first day we can have 3 possibilities for placing gymnasium—viz: Tuesday, Wednesday or Thursday. Possibility 1:

Monday	Gymnasium
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

This case is rejected because, once we place gymnasium we would need to place rowing and boxing in either Wednesday-Thursday or Thursday-Friday or Friday- Saturday. In each of these cases, we would also need to place a 3 day period having Cycling-Rest day-Boxing. It can be easily seen that in any of these 3 situations under Possibility 1, we do not have a completely free 3 day period anywhere in the week. Thus, we can reject Possibility 1. Possibility 2:

Monday	Gymnasium
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

Rejected on the same logic as Possibility 1. There is no availability of a 3 day window to place Cycling-Rest day-Boxing. Possibility 3

This is the only possibility that would work as in this case, the respective work outs ordering would be

Monday	Cycling Rest day Boxing Gymnasium Rowing Jogging
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

Workouts are cycling, rowing, gymnasium, jogging and boxing. From the second and third clues (gymnasium workout is done neither on the first nor on the last day but was done earlier than rowing and jogging was done on the day immediately following the rowing day), we know that rowing and jogging should be together and also that gymnasium has to be somewhere before this. Visually this can be represented as:



From the fourth and sixth clues we have: C-Rest day-B
 Note: Putting it in a box signifies that there is no break between the items in the box. Once we have these two visual representations we can go back to our original figure and think as follows:

Monday	Tuesday	Wednesday	Thursday

Since gymnasium has to precede rowing and jogging, and gymnasium is not on the first day we can have 3 possibilities for placing gymnasium—viz: Tuesday, Wednesday or Thursday. Possibility 1:

Monday	Gymnasium
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

This case is rejected because, once we place gymnasium we would need to place rowing and boxing in either Wednesday-Thursday or Thursday-Friday or Friday- Saturday. In each of these cases, we would also need to place a 3 day period having Cycling-Rest day-Boxing. It can be easily seen that in any of these 3 situations under Possibility 1, we do not have a completely free 3 day period anywhere in the week. Thus, we can reject Possibility 1. Possibility 2:

Monday	Gymnasium
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

Rejected on the same logic as Possibility 1. There is no availability of a 3 day window to place Cycling-Rest day-Boxing. Possibility 3

This is the only possibility that would work as in this case, the respective work outs ordering would be

Monday	Cycli
Tuesday	Rest
Wednesday	Boxi
Thursday	Gym
Friday	Row
Saturday	Joggi

48. Solution (a)

=CHANDAR

:From the clues it is evident that ACEB should be 4 people in that order and should be sitting together with no one in between. This means that they can be seated in one of the following 3 ways:

Possibility 1: A C E B __

Possibility 2: _A C E B _

Possibility 3: __A C E B

This leaves us to place two people—D and F. Since, Devdas is not at the end and Ferguson is not at the right end, we know that Possibility 1 and Possibility 2 get rejected. This leaves us with Possibility 3 and the final placement would be:

F D A C E B

49. Solution (E)

= Ferguson

:From the clues it is evident that ACEB should be 4 people in that order and should be sitting together with no one in between. This means that they can be seated in one of the following 3 ways:

Possibility 1: A C E B __

Possibility 2: _A C E B _

Possibility 3: __A C E B

This leaves us to place two people—D and F. Since, Devdas is not at the end and Ferguson is not at the right end, we know that Possibility 1 and Possibility 2 get rejected. This leaves us with Possibility 3 and the final placement would be:

F D A C E B

50. Solution (B)

=Devdas

:From the clues it is evident that ACEB should be 4 people in that order and should be sitting together with no one in between. This means that they can be seated in one of the following 3 ways:

Possibility 1: A C E B __

Possibility 2: _A C E B _

Possibility 3: __A C E B

This leaves us to place two people—D and F. Since, Devdas is not at the end and Ferguson is not at the right end, we know that Possibility 1 and Possibility 2 get rejected. This leaves us with Possibility 3 and the final placement would be:

F D A C E B

51. Solution (A)

=THREE

:From the clues it is evident that ACEB should be 4 people in that order and should be sitting together with no one in between. This means that they can be seated in one of the following 3 ways:

Possibility 1: A C E B __

Possibility 2: _A C E B _

Possibility 3: __A C E B

This leaves us to place two people—D and F. Since, Devdas is not at the end and Ferguson is not at the right end, we know that Possibility 1 and Possibility 2 get rejected. This leaves us with Possibility 3 and the final placement would be:

F D A C E B

52. Solution (E)

=T

For this question, start by using the direct clues first. We know that there are six cards P, Q, R, S, T, U; six colours—blue, red, green, grey, yellow and brown and, six pictures—King, Princess, Queen, Palace, Joker and Prince. The following set of deductions gives us the entire solution of the problem. The second part of the third statement is the most directly usable → P-Brown-Queen-Extreme right. We also know that R-King-Grey-Fifth from Right (ivth statement). Also Q being next to R, the following arrangements are possible Possibility Table 1:

Q	R	--	--	--
	King			
	Grey			

And Possibility Table 2:

--	R	Q	--	--
	King			

From this point we start using the indirect clues. From statement (iii), Palace-Blue-Not S → Hence T or U Further, from statement (iv), Princess —Not S and not T, → Not Green or Yellow → Hence, Red and U. This further gives us Palace —TBlue. Hence, S must be the joker (only pair left). Also, green and yellow must be shared between Q and S. Thus, the following pairings emerge:

- P — Brown — Queen
- Q — Green/Yellow — Prince
- R — Grey — King
- S — Yellow/Green —Joker
- T — Blue —Palace
- U — Red — Princess

At this point we have used all the statements. Hence go straight into the questions. For Question 1: for the Princess card (U) to be immediately between the Palace (T) and the Prince(Q), Possibility Table 2 must emerge to be the correct one. In such a case, the arrangement of cards becomes:
S R Q U T P

