

Direction (1-10): Read the passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these.

"Rivers should link, not divide us," said the Indian Prime Minister expressing concern over inter-state disputes and urged state governments to show "understanding and consideration, statesmanship and an appreciation of the other point of view."

Water conflicts in India now reach every level; divide every segment of our society, political parties, states, regions, and sub-regions within states, districts, castes and groups and individual farmers. Water conflicts within and among many developing countries are also taking a serious turn. Fortunately, the "water wars", forecast by so many, have not yet **materialised**. War has taken place but over oil, not water. Water is radically altering and affecting political boundaries all over the world, as well as within countries. In India, water conflicts are likely to **worsen** before they begin to be resolved. Till then they pose a significant threat to economic growth, security and health of the ecosystem and the victims are likely to be the poorest of the poor as well as the very sources of water-rivers, wetlands, and aquifers.

Conflicts might sound bad or negative, but they are logical developments in the absence of proper democratic, legal and administrative mechanisms to handle issues at the root of water conflicts. Part of the problem stems from the specific nature of water, namely that water is divisible and amenable to sharing; one unit of water used by one is a unit denied to others; it has multiple uses and involves resultant trade-offs.

Excludability is an **inherent** problem and very often exclusion costs involved are very high: it involves the issue graded scales and boundaries and need for evolving a corresponding understanding around them. Finally, the way water is planned, used and managed causes externalities, both positive and negative, and many of them are unidirectional and **asymmetric**. There is a relatively

greater visibility as well as a greater body of experience in evolving policies, frameworks, legal set-ups and administrative mechanisms dealing with immobile natural resources, however, contrasted space may be. Reformists, as well as revolutionary movements, are rooted in issue related to land. Several political and legal interventions addressing the issue of equity and social justice have been attempted. Most countries have gone through land reforms of one type or another. Issues related to forests have also generated a body of comprehensive literature on forest resources and rights. Though conflicts over them have not necessarily been effectively or adequately resolved, they have received much more serious attention, have been studied on their own the same kind of attention.

Source: www.epw.in/water-conflicts-india.

1. According to the author, which of the following is/are consequences of water conflicts?
(A) Trans-border conflicts between developing countries
(B) Water bodies will remain unused and unaffected till the conflict is resolved
(C) Water conflicts have altered the political boundaries within countries
A. Only (A) B. Only (B)
C. Only (C) D. Both (A) & (C)
E. None of these
2. Why does the author ask readers not to view conflicts too negatively?
(A) Most countries have survived them easily
(B) They bring political parties together
(C) They only affect the grass-root levels
A. Only (A) B. Only (B)
C. Only (C) D. All (A), (B) & (C)
E. Neither (A), (B) nor (C)

3. What is the author's main objective behind writing the passage?
 A. Showcase government commitment to solve the water distribution problem
 B. Make a strong case for war as the logical resolution for water conflicts
 C. Point out the seriousness of the threat posed by unresolved water conflicts
 D. Describe how the very nature of water contributes to water struggles
 E. Criticize governmental efforts for water conflict resolution
4. Which of the following is TRUE with respect to the passage?
 A. Water wars are taking place between many developing countries
 B. There have been several legal interventions in India to govern the use of water resources
 C. The poor people are worst affected by water conflicts
 D. Water diversion by Indian States has helped resolve water dispute
 E. None of these
5. What is the Prime Minister's advice to resolve water disputes?
 A. Link all rivers to make national grid
 B. Politicians alone can solve the problem
 C. Bridges and dams can resolve water issues
 D. Make consensual and conscious efforts
 E. Create public awareness
6. Which of the following is NOT TRUE in the context of the passage?
 A. Deeper problems exist at the root of all water conflicts
 B. Competing used of water is a cause of water conflict
 C. In India water conflicts affect all levels
 D. Only social stability is unaffected by water disputes
 E. All of these
7. Pick out the word which is the closest in meaning to the word printed in bold as used in the passage:
 Inherent
 A. Functional B. Intense
 C. Persistent D. Characteristic
 E. Genetic
8. Pick out the word which is the closest in meaning to the word printed in bold as used in the passage.

