

# Prepp

## Your Personal Exams Guide



NDA



CDS



SSC CGL



CBSE UGC NET



IAS



SSC CHSL



CTET



MPSC



AFCAT



CSIR UDC NET



IBPS PO



UP POLICE



SSC MTS



SBI PO



BPS



UPTET



IBPS RRB



IBPS CLERK



IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

# RRB Group D 2022 Prev. Yr. Paper (17 Aug 2022) (Shift 2)

Total Time: 1 Hour : 30 Minute

Total Marks: 100

## Instructions

Sl No.	Section Name	No. of Question	Maximum Marks
1	CBT	100	100

- 1.) A total of 90 minutes is allotted for the examination.
- 2.) The server will set your clock for you. In the top right corner of your screen, a countdown timer will display the remaining time for you to complete the exam. Once the timer reaches zero, the examination will end automatically. The paper need not be submitted when your timer reaches zero.
- 3.) There will, however, be sectional timing for this exam. You will have to complete each section within the specified time limit. Before moving on to the next section, you must complete the current one within the time limits.

Your Personal Exams Guide

## CBT

1. Find the median of the data 11, 16, 33, 15, 51, 18, 71, 75, 22, 17. (+1, -0.33)

- a. 19
  - b. 20
  - c. 24
  - d. 18
- 

2. Simplify  $(32)^3 + (22)^2$ . (+1, -0.33)

- a. 729
  - b. 793
  - c. 379
  - d. 739
- 

3. Mawsynram is the wettest place on earth and it is situated in: (+1, -0.33)

- a. Mahadeo Hills
  - b. Lushai Hills
  - c. Rajmahal Hills
  - d. Khasi Hills
-

4. Last year, Ranjan's monthly salary was 34,500, and this year his monthly salary is 38,640. What is the percentage increase in Ranjan's monthly salary this year over last year? (+1, -0.33)
- a. 10%
  - b. 12%
  - c. 15%
  - d. 20%
- 

5. In January 2022, GAIL started India's maiden project of blending hydrogen into natural gas systems at which place? (+1, -0.33)
- a. Gwalior
  - b. Indore
  - c. Ujjain
  - d. Bhopal
- 

6. To reach point B from point A, Anita must walk 70 m towards the west, then take a right turn and walk 70 m, then take a left turn and walk 150 m, then take another left turn and walk 70 m, then take a left turn and walk 90 m, then take a right turn and walk 100 m, and finally take a left turn and walk 130 m. How far and in which direction is point B from point A? (+1, -0.33)
- a. 130 m, North
  - b. 100 m, South
  - c. 130 m, South

d. 100 m, North

---

7. Which of the following numbers will replace the question mark (?) in the given series? 11, 21, 47, 97, 179, ? (+1, -0.33)

a. 281

b. 301

c. 231

d. 205

---

8. Three statements are given, followed by three conclusions numbered I, II, and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements. (+1, -0.33)

Statements:

All phones are tablets.

No tablet is a calculator.

All drives are calculators.

Conclusions:

I. Some drives are phones.

II. Some calculators are phones.

III. No tablet is a drive.

a. Only conclusion III follows

b. Only conclusions I and II follow

c. Only conclusions I and III follow

d. Only conclusion II follows

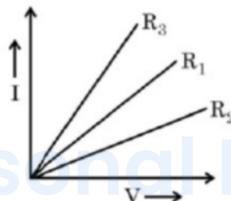
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9. Which factor(s) led scientists towards the classification of elements? (+1, -0.33)

- (i) Different methods of synthesis of elements
- (ii) Different source of elements
- (iii) Different properties of elements

- a. Only i
- b. Only ii
- c. i, ii, iii
- d. only iii

10. The I-V graph of three resistances  $R_1$ ,  $R_2$ , and  $R_3$  is shown in the figure below. The correct relation between  $R_1$ ,  $R_2$ , and  $R_3$  is: (+1, -0.33)



- a.  $R_3 < R_1 < R_2$
- b.  $R_3 > R_1 > R_2$
- c.  $R_1 > R_2 > R_3$
- d.  $R_1 < R_2 < R_3$

11. Bharat Heavy Electricals Limited was registered as Heavy Electricals (India) Limited (HE(I)L) in the Public Sector under the Ministry of Industry and (+1, -0.33)

Commerce on 20th August in which year?