53. Solution(E)
=DATA INEDEQAUTE

For this question, start by using the direct clues first. We know that there are six cards P, Q, R, S, T, U; six colours—blue, red, green, grey, yellow and brown and, six pictures—King, Princess, Queen, Palace, Joker and Prince. The following set of deductions gives us the entire solution of the problem. The second part of the third statement is the most directly usable → P-Brown-Queen-Extreme right. We also know that R-King-Grey-Fifth from Right (iv th statement). Also Q being next to R, the following arrangements are possible Possibility Table 1:

Q	R	--	--
	King		
	Grey		

And Possibility Table 2:

--	R	Q	--
	King		

From this point we start using the indirect clues. From statement (iii), Palace-Blue-Not S → Hence T or U Further, from statement (iv), Princess —Not S and not T, → Not Green or Yellow → Hence, Red and U. This further gives us Palace —TBlue. Hence, S must be the joker (only pair left). Also, green and yellow must be

shared between Q and S. Thus, the following pairings emerge:

- P — Brown — Queen
- Q — Green/Yellow — Prince
- R — Grey — King
- S — Yellow/Green —Joker
- T — Blue —Palace
- U — Red — Princess

At this point we have used all the statements. Hence go straight into the questions. For Question 1: for the Princess card (U) to be immediately between the Palace (T) and the Prince(Q), Possibility Table 2 must emerge to be the correct one. In such a case, the arrangement of cards becomes:
S R Q U T P

54. Solution(B)
=FIRST

For this question, start by using the direct clues first. We know that there are six cards P, Q, R, S, T, U; six colours—blue, red, green, grey, yellow and brown and, six pictures—King, Princess, Queen, Palace, Joker and Prince. The following set of deductions gives us the entire solution of the problem. The second part of the third statement is the most directly usable → P-Brown-Queen-Extreme right. We also know that R-King-Grey-Fifth from Right (iv th statement). Also Q being next to R, the following arrangements are possible Possibility Table 1:

Q	R	--	--	--
	King			
	Grey			

And Possibility Table 2:

--	R	Q	--	--
	King			

From this point we start using the indirect clues. From statement (iii), Palace-Blue-Not S → Hence T or U Further, from statement (iv), Princess —Not S and not T, → Not Green or Yellow → Hence, Red and U. This further gives us Palace —TBlue. Hence, S must be the joker (only pair left). Also, green and yellow must be shared between Q and S. Thus, the following pairings emerge:

- P — Brown — Queen
- Q — Green/Yellow — Prince
- R — Grey — King
- S — Yellow/Green —Joker
- T — Blue —Palace
- U — Red — Princess

At this point we have used all the statements. Hence go straight into the questions. For Question 1: for the Princess card (U) to be immediately between the Palace (T) and the Prince(Q), Possibility Table 2 must emerge to be the correct one. In such a case, the arrangement of cards becomes:

S R Q U T P

55. Solution (C)

=U-RED

For this question, start by using the direct clues first. We know that there are six cards P, Q, R, S, T, U; six colours—blue, red, green, grey, yellow and brown and, six pictures—King, Princess, Queen, Palace, Joker and Prince. The following set of deductions gives us the entire solution of the problem. The second part of the third statement is the most directly usable → P-Brown-Queen-Extreme right. We also know that R-King-Grey-Fifth from Right (iv th statement). Also Q being next to R, the following arrangements are possible Possibility Table 1:

Q	R	--	--
	King		
	Grey		

And Possibility Table 2:

--	R	Q	--
	King		

From this point we start using the indirect clues. From statement (iii), Palace-Blue-Not S → Hence T or U Further, from statement (iv), Princess —Not S and not T, → Not Green or Yellow → Hence, Red and U. This further gives us Palace —TBlue. Hence, S must be the joker (only pair left). Also, green and yellow must be shared between Q and S. Thus, the following pairings emerge:

P — Brown — Queen

Q — Green/Yellow — Prince

R — Grey — King

S — Yellow/Green — Joker

T — Blue — Palace

U — Red — Princess

At this point we have used all the statements. Hence go straight into the questions. For Question 1: for the Princess card (U) to be immediately between the Palace (T) and the Prince(Q), Possibility Table 2 must emerge to be the correct one. In such a case, the arrangement of cards becomes:

S R Q U T P

56. Solution

57. Solution

58. Solution

59. Solution(A)

Brothers-in-law

- 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 married, and they have children named Ashok and Sanjay.

- Geeta and Rakesh are children of Mr and Mrs Gupta.

- Geeta is married to Surinder and has three children named Rita, Sonu, and Raju.

Given that Sunil is married to Geeta's sister, and Surinder is Geeta's brother, it means Sunil is Surinder's brother-in-law.

So, Sunil and Surinder are related as brothers-in-law.

60. Solution(C)

= Maternal Uncle

The correct option is C Maternal Uncle Rajinder is the brother of Seeta and Ashok is Seeta's son.

So, Rajinder is the natural uncle Ashok

61. Solution (B)

= AUNT

The correct option is B Aunt

Renu is the sister of Sunil and Sanjay is the son of Sunil.

So, Renu is the Sanjay's aunt.

62. Solution (D)

=D

Let's reassess the options:

D. The square immediately northeast of the rice: Since rice is in the middle square, and wheat needs to be planted next to peanuts, and then barley, let's consider the placement:

- Rice (middle square)

- Peanuts (northwest square)

- Wheat (adjacent to peanuts)

- Barley (adjacent to wheat)

Given this arrangement, barley would indeed be in the square immediately northeast of the rice.

63. Solution (A)
=C

C. The square immediately west of the rice: If wheat is planted in the square immediately west of the rice, barley could be planted in the square immediately east of the rice to maintain continuity between wheat and barley. Therefore, wheat can be planted in this square.