Materialised

- A. Mattered B. Interfered
 C. Hidden D. Presented
 E. Expanded

9. Pick out the word which is opposite in meaning to the word printed in bold as used in the passage.

Worsen

- A. Bounty B. Accept
 C. Better D. Stable
 E. Capable

10. Pick out the word which is opposite in meaning to the word printed in bold as used in the passage.

Asymmetric

- A. Unsteady B. Uniform
 C. Discouraging D. Superior
 E. Contradictory

Direction (11-20): In the following passage, there are blanks each of which has been numbered. These numbers correspond to the question numbers; against each question, five words have been suggested, one of which fills the blanks appropriately.

In an age where there's an app for everything and telecommuting should be easy, why do workers still not feel it's **(###Q1###)**? It begs the question "are your employees **(###Q2###)** to work remotely?" In a survey of business owners by Virgin Media Business, it was **(###Q3###)** that 60% of office-based employees will regularly work from home by 2022. A separate survey by Office Angels found a third of employees think **(###Q4###)** will be unheard of by 2036. By comparison, large companies such as Yahoo are bucking this predicted trend by announcing all of its staff are required to work from the office.

In another survey, conducted by Ricoh UK, only 25% of respondents felt **(###Q5###)** when working from home. With an abundance of communication, **(###Q6###)** and cloud storage apps and solutions available to businesses and individuals alike, could it be factors other than the tools available to employees that are affecting this view? Do we put too much emphasis on whether the tools businesses use allow employees to be effective outside of the office? Maybe it's employees themselves who prevent telecommuting from being a viable option.

Until recently, working from home wasn't the norm in most businesses. Technological **(###Q7###)** meant that quite often employees simply weren't as productive working from home, regardless of their **(###Q8###)**. In a mobile world, we carry our office with us. Business leaders are embracing this shift in culture and **(###Q9###)** research and investment into the industry. As ever more clever technology is developed, employees and brands benefit from faster and more productive ways of **(###Q10###)** working.

11. Find the appropriate word in each case.
A. Prudential B. Beneficial
C. Empirical D. Purposeless
E. Pleasant
12. Find the appropriate word in each case.
A. Cut through B. Cut off
C. Cut out D. Cut in
E. Cut at
13. Find the appropriate word in each case.
A. Exempted B. Predicted
C. Debated D. Obliviated
E. Discussed
14. Find the appropriate word in each case.
A. Commuting B. Communicating
C. Recreation D. Professionalism
E. Travelling

15. Find the appropriate word in each case.
A. Perilous B. Unproductive
C. Futile D. Productive
E. Absent
16. Find the appropriate word in each case.
A. Collaborative B. Restoring
C. Piquant D. Dissociative
E. Degenerating
17. Find the appropriate word in each case.
A. Reservations B. Regeneration
C. Restrictions D. Resilience
E. wrote
18. Find the appropriate word in each case.
A. Apprehensions B. Intentions
C. Involvement D. Distance
E. Reciprocations
19. Find the appropriate word in each case.
A. Allowing B. Fuelling
C. Abnegating D. Restraining
E. Facilitation
20. Find the appropriate word in each case.
A. Disparate B. Stagnant
C. Homogenous D. Creative
E. Conditional
21. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.
Given the complexities of the Indian economy (1)/ and its inter-connections with the outside world, (2)/ a rate reduction by the monetary authority alone (3)/ would not suffice at the present juncture. (4)/ No error. (5)
A. 1 B. 2
C. 3 D. 4
E. 5
22. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.

The tea company, which is (1)/ now a sick unit listed with the BIFR, (2)/ have 11 large gardens (3)/ in West Bengal's sub-Himalayan region. (4)/ No error. (5)

- A. 1 B. 2
C. 3 D. 4
E. 5

23. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.