- a. 1956
- b. 1969
- c. 1952
- d. 1962

---

12. Which action taking place in the digestive system of humans is similar to the emulsifying action of soaps on dirt? (+1, -0.33)

- a. Bile salts breaking large fat globules into smaller ones
- b. Bile juice enzymes helping in digestion of starch
- c. Bile juice providing acidic medium
- d. Bile juice providing alkaline medium

---

13. The distance between the focus and the center of curvature of a spherical mirror, in terms of the radius of curvature  $R$ , is equal to: (+1, -0.33)

- a.  $2R$
- b.  $R/2$
- c.  $R/4$
- d.  $R$

---

14. Seven friends, P, Q, R, S, T, U, and V, are sitting around a circular table. All are facing the center of the table. Only R is sitting between Q and S. Only T

is sitting between P and V. V is sitting third to the right of Q. V is third to the left of U. Who is sitting to the immediate right of R?

- a. S
- b. T
- c. P
- d. V

15. Based on the given statement, two conclusions are drawn. Find out which conclusion is true based on the statement. (+1, -0.33)

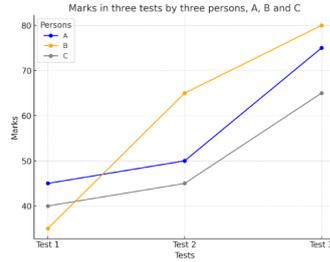
Statement:  $Z > R > Y > P = Q = N < S$

Conclusions:

- I.  $P > S$
- II.  $Z < Q$

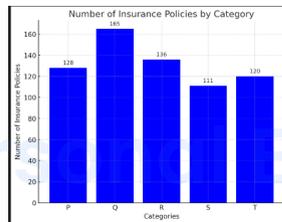
- a. Only conclusion I is true
- b. Only conclusion II is true
- c. Both conclusions I and II are true
- d. Neither conclusion I nor II is true

16. The graph and the table below show the marks obtained by three persons, A, B, and C, in three tests: Test 1, Test 2, and Test 3. If the maximum marks for both Test 1 and Test 2 are 80, and the maximum marks for Test 3 are 100, then how much percentage has A scored more than C considering the performance on all three tests? (+1, -0.33)



- a. 7.69%
- b. 8.2%
- c. 5.56%
- d. 6.92%

17. The following chart shows the numbers of insurance policies sold by five salespersons named P, Q, R, S, and T. What is the percentage share of insurance policies sold by Q in the total insurance policies sold by all five salespersons? (+1, -0.33)



- a. 30%
- b. 25%
- c. 20%
- d. 28%

18. When chlorination of dry slaked lime takes place, which compound will form as the main product? (+1, -0.33)

- a. Hydrochloric acid
  - b. Calcium oxychloride
  - c. Quicklime
  - d. Acetic acid
- 

19. In the given letter-cluster pairs, the first letter-cluster is related to the second letter-cluster following a certain logic. Study the pairs carefully, and from the options, select the pair that follows the same logic. (+1, -0.33)

COWBOY : WOCYOB

TANGLE : NATELG

- a. PICKLE : CIPLKE
- b. CROWDS : ORDWSC
- c. FLOWER : OLFREW
- d. MANGLE : NMALEG

20. Which of the following schemes is the most beneficial for a customer? (+1, -0.33)

Scheme 1: Buy 5 get 3 free

Scheme 2: Buy 5 get 6

Scheme 3: Two successive discounts of 10% and 5%

- a. Scheme 2 and 3 both
- b. Scheme 1

- c. Scheme 2
- d. Scheme 1 and 2 both

---

21. What is the rank of India in the Human Development Index, 2020, prepared by the United Nations Development Programme (UNDP) as per the report released in 2021? **(+1, -0.33)**

- a. 131st
- b. 161st
- c. 135th
- d. 129th

---

22. Select the set in which the numbers are related in the same way as the following sets. **(+1, -0.33)**

(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed.

Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

- (12,15,18)
- (45,35,25)

- a. (13, 10, 17)
- b. (19,18, 1)
- c. (14, 28, 14)

d. (15,20, 25)

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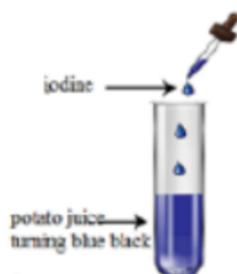
23. The Sangai deer is an endemic species found in which of the following Indian states? (+1, -0.33)

- a. Rajasthan
  - b. Telangana
  - c. Manipur
  - d. Kerala
- 

24. Express 0.420 as a fraction in the form of  $p/q$ , where  $p$  and  $q$  are integers and  $q \neq 0$ . (+1, -0.33)

- a.  $21/50$
  - b.  $14/33$
  - c.  $13/33$
  - d.  $41/99$
- 

25. Study the given diagram carefully. Which option correctly explains the reason for the appearance of the blue-black color? (+1, -0.33)



- a. Potato juice contains proteins, which turn blue-black with iodine.
  - b. Potato juice contains starch, which turns blue-black with iodine.
  - c. Potato juice contains glucose, which turns blue-black with iodine.
  - d. Potato juice contains fats, which turn blue-black with iodine.
- 

26. Which of the following numbers will replace the question mark (?) in the given series: 124, 129, 136, 145, 156, ? (+1, -0.33)

- a. 168
  - b. 169
  - c. 172
  - d. 165
- 

27. A textbook has a total of 892 pages. It is divided into two parts. The second part of the book has 52 pages less than the first part. How many pages are there in the second part of the book? (+1, -0.33)

- a. 464
  - b. 482
  - c. 472
  - d. 420
- 

28. The presence of which bacteria is an indicator of water pollution? (+1, -0.33)

- a. Salmonella typhi

- b. *Vibrio cholerae*
  - c. *E. coli* (Coliform)
  - d. *Mycobacterium tuberculosis*
- 

29. Which of the following parts helps in the exchange of gases in plants? (+1, -0.33)

- a. Cell membrane
  - b. Nucleus
  - c. Stomata
  - d. Guard cells
- 

30. Which of the following elements has the maximum number of atoms in its molecular form? (+1, -0.33)

- a. P
  - b. S
  - c. Ar
  - d. Ne
- 

31. When three parallel lines are cut by two transversals and the intercepts made by the first transversal are in the ratio 3 : 4, then the intercepts made by the second transversal are in the ratio: (+1, -0.33)

- a. 2 : 4
- b. 1 : 1

c. 3 : 4

d. 4 : 3

32. In this question, a group of numbers/symbols is coded using letters as per the table given below and the conditions which follow. The correct combination of codes following the conditions is your answer. (+1, -0.33)

Number/symbol	9	5	3	#	6	&	7	@	%	8	2
Code	L	K	J	H	G	F	D	S	A	P	B

Conditions:

(i) If the first two elements are numbers and the last is a symbol, then interchange the codes for the second number and the last symbol.

(ii) If the second element is a symbol and the last is a symbol, then all the symbols are to be coded as C.