So, option C, "The square immediately west of the rice," can indeed be planted with wheat.

64. Solution(D)
=D

D. The square immediately northeast of the rice: If soybeans are planted in the square immediately northeast of the rice, there are no restrictions mentioned that prevent soybeans from being planted there. Therefore, soybeans can indeed be planted in this square.

65. Solution (A)

The correct option is D 21.57%

Total readership of ABC = $x + 3 + 1.2 + 0.8 = 9.7$ lakh $\Rightarrow x = 4.7$ lakh

Total readership of DEF = $y + 3 + 1.2 + 2.3 = 9.1$ lakh $\Rightarrow y = 2.6$ lakh

Total readership of GHI = $z + 1.2 + 2.3 + 0.8 = 8.9$ lakh $\Rightarrow z = 4.6$ lakh

Therefore, number of people reading at least 1 = $4.7 + 2.6 + 4.6 + 3 + 1.2 + 0.8 + 2.3 = 19.2$ lakh

As a % of total population = $19.2 / 89 * 100 = 21.57\%$

66. Solution (B)

1. Car A starts from one end of the main road and travels 25 km east.

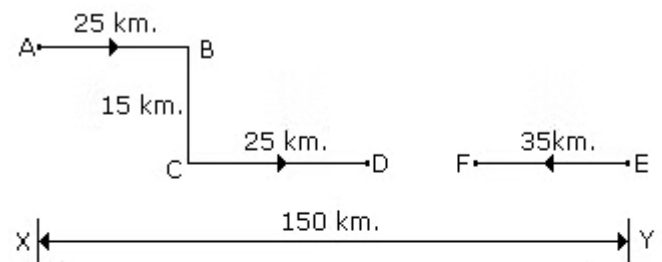
2. Car A takes a right turn and travels 15 km south.

3. Car A then takes a left turn and travels 25 km east.

4. Finally, Car A takes another left turn and heads back towards the main road, which would make it travel northward.

Given these movements, if Car A is heading back towards the main road after its last left turn, it would indeed be facing EAST.

67. Solution (C)
=65KM



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

68. Solution (A)
=40

69. Solution (B)
=125

To solve this problem, let's first visualize the cube after it's been painted. We'll denote the colors as follows:

- Yellow: Y
- Blue: B
- Red: R

Since opposite faces are painted with the same color, we can represent one possible arrangement of the cube's faces as:

```

...
  Y Y
  Y Y
R R B B
R R B B
...

```

Now, when we cut this cube into smaller blocks, each block will either have 0, 1, 2, or 3 sides painted.

Let's analyze the possibilities:

1. Blocks with 0 painted sides: These blocks are located at the center of the cube. Since the original cube has dimensions $7 \times 7 \times 7$ (7 blocks along each edge), the innermost layer will be a $5 \times 5 \times 5$ cube, and all the blocks in this inner cube will have 0 sides

painted. The number of blocks in this inner cube is $(5 \times 5 \times 5 = 125)$.

2. Blocks with 1 painted side: These blocks are the ones on the edges of the inner cube. Each edge of the inner cube has 5 blocks with exactly one side painted. There are 12 such edges in the cube, so there are $(12 \times 5 = 60)$ blocks with 1 painted side.

3. Blocks with 2 painted sides: These blocks are the ones on the faces of the original cube, excluding the edges. Each face of the original cube has $(7 \times 7 = 49)$ blocks, but we exclude the 10 blocks on the edges. So, there are $(6 \times 49 = 294)$ blocks with 2 painted sides.

4. Blocks with 3 painted sides: These blocks are the ones on the edges of the original cube. Each edge of the original cube has 7 blocks with 3 sides painted. There are 12 such edges, so there are $(12 \times 7 = 84)$ blocks with 3 painted sides.

Now, adding up all these possibilities:

- Blocks with 0 painted sides: 125
- Blocks with 1 painted side: 60
- Blocks with 2 painted sides: 294
- Blocks with 3 painted sides: 84

So, the total number of blocks with 0 sides painted is (125) .

70. Solution (C)

To find the dimensions of the original cube before it was cut into 343 smaller blocks, we need to consider the total number of smaller blocks.

If the original cube is cut into (343) smaller blocks of size $1 \times 1 \times 1$ it means the original cube was composed of $7 \times 7 \times 7$ smaller blocks. This is because $7 \times 7 \times 7 = 343$.

So, the dimensions of the original cube $7 \times 7 \times 7$ which matches option:

c) $7 \times 7 \times 7$

71. Solution(C)

=8

To solve this problem, let's first understand how the colors are distributed on the original cube. Since each color is painted on pairs of opposite faces, the opposite faces must have the same color.

Given that the cube has been cut into 343 smaller blocks, which means it originally had dimensions $7 \times 7 \times 7$ we can deduce the arrangement of colors.

Consider one layer of the cube:

```

'''
    YYYYYYYY
    YYYYYYYY
YYYYYYYYYYY
YYYYYYYYYYY
YYYYYYYYYYY
YYYYYYYYYYY
    R R B B R R B
    R R B B R R B
        B B B B B B
        B B B B B B
'''

```

In this representation, Y denotes yellow, R denotes red, and B denotes blue. Each color appears on two opposing faces. From this, we can see that the blocks with three sides painted with three different colors are the blocks in the corners of the original cube. There are 8 such corners in total.

So, the correct answer is:

c) 8

72. Solution (A)

= Laila is the niece of Gajodhar.

1. Chand and Kalini have a family of three generations comprising thirteen members, including six females.
2. Some of Chand's children are married, but none of his grandchildren are married.
3. Kalini has a daughter-in-law named Manara and two sons-in-law, one being Wadhwaran.
4. Gajodhar's brother is Mahesh, who has two nephews and two nieces, one being Laila.
5. Vandana, Mahesh's sister, has two children.
6. Manara, who is a sister-in-law to Mahesh, has four nephews and nieces.
7. Manohar, who is married to Sita, has a daughter Mira and a son Roy. He also has a sister and two cousins, Akash and Mira.