Those residing in villages (1)/ surrounded by garbage units (2)/ complain of increase respiratory disorders (3)/ due to frequent fires at these units. (4)/ No error. (5)

- A. 1 B. 2
C. 3 D. 4
E. 5

24. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.

Energy is neither created (1)/ nor destroyed; (2)/ it is only recycled and recast (3)/ in different form. (4)/ No error. (5)

- A. 1 B. 2
C. 3 D. 4
E. 5

25. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.

Aggression in some teenage boys (1)/ may be linkage to overly (2)/ large glands in their brains, (3)/ found a new study. (4)/ No error. (5)

- A. 1 B. 2
C. 3 D. 4
E. 5

26. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.

If a person has been given (1)/ diplomatic immunity, he (2)/cannot be arrested on a (3)/ foreign land under any circumstance. (4)/ No error. (5)

- A. 1 B. 2
C. 3 D. 4
E. 5

27. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.

It was an evening of (1)/ fun and frolic as the city's glitterati (2)/ and high-profile businessmen make sure (3)/ that they didn't miss the show. (4)/ No error. (5)

- A. 1 B. 2
C. 3 D. 4
E. 5

28. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.

Based on the (1)/ newspaper reports, (2)/ we can conclude that (3)/ many accidents caused by reckless driving. (4)/ No error. (5)

- A. 1 B. 2
C. 3 D. 4
E. 5

29. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.

Arranging such a large amount (1)/ of funds now will be a problem why (2)/ banks are usually not open (3)/ so early in the morning. (4)/ No error. (5)

- A. 1 B. 2
C. 3 D. 4
E. 5

30. **Direction:** Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number corresponding to that part will be your answer. If the given sentence is correct as it is, mark the answer as No error. Ignore the errors of punctuation if any.

Though he has promoted to (1)/ the bank's board as a director (2)/ he continues to carry out (3)/ all his current responsibilities. (4)/ No error. (5)

- A. 1 B. 2
C. 3 D. 4
E. 5

31. **Direction:** In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statement:

All lotus are beautiful.
All beautiful are Rose.
No Rose are stinky.
All sky are Rose

Conclusion:

- I. All stinky are beautiful is a possibility
II. Some stinky are lotus.

- III. Some Rose are Stinky is a possibility
IV. All beautiful can never be Sky
A. None follows
B. Only I and IV follow
C. Only II follows
D. Only II and III follow
E. None of these

32. **Direction:** In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statement:

Some planes are waters.
Some waters are doors.
All doors are guitars.
No guitar is a flat.

Conclusion:

- I. At least some guitars are Planes.
II. All doors are flat is a possibility.
III. Some planes are both waters & doors.
IV. At least some flat is a door.
A. Only IV follows
B. Only either II or III follow
C. Only III follows
D. Only I follows
E. None follows

33. **Direction:** In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statement:

Some red are blue.
Some blue are grey.
All grey are white.
No white is black.

Conclusion:

- I. No black is grey.
- II. Some blue are white.
- III. Some black are red.
- IV. No black is red.
- A. Only I and II follow
- B. Only either III or IV follows
- C. Only I and either III or IV follow
- D. Only I, II and either III or IV follow
- E. None of these

34. **Direction:** In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statement:

- All red are white.
- Some white are pink.
- Some pink are yellow.
- No yellow is blue.

Conclusion:

- I. No blue is pink.
- II. Some pink are red.
- III. Some blue are red.
- IV. Some blue are pink.
- A. None follows
- B. Only either I or IV follows
- C. Only I follows
- D. Only III & IV follow
- E. All follow

35. **Direction:** In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statement:

- All green are pink.
- Some pink are black.

- Some black are blue.
- All blue are white.

