

# 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. Ye. Paper (18 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. What will come in place of the question mark (?) in the following equation, if '+' and '-' are interchanged and also 'x' and '÷' are interchanged? (+1, -0.33)

$$8 + 13 - 18 \times 9 \div 3 = ?$$

- a. -33
- b. 33
- c. 32
- d. -32

- 
2. Mendeleev's Periodic Law states that: (+1, -0.33)

- a. The properties of elements are the periodic function of their atomic masses
- b. The properties of elements are the periodic function of their atomic numbers
- c. The properties of elements are the periodic function of their colour
- d. The properties of elements are the periodic function of their magnetic properties

- 
3. To connect a number of resistors in parallel can be considered equivalent to: (+1, -0.33)

- a. Increasing cross-sectional area of the conductor
- b. Decreasing cross-sectional area of the conductor

- c. Increasing length of the conductor
  - d. Increasing resistance of the conductor
- 

4. In a certain code language, TRIP is written as WULS and SOME is written as VRPH. How will CLAN be written in the same language? **(+1, -0.33)**

- a. FOEQ
  - b. FODQ
  - c. FODR
  - d. FPDQ
- 

5. The fraction equivalent to  $0.474747\dots$  is: **(+1, -0.33)**

- a.  $47/99$
  - b.  $11/27$
  - c.  $27/9$
  - d.  $27/100$
- 

6. The formation of water from hydrogen and oxygen is an example of **(+1, -0.33)**

- .
- a. Combination reaction
  - b. Oxidation and reduction
  - c. Decomposition reaction

d. Displacement reaction

---

7. \_\_\_\_\_ is represented by the root apex's constantly dividing cells. (+1, -0.33)

- a. Meristematic growth
  - b. Maturation
  - c. Increase in hormonal level
  - d. Germination
- 

8. Which team won the Santosh Trophy 2021-22, the 75th edition of the Football tournament? (+1, -0.33)

- a. Karnataka
  - b. Kerala
  - c. West Bengal
  - d. Meghalaya
- 

9. Safflower, shisham, khair, arjun, and mulberry are the main trees of which vegetation? (+1, -0.33)

- a. Tropical Evergreen Forests
- b. Mangrove Forests
- c. Tropical Deciduous Forests
- d. Montane Forests

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10. A class of 30 students appeared in a test. The average score of 12 students is 80, and that of the rest is 75. What is the average score of the class? (+1, -0.33)

- a. 56
- b. 67
- c. 87
- d. 77

---

11. Which of the following reactions represents symbolic combination reaction? (+1, -0.33)

- a.  $XY \rightarrow X + Y$
- b.  $A + B \rightarrow C$
- c.  $AB + CD \rightarrow AC + BD$
- d.  $PQ + R \rightarrow PR + Q$

---

12. In a certain code language, 'LEFT' is written as 'VGFN' and 'DESK' is written as 'MTFF'. How will 'HELP' be written in that language? (+1, -0.33)

- a. SMFJ
- b. RMFJ
- c. QMFJ
- d. RNFJ

13. Read the given statement and conclusions carefully. Assuming that the information given in the statements is true, decide which of the given conclusions logically follow(s) from the statement. (+1, -0.33)

**Statement:**

Cyclone Sepa is expected to make landfall by 3 p.m. today on the Balasore coast. Rough seas, heavy rain, and strong winds are expected to lash Balasore from 11 a.m. onwards. Power supply in Balasore is likely to be affected from 2 p.m. to 9 p.m.

**Conclusions:**

- i) There could be power cuts in Balasore after 3 p.m. today.
- ii) It would be unsafe for fishermen to venture out into the sea today, till the cyclone passes.

- a. Only conclusion I follows
- b. Both conclusions I and II follow
- c. Only conclusion II follows
- d. Neither conclusion I nor II follows

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

L @ S O J ^ B U # W R < E M @ N U # B \* H ! A & L E W % H & G A \* S A # L D

How many consonants are immediately preceded by a symbol and immediately followed by a vowel?

- a. 5
- b. 3

c. 4

d. 6

---

15. An optical device Y has a positive focal length. Y is: (+1, -0.33)

a. Either a concave lens or a concave mirror

b. Either a convex lens or a convex mirror

c. Either a convex lens or a concave mirror

d. Either concave lens or a convex mirror

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16. Which Article deals with the protection of life and personal liberty? (+1, -0.33)

a. Article 31

b. Article 12

c. Article 22

d. Article 21

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17. Which of the following events takes place during diastole in the human heart? (+1, -0.33)

a. Blood leaves the ventricle

b. Blood enters the aorta

c. Blood enters the ventricle

d. Blood enters the lungs

18. The diagonal and one side of a rectangular plot are 65 m and 63 m, respectively. What is the perimeter of the rectangular plot? (+1, -0.33)