73. Solution (C)

= Mahesh- Sita

1. Chand and Kalini have a family of three generations comprising thirteen members, including six females.

2. Some of Chand's children are married, but none of his grandchildren are married.
3. Kalini has a daughter-in-law named Manara and two sons-in-law, one being Wadhwaran.
4. Gajodhar's brother is Mahesh, who has two nephews and two nieces, one being Laila.
5. Vandana, Mahesh's sister, has two children.
6. Manara, who is a sister-in-law to Mahesh, has four nephews and nieces.
7. Manohar, who is married to Sita, has a daughter Mira and a son Roy. He also has a sister and two cousins, Akash and Mira.

74. Solution (C)
= Roy is Sita's child
c) Roy is Sita's child.

Given the information provided, Manohar, who is married to Sita, has a daughter named Mira and a son named Roy. This statement is incorrect; Roy is not Sita's child but rather her son-in-law's child.

So, the false statement is indeed:

c) Roy is Sita's child.

75. Solution(B)
= Sita

Abstract Reasoning

76. Solution =E
77. Solution =D
78. Solution =A
79. Solution =E
80. Solution =A
81. Solution =D
82. Solution =C
83. Solution =D
84. Solution =D
85. Solution =B
86. Solution =C
87. Solution =D
88. Solution =C
89. Solution =E
90. Solution =B
91. Solution =C

92. Solution =B
93. Solution =A
94. Solution =E
95. Solution =E
96. Solution =C
97. Solution =D
98. Solution =E
99. Solution =D
100. Solution =C

101. Solution (D)
Rs 3972

SOLUTION=

Given: 60% increase in amount in 6 yrs at SI

To find: CI of Rs 12,000 after 3 yrs at

Same rate

We know that

$SI = (P \times R \times T) / 100$

Where, SI = Simple interest

P = Principle

R = rate of interest

t = time period

and $A = SI + P$ (2)

Where, A = amount

Let principal be Rs.P

$AP + 60\%$ of P

$A = P + (60/100) * P$

$A = (8P)/5$ (1)

also from eq (2)

$A = SI + P$ (putting value of A from eq(1))

$(8P)/5 = (PR * 6)/100 + P$

$(8 \wedge 2)/5 = (6R)/100 + 1$

boxed $R = 10\%$...(3)

for; compound interest

$A = P * (1 + R/100) ^ n$

n = time period

$A = 12000 * (1 + 10/100) ^ 3$ putting value of R from eq (3)]

$A = \text{Rs } 15972...$ (4) [putting value of R from eq (3)]

Compound Interest = Amount - Principal (Putting value of A and P) = $15972 - 12000$ CI = Rs 3972

102. Solution (B)

16(4/11) minutes past 9

=At 9 o'clock, the minute hand is $9 \times 5 = 45$ minute - spaces behind the hour hand. Therefore, the minute hand will have to gain $45 - 30 = 10$ minute space over the hour hand.

Gain of 55 minute spaces equals 60 minutes

. Gain of 15 minute spaces equals ==

$60/55 * 15 = 180/11 = 16(4/11)$

Therefore, hour and minute hands of a clock point in opposite direction after
90' clock at $16\frac{4}{11}$ minutes past 9

103. Solution (C)

= 84

For this, we find the HCF of the length and breadth of the field. $HCF(180, 105) = 15$ Therefore, size of each tile = 15m x 15m Also, number of tiles = area of field / area of each tile \Rightarrow Number of tiles = $(180 \times 105) / (15 \times 15) \Rightarrow$ Number of tiles = **84** Hence, we need 84 tiles, each of size 15m x 15m.

104. Solution (C)

=Time = 15 minutes past 5

Angle = $\theta = 60^\circ \times \text{hour} - 11^\circ \times \text{minute} / 2$

And another angle = $(360 - \theta)^\circ$

$60 \times 5 - 11 \times 15 / 2$

$(135/2)^\circ$

=67.5

And another angle = $(3600)^\circ = (360 - 67.5)^\circ = 292.5^\circ$

Hence, '67 $1/2^\circ$ ' is the correct answer

105. Solution(C)

=35

As $\frac{146}{5^1} = 29.2 \approx 29$

$\frac{146}{5^2} = 5.84 \approx 5$

$\frac{146}{5^3} = 1.168 \approx 1$

$\frac{146}{5^4} = 0.2336 \approx 0$

The required number is $29 + 5 + 1 = 35$

Therefore, The maximum value of n is 35.

106. Solution (B)

Let AB and CD be the two towers.

The height of the first tower is AB = 160m

The horizontal distance between the two towers is BD = 75m

And the angle of depression of the first tower as seen from the top of the second tower is $\angle ACE = 45^\circ$

In $\triangle ACE$

$(AE)/(EC) = \tan 45^\circ = 1$

$AE = EC = BD = 75\text{m}$

$\therefore CD = EB = AB - AE = (160 - 75) = 85\text{m}$

Hence, height of the other tower is 85 m.

107. Solution (B)

=5/3

108. Solution (A)

=9660

109. Solution (C)

= 28

Let the Units digit of the Number be Y and the Tens digit be X. The number can be represented as $10X + Y$

According to the Question Stem: $X + Y = 10$

When the number is reversed we get $10Y + X$ as the new number.

According to the question stem: $(10X + Y) - (10Y + X) = 54$, Simplifying we get $9X - 9Y = 54$ or $9(X - Y) = X - Y = 6$

Putting this in the original equation we get two equations; $X + Y = 10$ (1) and $X - Y = 6$ (2)

Solving 1 & 2 we get $X = 8$ Y comes out to 2, and the Original Number is 82. The new number is 28

110. Solution (E)

= 5%

111. Solution (C)

=Number of capsules purchased = x

$216/x = 216/(x + 15) + 10$

$x = 12$ satisfies the equation.