Conclusion:

- I. Some black are white.
- II. Some blue are pink.
- III. Some pink are green.
- IV. No green is white.
- A. None follows
- B. Only I and III follows
- C. Only III follows
- D. Only either I or II follows
- E. None of these

Direction (36-40): Study the information given below and answer the questions based on it.

Nine boys Vikash, Kamal, Sunil, Saurabh, Rohit, Sanjay, Amit, Anit and Sushil stays in a nine floor building and all of them stays on different floors. Each of them likes different girls namely – Sanjana, Surabhi, Amita, Anita, Komal, Suhana, Kumkum, Saroj and Susheela. Each boys belongs to different cities i.e. Patna, Lucknow, Chennai, Varanasi, Mirzapur, Allahabad, Mathura, Noida and Agra but necessarily in the same order. The topmost floor is numbered 9, the floor below it is numbered 8 and so on, and the ground floor is numbered 1. The one who likes Surabhi stays on an even numbered floor. Sanjay does not belong to Allahabad. The one who belongs to Lucknow stays on the topmost floor. The one who likes Sanjana stays immediately below the one who likes Amita. Sanjay likes Anita and does not stay on the ground floor. Vikash belongs to Chennai and stays on an even numbered floor and he likes Sanjana. Saurabh stays on the second floor and belongs to Mirzapur. There are three boys between the one who likes Suhana and the one who likes Komal. The one who likes Suhana stays below the boy who likes Komal. The one who belongs to Allahabad stays on the third floor. The one who likes Saroj does not stay on sixth floor. There is one floor between the floors in which the one who

likes Susheela and the one who likes Kumkum stay. Kamal stays on an even numbered floor below the floor on which Vikash stays. There are two floors between the floors on which the boys who are from Mathura and Chennai. The boy who likes Komal is from Mathura. Sushil belongs to Patna. The one who belongs to Noida stays on the fourth floor. Kamal does not belong to Varanasi and does not like Anita and Komal. There are three floors between the floors on which Sushil and Amit stay. Sunil stays on a floor immediately above the Anit's floor. The one who likes Kumkum stays immediately above Sushil. There is one floor between the floors on which Sanjay and Amit stay.

36. Which among the following boys likes Anita?
 A. Sanjay B. Amit
 C. Anit D. Rohit
 E. Vikash
37. Who among the following stays between the floor of Sunil and Saurabh?
 A. Anit B. Amit
 C. Kamal D. Vikash
 E. Rohit
38. Which of the following combinations is true?
 A. Sanjay – Suhana - Varanasi
 B. Amit – Amita - Allahabad
 C. Rohit – Saroj - Varanasi
 D. Sunil – Susheela - Noida
 E. Kamal – Surabhi – Chennai
39. If 'Sanjay' is related to 'Mathura', 'Vikash' is related to 'Agra', in the same way 'Kamal' is related to?
 A. Allahabad B. Patna
 C. Chennai D. Noida
 E. Varanasi
40. How many boys stay between the one who likes Amita and the one who likes Kumkum?
 A. Five B. Two
 C. One D. Six
 E. Four

41. **Direction:** In these questions, a relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Statements:

$A \geq P = S > T, V < B = T > X$

Conclusions:

- I. $A > X$
 II. $P < B$

- A. only conclusion I is true
 B. only conclusion II is true
 C. either conclusion I or II is true
 D. neither conclusion I nor II is true
 E. both conclusions I and II are true

42. **Statements:**

$S > U > V, Y < U < Z, Z < X > W$

Conclusions:

- I. $S < Z$
 II. $X > Y$

- A. only conclusion I is true
 B. only conclusion II is true
 C. either conclusion I or II is true
 D. neither conclusion I nor II is true
 E. both conclusions I and II are true

43. **Statements:**

$P < X < Y < Q, S > Y < T, P = V > R$

Conclusions:

- I. $V < S$
 II. $T > R$

- A. only conclusion I is true
 B. only conclusion II is true
 C. either conclusion I or II is true
 D. neither conclusion I nor II is true
 E. both conclusions I and II are true