- a. 196 m
  - b. 256 m
  - c. 225 m
  - d. 158 m
- 

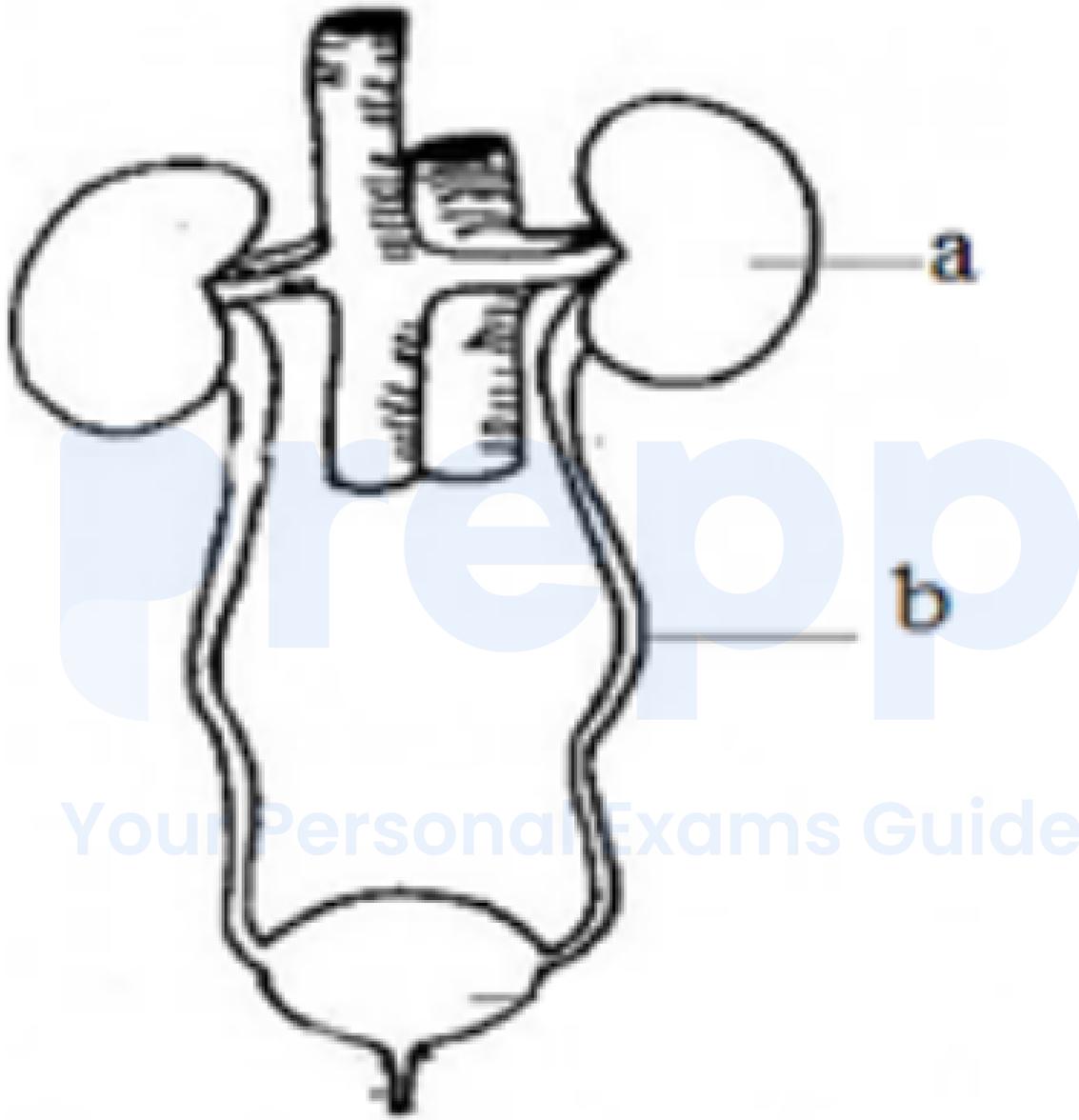
19. Calcium sulphate dihydrate is the chemical name of: (+1, -0.33)

- a. Washing soda
  - b. Gypsum
  - c. Baking powder
  - d. Plaster of Paris
- 

20. If  $AB = x + 3$ ,  $BC = 2x$ , and  $AC = 4x - 5$ , then for what value of 'x' does B lie on AC? (+1, -0.33)

- a. 2
  - b. 3
  - c. 5
  - d. 8
-

21. The diagram of the human excretory system is given below. Select the option that correctly shows the functions of parts 'a' and 'b'. (+1, -0.33)



- a. a - Formation of urine, b - Collection of urine
- b. a - Formation of urine, b - Carrying urine for storage
- c. a - Formation of urine, b - Throwing urine outside the body

d. a - Collection of urine, b - Formation of urine

---

22. The Panchayati Raj Institutions DO NOT exist in which of the following states as on June 2022? (+1, -0.33)

- a. Manipur
  - b. Tripura
  - c. Nagaland
  - d. Arunachal Pradesh
- 

23. The rate of increase in ex-ante consumption due to a unit increment in income is called ----- (+1, -0.33)

- a. Marginal propensity to consume
  - b. Average propensity to save
  - c. Average propensity to consume
  - d. Marginal propensity to save
- 

24. As of January 2022, which country has become the world's top exporter of cucumber? (+1, -0.33)

- a. India
- b. America
- c. Canada
- d. China

---

25. Magnification produced by a lens is equal to: (+1, -0.33)

- a.  $u/v$
- b.  $-v/u$
- c.  $v/u$
- d.  $-u/v$

---

26. How many such pairs of letters are there in the word 'CAPITAL' (in both forward and backward directions) each of which have as many letters between them in the word as there are in the English alphabetical order? (+1, -0.33)

- a. 3
- b. 4
- c. 1
- d. 2

---

27. Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster. (+1, -0.33)

SMILE : ELIMS :: MASTE : ETSAM :: STARV : ?