112. Solution (C)

=Profit % = $(9954 - 6531)/6531 \times 100$

= 52.41 or 52% approx.

113. Solution (C)

=11/50

The correct option is C

11/50

(probability of 2 drawn cards being spade when missing card is spade)/(probability of 2 drawn cards being spade when missing card is spade + probability of 2 drawn cards being spade when missing card is not spade)

$= \frac{(18 \times {}^{12}C_2 \times {}^5C_2)}{(18 \times {}^{12}C_2 + 3 \times ({}^5C_2))} \times \frac{13}{({}^5C_2)}$

$= \frac{(12 \times 11)}{(12 \times 11 + 3 \times 13 \times 12)} = 11/50$

114. Solution(D)

=6900

S.P for the first car = ₹ 5,400 and profit = 20%

... C.P for the first car $100/120 \times 5,400 = ₹ 4,500$

S.P for the second car = ₹ 3,300 and profit = 10%

C.P for second car = $100/110 \times 3,300 = ₹ 3,000$

and loss = 75/8%

P of three cars = $5,400 + 3,000 + 4,350 = ₹ 13,050$

Total C. P for the three cars = $(100 \times 8)/725 \times 13050 = 14,400$

... C.P for third car = $14,400 - 4,500 - 3,000 = 6,900$

115. Solution (C)

Volume of the earth = $\pi r^2 H$ where H is the depth of the well.

$$= \frac{22}{7} \times 3.5^2 \times 22.5$$

$$= 866.25 \text{ cubic metre.}$$

This earth is used to make the embankment.

Volume of earth (embankment) = $\pi R^2 H - \pi r^2 h$

$$\frac{22}{7} \times (10.5 + 3.5)^2 \times h - \frac{22}{7} \times (3.5)^2 \times h = 866.25$$

$$\frac{22}{7} \times 14 \times 14h - \frac{22}{7} \times 3.5 \times 3.5h = 866.25$$

$$616h - 38.5h = 866 \text{ . on simplification } \Rightarrow$$

$$577.5h = 866.25$$

$$h = \frac{866.25}{577.5} = 1.5 \text{ m}$$

The height of embankment = 1.5m

116. Solution (C)

$$= 23$$

The required number leaves remainders 1 and 4 on dividing 70 and 50 respectively. This means that the number exactly divides 69 and 46. So, we need to find the HCF of 69 (3×23) and 46 (2×23). Thus, **23** is the required number

117. Solution (C)

$$= 12$$

118. Solution (A)

$$= 34.9$$

Let's denote the present age of the man as (M) and the present age of his son as (S) .

According to the given information:

1. Four years ago, the man was 6 times as old as his son:

$$(M - 4) = 6(S - 4)$$

2. After 16 years, he will be twice as old as his son:

$$(M + 16) = 2(S + 16)$$

Now, we have a system of two equations with two variables. Let's solve it:

From equation 1:

$$(M - 4) = 6S - 24$$

$$(M = 6S - 20) \quad \text{(Equation 3)}$$

From equation 2:

$$(M + 16) = 2S + 32$$

$$(M = 2S + 16) \quad \text{(Equation 4)}$$

Now, we can equate equations 3 and 4:

$$(6S - 20 = 2S + 16)$$

Subtract $(2S)$ from both sides:

$$(4S - 20 = 16)$$

Add 20 to both sides:

$$(4S = 36)$$

Divide both sides by 4:

$$(S = 9)$$

Now, substitute the value of (S) back into equation 4 to find the man's age:

$$(M = 2(9) + 16)$$

$$(M = 18 + 16)$$

$$(M = 34)$$

So, the present age of the man is 34 years and the present age of his son is 9 years.

119. Solution (E)

$$= \frac{7}{22}$$

All possible case in drawing 3 balls from $^{12}C_3$ $\frac{12!}{3!9!}$

$$= 220$$

Favourable cases to draw exactly 2 red ball

$${}^5C_2 \times {}^7C_1 = \frac{5!}{2!3!} \times \frac{7!}{1!6!} = 70$$

Hence the required probability $\frac{70}{220}$

120. Solution (B)

Let the distance between A to B be X

So the distance between B to C is $3X$

Total time is taken by T_1 (Train 1)

$$\left(\frac{X}{V}\right) + \left(\frac{3X}{2V}\right)$$

$$\Rightarrow \frac{5X}{2V}$$

Total time is taken by T_2 (Train 2)

$$\left(\frac{X}{2V}\right) + \left(\frac{3X}{V}\right)$$

$$\Rightarrow \frac{7X}{2V}$$

$$\text{Required ratio of time} = \frac{5X/2V}{7X/2V} = \frac{5}{7}$$

\therefore The ratio is 5: 7.

121. Solution (B)

$$= 0$$

For finding the last digit of $81^{82} 83^{84} 85^{86}$

$$87^{88} 89$$

you need to take all last digits and multiply as there is no use in taking tens digit.

You can see $5 \times 2 = 10$, $4 \times 5 = 20$, etc. So the last digit must be

zero.

the last digit which will come from the multiplication of all the number.

In this case:

$$1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8 \times 9 = 362880$$

Here the last digit is 0 so the last digit of number coming from the multiplication of all the number will be 0.

122. Solution (C)

To compare the speeds of runners A and B, we'll first find out the distances they cover in the given time intervals.

1. For runner A:

Time taken to complete one lap on the inner track = 1 minute 30 seconds = 90 seconds.

The circumference of the inner track (radius = 100m) = $(2\pi \times 100)$ meters.