44. **Statements:**

$A \geq B > C, D \geq E = F \geq G, H \geq I = E$

Conclusions:

- I. $H < C$
 II. $H > D$

- A. only conclusion I is true
 B. only conclusion II is true
 C. either conclusion I or II is true
 D. neither conclusion I nor II is true
 E. both conclusions I and II are true

45. Statements:

$A \geq B > C, D \geq E > F > B, P \geq Q > E = S$

Conclusions:

I. $P < B$

II. $S > A$

- A. only conclusion I is true
- B. only conclusion II is true
- C. either conclusion I or II is true
- D. neither conclusion I nor II is true
- E. both conclusions I and II are true

Direction (46-47): Study the information given below and answer the questions based on it.

If 'A × B' means 'A is the son of B'.

If 'A + B' means 'A is the father of B'.

If 'A > B' means 'A is the daughter of B'.

If 'A < B' means 'A is the wife of B'.

46. Which of the following pairs of people represent first cousins with regard to the relations given in the expressions, if it is provided that A is the sister of J :

$L > V < J + P'$ and $'S \times A < D + F < E + K'$

- A. LP
- B. SP
- C. SK
- D. SF
- E. Cannot be determined

47. What will come in the place of the question mark (?), if it is provided that M is the paternal grandmother of F in the expression :

$'F \times R < S ? M'$

- A. >
- B. <
- C. +
- D. ×
- E. Cannot be determined

Direction (48-50): Read the given information carefully and answer the given question:

Ganesh is at his office. He gets out from the front gate and walks 5m to meet his school friend Harish. He took a right turn and walks 4m to meet Ishita. He walks 6m to meet Jagan after taking a left turn. He takes a left turn and walks twice the distance between Harish and Ishita to meet Kajal. Kajal is to the north of Jagan.

48. The front gate of Ganesh's office is facing in which direction?

- A. North
- B. West
- C. East
- D. South
- E. North-east

49. An AC has been fit into Ganesh's office which is either at 90 or 180 degrees from the front gate. If a person entering the office from the front gate sees the AC towards his right hand side, the AC is in which direction?

- A. West
- B. North
- C. South-west
- D. South
- E. East

50. Ganesh gets out of the office from the back gate (facing west), walks 3m and meets Umesh. Both of them take right turn and walk 4m to meet Rajesh. How much distance Kajal has to cover to meet Rajesh?

- A. 11m
- B. 13m
- C. 14m
- D. 16m
- E. 15m

Direction (51-55): Study the information given below and answer the questions based on it.

'Smart and hard work' is written as 'ghr mkc rul stp'

'hard of luck lost' is written as 'tlg zmq akv ghr'

'more work luck follows' is written as 'djp rul zmq pnr'

'follows to become smart' is written as 'brx hto djp stp'

51. What does the code 'tlg' stand for in the given code language?

- A. and
- B. Either 'of' or 'lost'
- C. more
- D. to
- E. either 'luck' or 'more'

52. Which of the following may possibly represent 'become to' in the given code?

- A. zmq hto
- B. btw zmq
- C. hto cox
- D. brx hto
- E. brx djp

53. What is the code for 'smart' in the given code language?
 A. stp
 B. Either 'mkc' or 'rul'
 C. ghr
 D. djp
 E. mkc
54. What is the code for 'work' in the given code language?
 A. stp
 B. ghr
 C. rul
 D. akv
 E. zmq
55. Which of the following may represent 'Follows rules hard' in the given code language?
 A. fsd ghr djp
 B. djp mkc ghr
 C. ghr pnr stp
 D. ghr fsd mkc
 E. xsw djp akv

Direction (56-60): Study the information given below and answer the questions based on it.

Eight persons A, B, C, D, E, F, G and H are sitting around a square table in such a way that four of them who sit at the corner are facing towards the centre and other four who sit in the middle of each row are facing outside the centre. They like different colors i.e. Blue, Black, Brown, Yellow, Orange, Pink, Green and Red, but not necessarily in the same order.