(iii) If the question has any Number which is immediately preceded by a prime number, then interchange the codes of the first and last Number appearing in the question.

a. DL&P%#J

b. DLGPSJJ

c. SLFPAHJ

d. JLFPAHD

33. Cyclohexane contains ..... C-C bonds and,..... C-H bonds, so total ..... covalent bonds are (+1, -0.33)

a. 4, 8, 12

- b. 4, 12, 16
- c. 6, 12, 18
- d. 6, 12, 11

---

34. The armature of an electric motor consists of which of the following parts? (+1, -0.33)

- (i) Soft iron core
  - (ii) Coil
  - (iii) Magnets
- a. Both (i) and (iii)
  - b. Only (i)
  - c. Only (ii)
  - d. Both (i) and (ii)

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35. Study the given letter, symbol series and answer the question that follows. (+1, -0.33)

# 91@4\*7^53#91<54@3S#2\*6!42&9<36#2%2@7

If all even numbers in the given series are replaced with a number which is prime and even, how many numbers are there in the resultant series which are immediately preceded by a prime number and immediately followed by a symbol?

- a. 4
- b. 5

c. 2

d. 3

---

36. Which of the following rivers originates from Amarkantak Hills? (+1, -0.33)

a. Teesta

b. Sutlej

c. Narmada

d. Godavari

---

37. In a certain code language, 'FUEL' is written as '50' and 'JEER' is written as '44'. How will 'FARE' be written in that language? (+1, -0.33)

a. 36

b. 40

c. 34

d. 38

---

38. What fraction of the positions in all panchayat institutions is reserved for women? (+1, -0.33)

a.  $\frac{1}{4}$

b.  $\frac{1}{3}$

c.  $\frac{1}{2}$

---

d. 2/3

---

39. If '+' means '-', '-' means 'x', 'x' means '÷', and '÷' means '+', what will come in place of the question mark (?) in the following equation? (+1, -0.33)

$$16 + 4 - 8 + 3 \times 3 = ?$$

a. 9

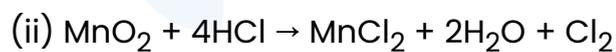
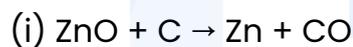
b. 14

c. 22

d. 23

---

40. Which of the following is not an example of a redox reaction? (+1, -0.33)



a. i

b. ii

c. iii

d. iv

---

41. Navroz festival is associated with which of the religious communities? (+1, -0.33)

- a. Jain
  - b. Sikh
  - c. Parsi
  - d. Buddhist
- 

42. The famous Haji Ali Dargah is located in which of the following cities? (+1, -0.33)

- a. Hyderabad
  - b. Delhi
  - c. Mumbai
  - d. Ajmer
- 

43. Consider the below statements and identify the correct answer. (+1, -0.33)

Statement I: Anhydrous sodium carbonate is used in soda-acid fire extinguishers.

Statement II: Anhydrous sodium carbonate is dissolved in water and recrystallized to get washing soda crystals containing 10 molecules of water of crystallization.

- a. Both statements are true.
  - b. Both statements are false.
  - c. Statement I is true, and Statement II is false.
  - d. Statement II is true, and Statement I is false.
-

44. If 2 is added to each odd digit and 1 is subtracted from each even digit in the number 34135278, what will be the sum of the digits that are third from the Left and third from the right? (+1, -0.33)

- a. 7
- b. 3
- c. 1
- d. 4

45. Which part of the Indian Constitution has only one Article 51A, which deals with the Code of 11 Fundamental Duties for the Citizens? (+1, -0.33)

- a. Part IV-A
- b. Part V
- c. Part IX-A
- d. Part VII

46. Which of the following terms will replace the question mark (?) in the given series to make it logically complete? (+1, -0.33)

UCK-4, WFO-9, YIS-19, ALW-39, ?

- a. COA-49
- b. BOA-76
- c. COA-77
- d. CPB-79

47. Study the given arrangement carefully and answer the question that follows. (+1, -0.33)

(Left) 3 ^ % 7 2 4 £ 3 ₣ 4 f @ 8 8 & 6 @ 1 (Right)

How many such numbers are there in the above arrangement each of which is immediately followed by a symbol and also immediately preceded by a symbol?