Distance covered by A = Circumference of the inner track.

Distance covered by A = $(2\pi \times 100)$ meters.

2. For runner B:

Time taken to complete one lap on the outer track = 1 minute 32 seconds = 92 seconds.

The circumference of the outer track (radius = 102m) = $(2\pi \times 102)$ meters.

Distance covered by B = Circumference of the outer track.

Distance covered by B = $(2\pi \times 102)$ meters.

Now, let's calculate the distances:

1. Distance covered by A = $(2\pi \times 100)$ meters
 $(= 200\pi)$ meters

2. Distance covered by B = $(2\pi \times 102)$ meters
 $(= 204\pi)$ meters

Now, let's compare the distances covered in the same time interval. We can see that runner B covers a greater distance in the same time, so B runs faster.

To find out by how much faster, let's calculate the difference in their speeds:

Speed of A = Distance covered by A / Time taken by A
 $(= \frac{200\pi}{90})$ meters per second

Speed of B = Distance covered by B / Time taken by B
 $(= \frac{204\pi}{92})$ meters per second

Now, we can find the ratio of their speeds:

$$\frac{\text{Speed of B}}{\text{Speed of A}} = \frac{\frac{204\pi}{92}}{\frac{200\pi}{90}}$$

$$= \frac{204\pi \times 90}{200\pi \times 92}$$

$$= \frac{18360\pi}{18400\pi}$$

$$= \frac{-40\pi}{8280}$$

$$= -\frac{2\pi}{414}$$

$$= -\frac{2\pi}{414} \text{ meters per second}$$

Since this value is negative, it means that runner B runs faster. The magnitude of the difference in speed

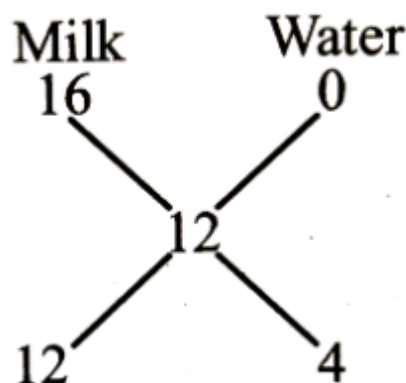
is $(\frac{2\pi}{414})$ meters per second. So, runner B runs faster by $(\frac{2\pi}{414})$ meters per second.

123. Solution (C)

=SP of the mixture = 15

CP of the mixture $15 \times 125/100 = 12$

Now, by the rule of mixture



... Ratio of milk and water in the mixture 12:4 = 3:1

124. Solution (D)

=75M

125. Solution (A)

Arithmetic Progression is 20, 15, 10,.....

Formula used:

$$\text{nth term} = [a + (n - 1) * d]$$

Where a is the first term of the series d is the common difference

Calculation:

First term is 20

The common difference is $15 - 20 = -5$

The 15th term is $20 + (15 - 1)(-5)$

$20 + 14(-5) = 20 - 70 = -50$

∴ The 15th term is -50.

126. Solution (C)

The pattern followed here is:

In 400 consecutive years there are 97 leap years.

So, in 400 consecutive years February has the 29th day 97 times and remaining 11 months have 29th days.

$$400 \times 11 = 4400 \text{ times} = 4400 + 97 = 4497$$

Hence, the correct answer is "4497 times".

127. Solution (C)

$$\text{SPEED} = (54 \times 5/18) \times \text{m/sec} = 15 \text{ m/sec}$$

Length of the rain = $(15 \times 20) \text{ m} = 300 \text{ m}$ Let the length of the platform be x metres

$$\text{THEN } (x + 300)/36 = 15 \Rightarrow x + 300 = 540$$

$$\Rightarrow x = 240 \text{ m}$$

128. Solution (A)

Apologies for the oversight. Let's reevaluate.

To find the length of the plank, we need to find the least common multiple (LCM) of the given lengths.

First, let's convert all lengths to the same unit. Let's choose centimeters.

- 4 m 50 cm = 450 cm
- 9 m 90 cm = 990 cm
- 16 m 20 cm = 1620 cm

Now, we find the LCM of these lengths:

$$\text{LCM}(450, 990, 1620)$$

Now let's find the prime factorization of each number:

$$\begin{aligned} 450 &= 2 \times 3^2 \times 5^2 \\ 990 &= 2 \times 3^2 \times 5 \times 11 \\ 1620 &= 2^2 \times 3^4 \times 5 \end{aligned}$$

To find the LCM, we take the highest power of each prime factor that appears in any of the numbers:

$$\text{LCM} = 2^2 \times 3^4 \times 5^2 \times 11 = 4 \times 81 \times 25 \times 11 = 81,900 \text{ cm}$$

Now, let's convert this back to meters and centimeters:

$$81,900 \text{ cm} = 81 \text{ m } 900 \text{ cm} = 81 \text{ m } 90 \text{ cm}$$

129. Solution (D)

We know:

- Pipe A fills the tank in 10 hours.
 - Pipe B fills the tank in 30 hours.
 - When A and B are opened together, they fill the tank in less time than when all three are opened together.
- First, let's find the combined rate at which A and B fill the tank when opened together:
- Rate of A (inlet): 1 tank per 10 hours = $\frac{1}{10}$ tank per hour
- Rate of B (inlet): 1 tank per 30 hours = $\frac{1}{30}$ tank per hour
- Combined rate of A and B = $\frac{1}{10} + \frac{1}{30} = \frac{4}{30} = \frac{2}{15}$ tank per hour

Now, let's find out how long it takes for A and B to fill the tank together:

$$\text{Time taken by A and B together} = \frac{1}{\text{Combined rate of A and B}} = \frac{1}{\frac{2}{15}} = 7.5 \text{ hours}$$

Now, when all three pipes are opened together, it takes 30 minutes (or 0.5 hours) longer than when only A and B are opened. So, the time taken by all three pipes is $7.5 + 0.5 = 8$ hours.

