IBPS RRB PO Prelims Memory-Based Questions 12th September, 2020

Direction (1 – 5) : In the following question two equations are given in variables X and Y. You have to solve these equations and determine the relation between X and Y.

1.
I. $x^2 + 9x + 20 = 0$
II. $8y^2 - 15y + 7 = 0$
A. y > x
B. y < x
C. y ≥ x
D. y ≤ x
E. x = y or कोई संबंध स्थापित नहीं किया जा सकता है

2.
I. $x^2 - 11x + 30 = 0$
II. $y^2 + 12y + 36 = 0$
A. y > x
B. y < x
C. y ≥ x
D. y ≤ x
E. x = y or कोई संबंध स्थापित नहीं किया जा सकता है

3.
I. $x^2 + 13x + 40 = 0$
II. $y^2 + 7y + 10 = 0$
A. y > x
B. y < x
C. y ≥ x
D. y ≤ x
E. x = y or कोई संबंध स्थापित नहीं किया जा सकता है

4.
I. $x^2 - 20x + 91 = 0$
II. $Y^2 + 16y + 63 = 0$
A. y > x
B. y < x
C. y ≥ x
D. y ≤ x
E. x = y or कोई संबंध स्थापित नहीं किया जा सकता है

5.
I. $x^2 - x - 12 = 0$
II. $y^2 + 5y + 6 = 0$
A. y > x

B. y < x
C. y ≥ x
D. y ≤ x
E. x = y or कोई संबंध स्थापित नहीं किया जा सकता है

Direction (6 – 10) : What approximate value will come in place of the question mark (?) in the following question? (You are not expected to calculate the exact value)

6.
$\sqrt{784.01} \times 7.142 + 351.99 \times 24.98\%$ = ?
A. 320
B. 400
C. 240
D. 284
E. 450

7. $15.33^2 - 12.94^2 + 22.06^2 - 35.65 = ?$
A. 720
B. 505
C. 402
D. 600
E. 300

8. $24.002 \times 14.005 - 7.775 \times 5.964 = ?$
A. 400
B. 350
C. 288
D. 220
E. 150

9. $257.12 + 187.99 \times ? = (49.98)^2 + 30.99$
A. 8
B. 20
C. 24
D. 36
E. 12

10.
$\dfrac{2.99}{3.99} \times 3\sqrt{511.99} + 123.9\% \text{ of } 650.11 = ?$
A. 600
B. 700
C. 750
D. 812
E. 1000

11. If in the word '**PRODUCE'**, all the vowels are changed to the next letter and all the consonants are changed to the previous letter. Which of the following letters is fourth from the right end?
A. P
B. O
C. V
D. C
E. None of the above

12. How many such pairs of letters are there in the word '**SEGMENT**' each of which has as many letters between them in the word as in the English alphabet (Both forward and backward)?
A. One
B. Two
C. Three
D. More than three
E. None

In the given question assuming the given statements to be true, find which of the conclusion(s) is/are is definitely true and then give your answers accordingly.
13. **Statements:** A > B < C = D ≤ E, Q ≥ R < O > E
Conclusions:
I. D > R
II. B < O
A. If only conclusion I is true.
B. If 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.

In the given question assuming the given statements to be true, find which of the conclusion(s) is/are is definitely true and then give your answers accordingly.
14. **Statements:** X < K ≥ A = D < Y ≤ M, C ≥ N = D ≥ I
Conclusions:
I. K > I
II. X < C
A. If only conclusion I is true.
B. If 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.

In the given question assuming the given statements to be true, find which of the conclusion(s) is/are is definitely true and then give your answers accordingly.
15. **Statements:** P > Q < A < B ≥ E, M N = B ≤ X
Conclusions:
I. P > N
II. M > Q
A. If only conclusion I is true.
B. If 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.

In the given question assuming the given statements to be true, find which of the conclusion(s) is/are is definitely true and then give your answers accordingly.
16. **Statement:** A > N < J = L < D > U > W < G ≤ Y ≥ Z
Conclusions:
I. A < G
II. L > Z
A. If only conclusion I is true.
B. If 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.