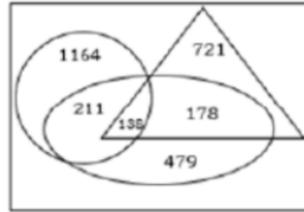
- a. 9
- b. 11
- c. 4
- d. 3

48. The mean of 36 numbers was found as 42. Later on, it was determined that a number 47 was misread as 41. Find the correct mean of the given numbers (rounded off to two decimal places). (+1, -0.33)

- a. 43.74
- b. 42.17
- c. 42.83
- d. 43.62

49. The rectangle represents students, the circle represents girls, the oval represents arts stream, and the triangle represents sports. The numbers in different sections indicate the number of persons. How many girl students have taken arts stream and do NOT play sports, and what is the

total number of students who play sports but are NOT girls and have taken arts stream?



- a. 479 and 211, respectively
- b. 211 and 178, respectively
- c. 138 and 178, respectively
- d. 138 and 479, respectively

50. A is twice as old as B. B is  $\frac{1}{3}$  as old as C. The sum of ages of A, B, and C is 42 years. Find the sum of the ages of A and B. (+1, -0.33)

- a. 21 years
- b. 23 years
- c. 15 years
- d. 12 years

51. Find the value of  $(\sin^2 22^\circ + \sin^2 68^\circ) / (\cos^2 33^\circ + \cos^2 57^\circ)$ . (+1, -0.33)

- a. 1:4
- b. 2:1
- c. 1:2

d. 1:1

---

52. The LCM of 48, 72, and another number, X, is 576. Which of the values given below can be the value of X? (+1, -0.33)

a. 144

b. 195

c. 288

d. 192

---

53. Suneet walked 10 m towards the north, then turned left and walked 11 m, then from there he turned right and walked 13 m, and then he turned right again and walked 25 m. In which direction is Suneet facing now? (+1, -0.33)

a. North

b. West

c. South

d. East

---

54. In which year was The Indian Museum Act passed? (+1, -0.33)

a. 1909

b. 1910

c. 1921

d. 1915

55. In accordance with Fleming's left hand rule used to find the force on a current-carrying conductor placed inside a magnetic field, the thumb and the index finger represent the directions of ..... and ..... , respectively. (+1, -0.33)
- a. Field, Current
  - b. Magnetic Field, Force
  - c. Force, Magnetic Field
  - d. Current, Field
- 

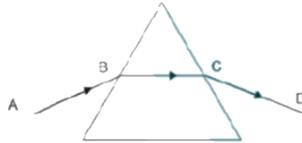
56. If 15 March 2022 was a Tuesday, what day of the week was 15 March 2020? (+1, -0.33)
- a. Friday
  - b. Sunday
  - c. Saturday
  - d. Monday
- 

57. S, T, U, V, W, and X live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it is numbered 2, and so on until the topmost floor is numbered 6. V lives on the lowermost floor. X and U each live on an even-numbered floor. T lives exactly between U and W. W lives on floor number 2. Who lives on floor number 5? (+1, -0.33)
- a. S
  - b. T
-

c. X

d. U

58. In the figure shown below, the incident ray and the emergent ray in the respective order are given by: (+1, -0.33)



a. AB and BC

b. AB and CD

c. CD and AB

d. BC and CD

59. If the volume of a sphere is  $36\pi \text{ cm}^3$ , then the diameter of the sphere is: (+1, -0.33)

a. 9 cm

b. 27 cm

c. 3 cm

d. 6 cm

60. What is the nature of the roots of  $3x^2 + 6x - 5 = 0$ ? (+1, -0.33)

a. There are no real roots.

b. The roots are real and equal.

- c. The roots are real and distinct.
- d. The roots are real and more than 2.