Now, we need to find how fast pipe C can empty the tank.

Let's denote the rate at which pipe C empties the tank per hour as $\frac{1}{x}$ tank per hour.

When all three pipes are opened together, the net rate at which the tank is filled (or emptied) per hour is:

$$\text{Rate of A and B} - \text{Rate of C}$$

So, we have:

$$\left[\frac{2}{15} - \frac{1}{x} \right] = \frac{1}{8}$$

To solve for $\frac{1}{x}$, we rearrange the equation:

$$\left[\frac{1}{x} \right] = \frac{2}{15} - \frac{1}{8}$$

$$\left[\frac{1}{x} \right] = \frac{16}{120} - \frac{15}{120}$$

$$\left[\frac{1}{x} \right] = \frac{1}{120}$$

So, $\frac{1}{x} = \frac{1}{120}$ hours.

Thus, it takes 120 hours for pipe C alone to empty the tank.

130. Solution (C)

Solution: To find the required number, we need to find the

HCF of (136-64), (238-136) and (238-64), i.e., HCF (72, 102, 174).

$$72 = 2^3 \times 3^2$$

$$102 = 2 \times 3 \times 17$$

$$174 = 2 \times 3 \times 29 \text{ Therefore, HCF (72, 102, 174) = } 2 \times 3 = 6$$

hence, 6 is the required number.

131. Solution (C)

=In order to count the number of terms in the AP, use the short cut: $\frac{(\text{last term} - \text{first term})}{\text{common difference}} + 1$. In this case it would become:

$$\frac{(130-20)}{5} + 1 = 23. \text{ Option (C) is correct}$$

132. Solution (D)

=Solution

Given number A381 is divisible by 11.

$$\text{If } (3 + 1) - (A + 8) = 0 \text{ or } 11$$

if A = 7 then,

$$(3 + 1) - (7 + 8) = -11 \text{ which is a multiple of } 11.$$

Therefore, A = 7 is the smallest value such that the number

A381 is divisible by 11.

133. Solution (A)

$$=X + Y = 15 \text{ (1)}$$

AM = $(X + Y) / 2 = 15/2 = 7.5$ Now GM is 20% lower than AM. So GM = 80% of AM = 80% of 7.5. GM = 6 = \sqrt{XY} XY = 36 deg (2)

Solving (1) & (2) we get, X = 12 & Y = 3

The two numbers are 12 & 3.

134. Solution (E)

=For number to be divisible by 9, its sum of digits should be divisible by 9.

$$\text{Sum of the digits of the number} = 17 + A$$

For A to be the smallest A = 6

135. Solution (C)

=

The correct option is **D 52**

We can solve this by splitting the denominator into co-prime numbers 9 and 17. First find the remainder of 128^{1000} on division by 9.

$$128^{1000} \div 9 \rightarrow 2^{1000} \div 9 = (2^6)^{166} \times 2^4 \div 9 \rightarrow$$

This means that 128^{1000} is a $9n + 7$ number

Next find the remainder of 128^{1000} on division by 17

$$128^{1000} \div 17 \rightarrow 2^{1000} \div 17 = [(2^{16})^{62} \times 2^8] \div 17$$

. This means that 128^{1000} is a $17n + 1$ number

look for a number below 153, that is both $9n + 7$, we would see that the number 52

satisfies the requirement. Hence, 52 is the required remainder

$$128^{1000} \div 153$$

136. Solution (C)

=Here, we see that 20 is added to 8th term 39 to get 12th term 59 i.e. 4 times the common difference is added to 39. So, CD = $20/4 = 5$. Hence, 7 times CD is added to 1st term to get 39. That means **4 is the 1st term of the AP.**

137. Solution (A)

=Let almonds be m, apples be p and mangoes be g.

According to the question,

$$8m = 50p$$

Cost of 19 kg of mangoes is 456. Hence each kg of mango costs 24 rs.

Also the cost of apples is twice the 2kg of mangoes.

Hence cost of apples is $2 \times 2 \times 24 = 96$

Cost of 8 kg of almonds is 50 kg of apples = $50 \times 96 = 4800$

Hence each kg of almonds is 600 rs

Hence the price of 3 kg of almonds and 4kgs of apples together is $3 \times 600 + 4 \times 96 = 1800 + 384 = 2184$

138. Solution (C)

=This problem ate up lot of my time, but the fun part was in counting. Before we start let's see how we get the number of factors of any number.

Let us say a number A is expressed in prime factors as $A = p^x \times q^y \times r^z$ where x, y, z are powers of the prime numbers p, q, r. Number of factors = $(x + 1)(y + 1)(z + 1)$. For example: $40 = 2^3 \times 5$ Number of factors = $(3 + 1)(1 + 1) = 8$ The factors are 1, 2, 4, 5, 8, 10, 20 and 40

Getting back to your question,

If number of factors = 4

$$\text{i.e., } (x + 1)(y + 1) = 4 \text{ or } (x + 1) = 4$$

Now this is possible on two occasions, that is either both $(x, y) = (1, 1)$ or $x = 3$

That means only those numbers will have exactly 4 factors which can be expressed as a product of only two unique prime numbers or cube of prime number. Case 1: Cube of Prime numbers are 8 and 27 which lie within 100. So count is 2.

Case 2: product of two unique prime numbers.

Numbers are

6, 10, 15, 14, 21, 22, 26, 33, 34, 35, 39, 38, 46, 51, 55, 57, 58, 62, 65, 69, 74, 77, 82, 85, 86, 87, 91, 93, 94, 95

Count is 30

Hence total count in both case 1 and 2 is 32.

Hence there are 32 numbers from 1 to 100 with exactly 4 factors.