In the given question assuming the given statements to be true, find which of the conclusion(s) is/are is definitely true and then give your answers accordingly.
17. **Statement:** E > G < F >A ≥ Y ≥ Q = V = D < W ≤ H
Conclusions:
I. A > D
II. A = D
A. If only conclusion I is true.
B. If 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 : Study the following data carefully and answer the questions accordingly.
In a certain code language,
'college road transport basic' is coded as 'da bs np co'
'attendance basic book adjust' is coded as 'uk bs zf vu'

'attendance block transport basic' is coded as 'uk je np bs'
'college open block transport' is coded as 'np co tx je'

18. What is the code for 'college'?
A. co
B. da
C. np
D. tx
E. none of the above

Direction: Study the following data carefully and answer the questions accordingly.

In a certain code language,
'college road transport basic' is coded as 'da bs np co'
'attendance basic book adjust' is coded as 'uk bs zf vu'
'attendance block transport basic' is coded as 'uk je np bs'

'college open block transport' is coded as 'np co tx je'

19. How is 'transport' coded in that language?
A. co
B. np
C. bs
D. tx
E. uk

20. Which of the following is coded as "adjust"?
A. uk
B. bs
C. vu
D. either vu or zf
E. zf

###ANSWERS###

1. Ans. A.
$x^2 + 9x + 20 = 0$
$x^2 + 4x + 5x + 20 = 0$
$x(x + 4) + 5(x + 4) = 0$
$(x + 5)(x + 4) = 0$
$x = -4, -5$
$8y^2 - 15y + 7 = 0$
$8y^2 - 8y - 7y + 7 = 0$
$8y(y - 1) - 7(y - 1) = 0$
$(8y - 7)(y - 1) = 0$
$y = \frac{7}{8}, 1$
So, y > x.
2. Ans. B.
$x^2 - 11x + 30 = 0$
$x^2 - 5x - 6x + 30 = 0$
$x(x - 5) - 6(x - 5) = 0$
$(x - 5)(x - 6) = 0$
$x = 6, 5$
$y^2 + 12y + 36 = 0$
$y^2 + 6y + 6y + 36 = 0$
$y(y + 6) + 6(y + 6) = 0$
$(y + 6)(y + 6) = 0$
$y = -6, -6$
So, x > y.
3. Ans. C.
$x^2 + 13x + 40 = 0$
$x^2 + 8x + 5x + 40 = 0$
$x(x + 8) + 5(x + 8) = 0$
$(x + 5)(x + 8) = 0$
$X = -5, -8$
$y^2 + 7y + 10 = 0$
$y^2 + 2y + 5y + 10 = 0$
$y(y+2) + 3(y + 2) = 0$
$y = -2, -5$
so, y ≥ x
4. Ans. B.
$x^2 - 20 + 91 = 0$
$x^2 - 13x - 7x + 91 = 0$
$x(x - 13) - 7(x - 13) = 0$
$(x - 7)(x - 13) = 0$
$X = 13, 7$
5. Ans. E.
$x^2 - 4x + 3x - 120 = 0$
$x(x - 4) + (x - 4) = 0$
$(x + 3)(x - 4) = 0$
$X = -3, 4$
$y2 + 5y + 6 = 0$
$y^2 + 2y + 3y + 6 = 0$
$y(y + 2) + 3(y + 2) = 0$
$y = -2, -3$

6. Ans. D.
$? = \sqrt{784} \times 7 + 352 \times 25\% = 28 \times 7 + 88 = 196 + 88 = 284$
Hence, the answer is D.
7. Ans. B.
$? = 15.33^2 - 12.94^2 + 22.06^2 - 35.65 = 15^2 - 13^2 + 22^2 - 35 = 225 - 169 + 484 - 35 = 505$.
Hence, the answer is B.
8. Ans. C.
$? = 24 \times 14 - 8 \times 6 = 336 - 48 = 288$
Hence, the answer is C.
9. Ans. E.
$257.12 + 187.99 \times ? = (49.98)^2 + 30.99$
$\Rightarrow 257 + 188 \times ? = 2500 + 31$
$\Rightarrow 188 \times ? = 2274$
$\Rightarrow x = 12$
Hence, the answer is C.
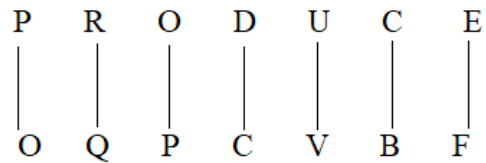10. Ans. D.
$\frac{3}{4} \times 8 + 124\%$ of $650 = x$
$6 + 806 = x$
$812 = x$
Hence, the answer is D.
11. Ans. D.