A likes Green and facing outside. Two persons are sitting between A and D. One person sits between D and F and F likes Black. Two persons sit between F and the one who likes Pink. B and E are neighbors and one of them likes Pink. H likes Yellow and facing outside and sits 2nd to the left of C. H is not neighbor of D. E is neighbor of A. C and G are not neighbors. The one who likes Blue is facing outside. The one who likes Orange is neighbor of A. The one who likes Red and Pink are neighbors. G doesn't like Red and Orange.

56. Who among the following likes Orange?
 A. A
 B. E
 C. C
 D. D
 E. G

57. Which of the following combinations is correct?
 A. B-Red
 B. D-Pink
 C. C-Blue
 D. G-Blue
 E. None is correct
58. Who among the following sits 2nd to the left of D?
 A. A
 B. B
 C. E
 D. H
 E. F
59. Which of the following is not belongs to the group?
 A. C
 B. B
 C. A
 D. H
 E. F
60. G likes which of the following color?
 A. Blue
 B. Orange
 C. Pink
 D. Brown
 E. None of these

Direction (61-65): Study the information given below and answer the questions based on it.

Eight persons A, B, C, D, E, F, G and H are sitting in two different rows. In each row four persons are sitting and they are sitting like that the persons are sitting in row I is facing to the persons are sitting in row II. The persons are sitting in row I facing north and the persons are sitting in row II facing south.

Note: The persons are sitting in row I likes different fruits i.e. Apple, Mango, Grapes and Banana and the persons are sitting in row II likes different colors i.e. Black, Red, Blue and White.

D likes Banana and H is immediate right of the one who is facing D. C likes White and A is immediate right of C. C is not neighbor of D or H. D and H are not sitting at any end. B likes Mango. The number of persons sitting between B and D is same as H and C. E likes Apple and one person is sitting between E and the one who is facing the one who likes Black. F likes Blue.

61. Who among the following doesn't belong to the group?

- A. H B. C
C. B D. A
E. F

62. Who among the following is facing B?

- A. F B. D
C. A D. C
E. E

63. Which of the following combination is correct?

- A. H-Red B. G-Row II
C. F-Row I D. A-Red
E. B-Row II

64. Who among the following is 2nd to the right of C?

- A. H
B. The one who likes Blue
C. The one who likes Red
D. F
E. D

65. Who among the following is 2nd to the left of the one who is facing A?

- A. G B. B
C. D D. E
E. F

66. **Direction:** In the following question, two equations are given. Solve both the equations and answer the question accordingly.

- I. =0
II. =0
A. if $x > y$ B. if $x \geq y$
C. if x D. if $x \leq y$
E. if $x = y$ or the relationship cannot be established

Direction (67-71): In each question numbered I and II have been given. You have to solve both the equations and mark the appropriate option.

67. I. $x^2 - 15x + 56 = 0$
II. $Y = 64$
A. $x > y$ B. $x \geq y$
C. $x \leq y$ D. $x < y$
E. $x = y$ or no relationship can be established

68. I. $X^2 + 361 = 442$

II. $Y^2 + 289 = 676$

- A. $x > y$ B. $x \geq y$
C. $x \leq y$ D. $x < y$
E. $x = y$ or no relationship can be established

69. I. $x^2 + 6x + 9 = 0$

II. $y^2 - 3y - 18 = 0$

- A. $x > y$ B. $x \geq y$
C. $x \leq y$ D. $x < y$
E. $x = y$ or no relationship can be established

70. I. $x^2 - 10x + 24 = 0$

II. $2y^2 - 3y - 35 = 0$

- A. $x > y$ B. $x \geq y$
C. $x \leq y$ D. $x < y$
E. $x = y$ or no relationship can be established

Direction (71-80): Select the correct alternative from the given choices.