---

61. At simple interest, a certain sum of money amounts to RS 1,250 in 2 years and to Rs 2,000 in 5 years. Find the rate of interest per annum (rounded off to two decimal places). (+1, -0.33)

- a. 16.67%
- b. 33.33%
- c. 27.27%
- d. 11.11%

---

62. Which of the following is divisible by both 4 and 8? (+1, -0.33)

- a. 4382
- b. 3824
- c. 8342
- d. 3842

---

63. An object placed at a distance of 25 cm from a converging lens forms a real and inverted image at 30 cm from the lens. The magnification produced by the lens is equal to: (+1, -0.33)

- a.  $-5/6$
- b.  $-6/5$

c. 6/5

d. 5/6

---

64. Formation of urine in the kidneys involves the given three processes in which of the following sequences? (+1, -0.33)

a. Filtration, elimination, selective reabsorption

b. Filtration, selective reabsorption, elimination

c. Selective reabsorption, filtration, elimination

d. Selective reabsorption, elimination, filtration

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65. Which of the following "state – major language" pairs has been INCORRECTLY matched? (+1, -0.33)

a. Andhra Pradesh – Telugu

b. Manipur – Meitei

c. Meghalaya – Khasi

d. Kerala – Kannada

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66. Which of the following is NOT an example of asexual reproduction? (+1, -0.33)

a. Budding

b. Fragmentation

c. Grafting

---

d. Binary Fission

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67. In the context of Consumer Rights, what is the full form of COPRA? (+1, -0.33)

- a. Consumer Protection Agency
  - b. Consumer Protection Alliance
  - c. Consumer Protection Act
  - d. Consumer Protection Association
- 

68. Refer to the following number series and answer the question. (+1, -0.33)

51263565365325695172

How many such numbers are there in the series each of which is immediately preceded by an even number and also immediately followed by an even number?

- a. 3
  - b. 5
  - c. 4
  - d. 2
- 

69. P, Q, R, S, T, U, and V live on seven different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it is number 2, and so on up to the topmost floor numbered 7. Q lives on floor number 2. R lives on the floor immediately above U. S is on the floor immediately below V's floor. Only three persons live between the floors of T and P. R (+1, -0.33)

lives on the topmost floor. Only one person lives between the floors of R and P. On which floor does P live?

- a. Floor 4
- b. Floor 5
- c. Floor 3
- d. Floor 2

---

70. Select the set in which the numbers are related in the same way as the numbers of the following sets. (+1, -0.33)

(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed.

Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 s not allowed)

(35, 12, 29), (23, 16, 31)

- a. (21, 25, 29)
- b. (33, 30, 27)
- c. (18, 12, 21)
- d. (19, 8, 23)

---

71. The product of the roots of  $3x^2 - 13x + 6 = 0$  is: (+1, -0.33)

- a. 5

- b. 4
  - c. 3
  - d. 2
- 

72. What is the total number of shells involved in the electronic configuration of carbon? (+1, -0.33)

- a. One
  - b. Four
  - c. Three
  - d. Two
- 

73. 5 men and 6 women can do a piece of work in 6 days while 3 men and 5 women can do the same work in 9 days. In how many days can 3 men and 2 women do the same work? (+1, -0.33)

- a.  $11\frac{5}{11}$  days
  - b.  $13\frac{1}{2}$  days
  - c.  $10\frac{1}{4}$  days
  - d.  $12\frac{1}{7}$  days
- 

74. Who prepared the first estimates of the national income of India in 1876? (+1, -0.33)

- a. Dadabhai Naoroji

- b. P. C. Mahalanobis
  - c. V. K. R. V. Rao
  - d. William Digby
- 

75. Find the amount of water contained in a cylindrical tank of radius 7 m and height 20 m. It is known that the tank is completely filled. (+1, -0.33)

- a. 4250 m<sup>3</sup>
  - b. 3125 m<sup>3</sup>
  - c. 5110 m<sup>3</sup>
  - d. 3080 m<sup>3</sup>
- 

76. According to data from the Centre for Monitoring the Indian Economy, which state witnessed the highest unemployment rate in January 2022? (+1, -0.33)