After changing all the vowels to the next letter and all the consonants to the previous letter, we have

P	R	O	D	U	C	E
O	Q	P	C	V	B	F

Hence, C is the fourth letter from the right end.
12. Ans. B.
Two such pairs are there: EG and NS.
13. Ans. B.
Given statements are: A > B < C = D ≤ E and Q ≥ R < O > E
Combining the statements we have,
Q ≥ R < O > E ≥ D = C > B < A
Conclusion I: D > R … this is not true as R < O > E ≥ D
Conclusion II: B < O … this is true as O > E ≥ D = C > B
Hence, only conclusion II follows.
14. Ans. D.

Given statements are: X < K ≥ A = D < Y ≤ M and C ≥ N = D ≥ I
Now,
Conclusion I: K > I (it is not true as K ≥ A = D ≥ I)
Conclusion II: X < C (it is not true as X < K ≥ A = D = N ≤ C)
Hence, neither of the conclusions follow.
15. Ans. B.
Given statements are: P > Q < A < B ≥ E and M > N = B ≤ X
Now,
Conclusion I: P > N (it cannot be true as P > Q < A < N)
Conclusion II: M > Q (it is true as Q < A < B = N < M)
Hence, only conclusion II follows.
16. Ans. D.
Given statement is: A > N < J = L < D > U > W < G ≤ Y ≥ Z
Conclusion I: A < G (it is false)
Conclusion II: L > Z (it is false)
Hence, neither of the given conclusions follow.
17. Ans. C.
Given statement is: E > G < F >A ≥ Y ≥ Q = V = D < W ≤ H
Conclusion I: A > D (it is possible as A ≥ Y ≥ Q = V = D implies A ≥ D)
Conclusion II: A = D (it is possible as A ≥ Y ≥ Q = V = D implies A ≥ D)
Both cannot be possible together as these are complementary to each other. Hence, any of them follows.
18. Ans. A.
Given,
(i) 'college road transport basic' is coded as 'da bs np co'
(ii) 'attendance basic book adjust' is coded as 'uk bs zf vu'
(iii) 'attendance block transport basic' is coded as 'uk je np bs'
(iv) 'college open block transport' is coded as 'np co tx je'
Comparing (i), (iii) and (iv), we have transport = np
Comparing (i) and (iv), we have College = co
Comparing (i), (ii) and (iii), we have basic = bs
Comparing (ii) and (iii), we have Attendance = uk
Comparing (iii) and (iv), we have

Block = je
From (i), road = da
From (ii), book adjust = zf vu (but not necessarily in the same order)
From (iv), open = je
"College" is coded as 'co'.
19. Ans. B.
Given,
(i) 'college road transport basic' is coded as 'da bs np co'
(ii) 'attendance basic book adjust' is coded as 'uk bs zf vu'
(iii) 'attendance block transport basic' is coded as 'uk je np bs'
(iv) 'college open block transport' is coded as 'np co tx je'
Comparing (i), (iii) and (iv), we have transport = np
Comparing (i) and (iv), we have College = co
Comparing (i), (ii) and (iii), we have basic = bs
Comparing (ii) and (iii), we have Attendance = uk
Comparing (iii) and (iv), we have Block = je
From (i), road = da
From (ii), book adjust = zf vu (but not necessarily in the same order)
From (iv), open = je
Hence, 'transport' is coded as 'np'.
20. Ans. D.
Given,
(i) 'college road transport basic' is coded as 'da bs np co'
(ii) 'attendance basic book adjust' is coded as 'uk bs zf vu'
(iii) 'attendance block transport basic' is coded as 'uk je np bs'
(iv) 'college open block transport' is coded as 'np co tx je'
Comparing (i), (iii) and (iv), we have transport = np
Comparing (i) and (iv), we have College = co
Comparing (i), (ii) and (iii), we have basic = bs
Comparing (ii) and (iii), we have Attendance = uk
Comparing (iii) and (iv), we have Block = je
From (i), road = da

From (ii), book adjust = zf vu (but not necessarily in the same order)
From (iv), open = je
Therefore, 'adjust' is coded as either zf or vu.