71. $105.126 \times 35.201 - 90.23 \times 3 + 55.11 \times 27.01 = ?$

- A. 4890
B. 40000
C. 271
D. 5996
E. 6400

72. 27.5% of 1600 + 6.4% of 1500 = $(?)^3 + 24$

- A. 6 B. 8
C. 10 D. 14
E. 15

73. **Direction:** What approximate value should come in place of question mark (?) in the following questions?

(Note: you are not expected to calculate the exact value.)

73. $(27)^2 + \quad = ? \% \text{ of } 5976$

- A. 12 B. 15
C. 10 D. 14
E. None of these

74. **Directions:** What approximate value will come in place of question mark (?) in the following equations?

$$59220 \div 3214.05 \times 514.13 + 5231.92 = ?$$

- A. 13617 B. 14700
C. 14000 D. 13511
E. None of these

75. **Direction:** What should come in place of question mark (?) in the following question? (You do not have to calculate the exact value.)

$$\sqrt{2401} + 96 + 170\% \text{ of } 900 + \sqrt{529} = x + 346$$

- A. 1170 B. 1560
C. 1620 D. 1352
E. 6412

76. **Direction:** What should come in the place of question mark '?' in the given questions.

$$3, 4, 6, 10, ?$$

- A. 14 B. 12
C. 20 D. 18
E. None of these

77. 22, 97, 222, ?, 622

- A. 422 B. 323
C. 397 D. 333
E. None of these

78. **Direction:** What will come in place of question mark in the following questions?

$$5, 6, 14, 23, 87 ?$$

- A. 112 B. 212
C. 123 D. 69
E. 70

79. **Direction:** What will come in place of question mark in the following questions?

$$4 \ 5 \ 16 \ 81 \ ? \ 5113$$

- A. 654 B. 568
C. 236 D. 567
E. None of these

80. **Direction:** What will come in place of question mark (?) in the given number series?

$$11 \ 27 \ ? \ 107 \ 171 \ 251$$

- A. 57 B. 58
C. 56 D. 59
E. 69

Direction (81-85): Study the pie-chart given below and answer the related questions.

Pie-chart shows the people participated from six states in poetry competition.

Total participants = 500

81. What is the average of participants from Punjab and Kerala together?
A. 120 B. 108
C. 95 D. 82
E. None of these
82. The ratio of male to female participants in Karnataka and Kerala are 5: 6 and 6: 7. Male participants in Karnataka and Kerala are what percent more or less than female participants in same states?
A. 15.38% B. 20%
C. 23.22% D. 25%
E. None of these
83. If sum of male participants in Haryana and Goa is 55 and ratio of female to male participants in Goa is 7: 3, what numbers of male participants are from Haryana?
A. 22 B. 20
C. 18 D. 15
E. None of these
84. In Gujarat and Punjab, 20% and 15% participants are disqualified from the competition, how many participants qualified from the same states?
A. 118 B. 119
C. 120 D. 121
E. None of these

85. Participants from Kerala and Gujarat are approximately what percent of participants from Karnataka, Goa and Haryana together?
 A. 75 B. 80
 C. 90 D. 95
 E. None of these
86. A sum of money amounts to 12000 in 4 years and 9500 in 3 years under compound interest. What is the rate of interest per annum?
 A. 22.3% B. 16.4%
 C. 26.3% D. 12.3%
 E. None of these
87. If an book is sold for Rs. 178 at a loss of 11%, what should be its selling price in order to earn a profit of 11%?
 A. Rs. 222.50 B. Rs. 267
 C. Rs. 222 D. Rs. 220
 E. None of these
88. Atul, Bhaskar and Chetan can complete a work in 10, 20 and 25 days respectively. What is the minimum time required to finish the work if not more than two of them work together on a single day and no two consecutive days have the same pair of people working?
 A. 6.5 days B. 8 days
 C. 7.5 days D. 8.5 days
 E. 10 days
89. Ratio of ages of P and Q is 3 : 5. Age of S and T together is 20 more than the thrice of age of R. Q's age after 8 years will be 43. Thrice the age of Q is equal to seven times the age of R and sum of ages of Q, R and S is 95. What is the sum of age of P after 11 years and age of T before 9 years?
 A. 46 B. 43
 C. 47 D. 45
 E. None of these
90. A, B and C started a business with initial investments of Rs. 'x', Rs. (x+300), and Rs. (x+600) respectively. After one year, a profit of Rs. 2100 is generated which is distributed among A, B and C in the ratio of their investments. A deposited the amount in a scheme offering simple interest at the rate of 12% per annum for 2 years. Find the