- a. Haryana
  - b. Punjab
  - c. Himachal Pradesh
  - d. Rajasthan
- 

77. Any reaction that produces an insoluble precipitate can be called a: (+1, -0.33)

- a. Redox reaction
- b. Displacement reaction

- c. Precipitation reaction
  - d. Decomposition reaction
- 

78. A given resistance  $R$  is cut into 2 equal parts. The resistance of each part is: (+1, -0.33)

- a.  $2R$
  - b.  $R/4$
  - c.  $R$
  - d.  $R/2$
- 

79. 14 years ago, the age of a father was three times the age of his son. Now, the father is twice as old as his son. What is the sum of the present ages of the father and the son? (+1, -0.33)

- a. 84 years
  - b. 56 years
  - c. 42 years
  - d. 98 years
- 

80. In this question, a statement is followed by two conclusions. Which of the two conclusions is/are true with respect to the statement? (+1, -0.33)

Statement:  $H > Y \geq S = X = A > W$

Conclusions:

I.  $H < S$

II.  $A \leq Y$

- a. Both conclusions I and II are true
  - b. Only conclusion I is true
  - c. Neither conclusion I nor II is true
  - d. Only conclusion II is true
- 

81. A statement is given followed by two arguments I and II. Read the statement and the arguments carefully and select the appropriate answer from the given options. (+1, -0.33)

Statement: Apartment complexes have decided to charge a heavy penalty on residents who do not segregate their dry waste and wet waste.

Arguments:

I. The government has mandated segregation of wet waste and dry waste by all homeowners.

II. All apartments have been provided with separate bins for dry waste and wet waste to facilitate garbage segregation.

- a. Both arguments I and II strengthen the statement
  - b. Both arguments I and II weaken the statement
  - c. Argument II weakens, while argument I strengthens the statement
  - d. Argument I weakens, while argument II strengthens the statement
-

82. The percentage profit earned by James by selling an article for 1,920 equals the percentage loss suffered by selling it at 1,500. What should be the selling price if he wants to earn a 10% profit? (+1, -0.33)
- a. 17,000
  - b. 22,000
  - c. 1,881
  - d. 21,881
- 

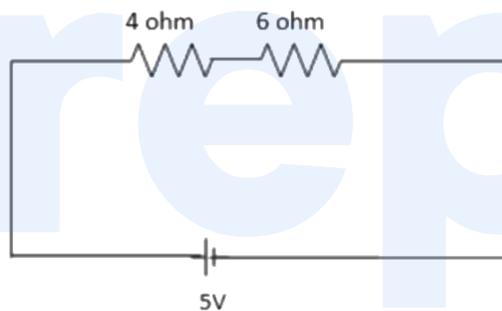
83. Article 279A is related to which of the following constitutional bodies? (+1, -0.33)
- a. Goods and Service Tax Council
  - b. Election Commission of India
  - c. Finance Commission
  - d. UPPSC
- 

84. In May 2022, which of the following state Chief Ministers, Basavaraj Bommai, launched a new health and wellness scheme app named "AAYU"? (+1, -0.33)
- a. Andhra Pradesh
  - b. Kerala
  - c. Karnataka
  - d. Tamil Nadu
-

85. For outstanding contribution in which of the following sports did T. P. Ouseph win the Dronacharya Award in 2021? (+1, -0.33)

- a. Weightlifting
- b. Athletics
- c. Boxing
- d. Table Tennis

86. The potential drop across the  $4\ \Omega$  resistor in the given circuit is: (+1, -0.33)



- a. 2 V
- b. 4 V
- c. 3 V
- d. 5 V

87. The expansion of  $(3a - 4b - 2c)^2$  is: (+1, -0.33)

- a.  $9a^2 + 16b^2 + 4c^2 - 24ab + 8bc + 12ac$
- b.  $9a^2 + 16b^2 + 4c^2 + 12ab - 8bc + 6ac$