139. Solution (C)

=Hence, the correct answer is option A: 270. Find the number of zeroes at the end of

1090! a) 270 b) 268 c) 269 d) 271 Corre... The number of zeroes would be given by adding the quotients when we successively divide 1090 by 5 ; $1090/5 + 218/5 + 43/5 + 8/5 = 218 + 43 + 8 + 1 = 270$.

140. Solution (B)

$= 9^{100}/8 = (8 + 1)^{100}/8 \rightarrow$ Since this is of the form $(a + 1)^n/a$, the Remainder $= 1$.

141. Solution (C)

= We know that runner A finishes the race in 20 minutes, which is equivalent to $20 * 60 = 1200$ seconds. We can use the formula: Distance = speed \times time. The distance covered by runner A in 1200 seconds is Distance = $12 * 1200 = 14400$ meters. We want to find out how many seconds it will take for runner B to finish the race. Let's assume that it takes runner B t seconds to finish the race. Then, the distance covered by runner B in t seconds is Distance $= 15t$. Since both runners cover the same distance, we can set up an equation: $14400 = 15t$ Solving for t , we get $t = 960$ Therefore, runner B will finish the race in 960 seconds or 16 minutes

142. Solution (C)

= 39 seconds

143. Solution (C)

= Given:

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

Concept used:

1. Area of a square = Side²

2. Incremented/Reduced value = Initial value $(1 \pm \text{change}\%)$

Calculation:

Let the original measure of each side be Q units.

Original area = Q^2 sq. unit

Hence, the measure with error = $Q(1+5\%) = 1.05Q$ units

Area with error = $(1.05Q)^2 = 1.1025Q^2$ sq. unit

Now, the error% in the calculated area = $1.1025Q^2 - Q^2 / Q^2 = 1.1025 - 1$

.. The error% in the calculated area is 10.25%.

144. Solution (C)

= Let the age of Minu is $4X$ and age of Meera $2X$.

As per question; $4X + 2X = 6$

$6X = 6$

$X = 1$

Minu's age = $4 * 1 = 4$ years

Meera's age = $2 * 1 = 2$ years

Ratio of their ages after 8 years;
 $= (4 + 8) / (2 + 8)$

$= 12/10$

$= 6/5$

145. Solution (b) 4.00 pm.

146. Solution (C)

= To solve this problem, we'll first find out how much money Rohan and Sohan have, and then we'll find out how much money Mohan has.

Let's denote the amount of money Rohan has as (R) , the amount Sohan has as (S) , and the amount Mohan has as (M) .

147. Solution (C)

= Fact 7^m has 1, 3, 9, 7 at the unit place for $m = 4p, 4p - 1, 4p - 2, 4p - 3$ for all $a = 1, 2, 3$. So $7^a + 7^b$ will be divisible by 5 if 7^a has 3 or 7 at unit place and 7^b has 7 or 3 at unit place or 7^a has 4 or 9 at the unit place and 7^b has 9 or 1 at the unit place. ... for choice of a and b the unit place in the expression $7^a + 7^b$ is 0, 2, 4, 6, 8 and will be divisible by 5 only if 0 occurs at the unit place.

Required probability = $1/4$

148. Solution (A)

To solve this problem, let's break it down step by step:

1. Calculate the selling price after the discount.
2. Determine the cost price.
3. Calculate the profit.

Given:

- The seller offers a discount of 30%.
- The price is 50% above the cost price.

So, the profit is 50% of the cost price.

If the profit is 50% of the cost price, it means the profit margin is 50%. In other words, the profit is half of the cost price.

Let's say the cost price is Rs. 100. Then the profit would be Rs. 50.

If the cost price is Rs. 100, then the selling price (50% above the cost price) would be Rs. 150. After the 30%

discount, the selling price becomes 70% of Rs. 150, which is Rs. 105.

So, the profit would be Rs. 105 (selling price after discount) - Rs. 100 (cost price) = Rs. 5.

Thus, the profit made by the seller is Rs. 5.

149. Solution (c)
=36 m

150. Solution (C)
= 16th July 1776 = 1775 years + Period from 1st Jan. 1776 to 16th July 1776
Counting of odd days: 1600 years have 0 odd day. 100 years have 5 odd days. 75 years = 18 leap years + 57 ordinary years = $[18 * 2 + 57 * 1]$ odd days = 93 odd days = 13 weeks + 2 days = 2 odd days. 1775 years have 0 + 5 + 2 odd days = 7 odd days = 0 odd day. Jan. Feb. March April May June July
 $31 + 29 + 31 + 30 + 31 + 30 + 16 = 198$ days = 28 weeks + 2 days = 2 days \therefore Total number of odd days = 0 + 22.
Required day was Tuesday

- 175. Solution =A
- 176. Solution =D
- 177. Solution =A
- 178. Solution =C
- 179. Solution =D
- 180. Solution =C
- 181. Solution =B
- 182. Solution =E
- 183. Solution =A
- 184. Solution =A
- 185. Solution
- 186. Solution
- 187. Solution
- 188. Solution
- 189. Solution
- 190. Solution
- 191. Solution
- 192. Solution
- 193. Solution
- 194. Solution
- 195. Solution
- 196. Solution
- 197. Solution
- 198. Solution
- 199. Solution
- 200. Solution

VERBAL

- 151. Solution =C
- 152. Solution =C
- 153. Solution =B
- 154. Solution =A
- 155. Solution =C
- 156. Solution =A
- 157. Solution =B
- 158. Solution =B
- 159. Solution =B
- 160. Solution =A
- 161. Solution =B
- 162. Solution =C
- 163. Solution =A
- 164. Solution =B
- 165. Solution =A
- 166. Solution =B
- 167. Solution =B
- 168. Solution =C
- 169. Solution =C
- 170. Solution =A
- 171. Solution =A
- 172. Solution =A
- 173. Solution =D
- 174. Solution =A