value of 'x', if the interest earned by A is Rs. 126.

- A. Rs. 1700 B. Rs. 1200
 C. Rs. 900 D. Rs. 700
 E. None of these

Direction (91-95): This following table is related to profit and loss and some values are missing. All the discounts are on the M.P. and the Profits are on C.P. Read the Questions carefully and answer the question:

91. If the profit % and discount % of the Article D is same. Find out the Marked Price of Article D
 A. Rs. 900 B. Rs. 1222.22
 C. Rs. 909 D. Rs. 999
 E. None of these
92. If the ratio of the Cost Price of the Article D and Article E is 4:5, find out the discount % of Article E
 A. 32.3% B. 62.5%
 C. 30.25% D. 32.25%
 E. 33.33%
93. If the M.P. of Article A is Rs. 250 more than the C.P. of Article B and the difference between M.P and S.P. of Article B is Rs. 1258. Find the discount % of Article B
 A. 51.52% B. 20.52%
 C. 50.32% D. 51%
 E. None of these
94. C. P. of Article D is how much % less than the M.P. of Article A?
 A. 29% B. 27.1%
 C. 28.57% D. 28.6%
 E. None of the above
95. Find the Selling Price of Article C, if there is a hike in Profit % by 12.5%. Assume the Marked price for item C is 6/5 of cost price.
 A. Rs. 2178.5 B. Rs. 2718.5
 C. Rs. 2158.5 D. Rs. 2871.5
 E. Rs. 2817.5

96. The ratio of zinc and copper in an alloy of 32 kg is 5: 3. Some quantity of additional copper and zinc is added to the alloy and the quantity of zinc added to the alloy is 6 kg less than the quantity of copper added to the alloy. Find the percentage of zinc in the new alloy, if the total quantity of the final alloy is 42 kg?
 A. 52.4% B. 54.6%
 C. 59.7% D. 62.4%
 E. None of these
97. A thief is noticed by a policeman from a distance of 200 m. The thief starts running and the policeman chases him. The thief and the policeman run at the rate of 10 km and 11 km per hour respectively. What is the distance between them after 6 minutes?
 A. 100 m B. 150 m
 C. 190 m D. 200 m
 E. None of these
98. A pipe 'P' can fill a tank in 12 minutes and another pipe 'Q' can fill it in 16 minutes. But the third pipe 'R' can empty it in 6 minutes. The first two pipes P and Q are kept open for 4 minutes in the beginning and the third pipe R is also opened. How long does it take to empty the tank?
 A. 28 minutes B. 34 minutes
 C. 36 minutes D. 16 minutes
 E. None of these
99. A group of eight students performing an experiment in the laboratory. If the average reading of each student is 35.5, the average reading of first two student is 28 and the average reading of next three students is 36 the reading of 6th student is 8 more than the seventh one and the eighth one is 8 more than the sixth one, then find the reading of the sixth student
 A. 24 B. 32
 C. 40 D. 48
 E. 56
100. The side of the square PQRS is greater than the side of the square ABCD by 15%. By what percentage is the total surface area of the square PQRS more than that of square ABCD?
 A. 32.25% B. 26.75%
 C. 24% D. 20%
 E. 25%