c.  $9a^2 + 16b^2 + 4c^2 - 24ab + 16bc - 12ac$

d.  $9a^2 + 16b^2 + 4c^2 - 24ab + 16bc - 6ac$

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88. Soil erosion is one of the major threats to the environment. Which of the following can help to prevent erosion of soil? **(+1, -0.33)**

a. Poor irrigation practices

b. Over-cultivation

c. Cattle grazing

d. Contour ploughing

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89. Sandhya Gurung received the Dronacharya Award, 2021, for coaching in the field of: **(+1, -0.33)**

a. Kabaddi

b. Swimming

c. Boxing

d. Shooting

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90. There are four different points on a plane such that no three are collinear. The number of distinct straight lines that can be drawn through them is: **(+1, -0.33)**

a. 8

b. 4

c. 2

---

d. 6

---

91. The distance between the pole and the center of curvature of a spherical mirror, in terms of its focal length  $f$ , is equal to: (+1, -0.33)

a.  $f$

b.  $2f$

c.  $f/2$

d.  $f/4$

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92. Divij, Palak, Ravneet, Sejal, and Tapan are sitting around a circular table facing the center of the table. Only Palak is sitting between Ravneet and Tapan. Tapan is second to the right of Sejal. Only Sejal is between Ravneet and Divij. Who is sitting to the immediate left of Tapan? (+1, -0.33)

a. Palak

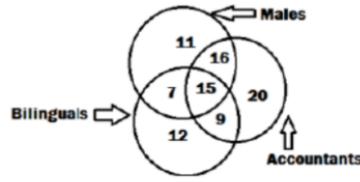
b. Divij

c. Ravneet

d. Sejal

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93. Study the given diagram carefully and answer the question. The numbers in different sections indicate the number of persons. How many such accountants are there who are also bilinguals? (+1, -0.33)



- a. 9
- b. 24
- c. 22
- d. 15

94. During adolescence, several changes occur in the human body. Which of the following changes is associated with sexual maturation only in girls? (+1, -0.33)

- a. Oily skin with pimples
- b. Growth of hair on different parts of the body
- c. Consciousness of their looks
- d. Growth of mammary glands

95. A, B, and C started a business. They partnered for 6 months, 12 months, and 14 months respectively. If their profit is in the ratio 5 : 4 : 7, then the ratio of their respective investments is: (+1, -0.33)

- a. 5 : 2 : 3
- b. 1 : 5 : 3
- c. 2 : 3 : 7
- d. 2 : 3 : 5

96. Select the correct combination of mathematical signs that can sequentially replace \* to balance the following equation. (+1, -0.33)

$$20 * 4 * 6 * 2 * 14 = 18$$

- a. +, =, ÷, ×, +
  - b. ÷, ×, +, =, +
  - c. ×, +, ÷
  - d. ÷, -, +
- 
97. Reena reaches a birthday party 20 minutes late if she walks at 3 km/h from her house. If she increases her speed to 4 km/h, she would reach 30 minutes early. What is the distance between her house and the party venue? (+1, -0.33)
- a. 4 km
  - b. 9 km
  - c. 10 km
  - d. 7 km

98. In December 2021, which state government inaugurated the "Pink Force" of Police to enhance safety and security for women and children? (+1, -0.33)

- a. Kerala
- b. Sikkim
- c. Goa

d. Meghalaya

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99.  $6124.8 \times 625.5 \times 0.0043$  is equal in value to: (+1, -0.33)

a.  $612.48 \times 625.5 \times 0.43$

b.  $6.1248 \times 62.55 \times 0.043$

c.  $6.1248 \times 62.55 \times 0.43$

d.  $61.248 \times 6255 \times 0.043$

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100. O, P, Q, R, S, T, and U are seven boxes that are kept one over the other but not necessarily in the same order. Only one box is kept between R and P. Only one box is kept between S and T. Only one box is kept between P and Q. Q is kept at the lowermost position. T is kept immediately above Q. How many boxes are kept between S and Q? (+1, -0.33)

a. One

b. Two

c. Three

d. Four

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