- a. VRATS
- b. VTARS
- c. VRTAS

d. SRVAT

---

28. Select the correct group of scientists who are the recipients of the Shanti Swarup Bhatnagar Prize for Science and Technology, 2021. (+1, -0.33)

- a. Dr. Subimal Ghosh, Dr. Neena Gupta, and Dr. Dhiraj Kumar
  - b. Dr. Vatsasla Thirumalai, Dr. Abhijit Mukharjee, and Dr. Subi Jacob George
  - c. Dr. Bushra Ateeq, Dr. Ritesh Agarwal, and Dr. Surajit Dhara
  - d. Dr. Amit Singh, Dr. Kanishka Biswas, and Dr. Anish Ghosh
- 

29. Q started from a point and walked towards the south for 42 m, then from there he turned right and walked 2 m, then he turned right again and walked 30 m, and then turned left and walked 10 m. In which direction is Q facing now? (All turns are 90 degree turns only) (+1, -0.33)

- a. North
  - b. West
  - c. East
  - d. South
- 

30. A vendor sold 25 laptops at a profit of 12% and 15 laptops at a profit of 20%. If he had sold all the 40 laptops at a profit of 18%, his profit would have increased by Rs. 30,000. What is the cost price of each laptop, if the cost price of all the 40 laptops is the same? (+1, -0.33)

- a. Rs. 28,000

- b. Rs. 25,000
- c. Rs. 26,000
- d. Rs. 27,000

31. The table given below shows the record of the number of students who got selected in the entrance exam of M.Phil. in a particular central university from five different states of India over the years. Study the table and answer the question. (+1, -0.33)

| Years | Kashmir | Bihar | MP  | Punjab | Delhi |
|-------|---------|-------|-----|--------|-------|
| 2017  | 300     | 440   | 250 | 350    | 280   |
| 2018  | 400     | 400   | 280 | 400    | 320   |
| 2019  | 450     | 350   | 240 | 260    | 260   |
| 2020  | 500     | 380   | 400 | 320    | 400   |
| 2021  | 430     | 420   | 540 | 280    | 350   |

number of students who got selected in 2020 from Bihar was approximately what percentage of the total number of students who got selected from Delhi for all the years together?

- a. 15.0%
- b. 20.5%
- c. 23.6%
- d. 15.5%

32. Which of the following is the greatest number that divides 72 and 119 and leaves 3 and 4 as respective remainders? (+1, -0.33)

- a. 23
- b. 21
- c. 19
- d. 17

33. A statement is given, followed by four conclusions given in the options. Find out which conclusion is true based on the given statement. (+1, -0.33)

Statement:  $K = U = R > N > E > G < W$

- a.  $G < R$
- b.  $W < N$
- c.  $K = N$
- d.  $K < N$

34. Who is the Controller General of Accounts (CGA) as on 15th June 2022? (+1, -0.33)

- a. Girraj Prasad Gupta
- b. Sonali Singh
- c. Deepak Das
- d. Soma Roy

35. In which of the following years was The Indian Official Language Act passed? (+1, -0.33)
- a. 1973
  - b. 1953
  - c. 1936
  - d. 1963
- 

36. What is the angle traced by the hour hand in 18 minutes? (+1, -0.33)
- a.  $7^\circ$
  - b.  $8^\circ$
  - c.  $12^\circ$
  - d.  $9^\circ$
- 

37. If each interior angle of a regular polygon is  $135^\circ$ , then the number of sides that polygon has is: (+1, -0.33)
- a. 8
  - b. 15
  - c. 12
  - d. 10
-

38. A metallic wire having resistivity  $\rho$  is cut into four equal parts. The resistivity of each part is: (+1, -0.33)

- a.  $\rho$
- b.  $4\rho$
- c.  $\rho/2$
- d.  $\rho/4$

39. Which of the following was the first city planned by the Mughal Empire? (+1, -0.33)

- a. Delhi
- b. Agra
- c. Islamabad
- d. Fatehpur Sikri

40. Who is the Chief Election Commissioner of India as on March 2022? (+1, -0.33)

- a. KK Menon
- b. Sushil Chandra
- c. Rajiv Kumar
- d. Anup Chandra Pandey

41. The first and second members, respectively, of the ketone homologous series are: (+1, -0.33)

- a. Propanone, Butanone
- b. Methanone, Ethanone
- c. Ethanone, Propanone
- d. Butanone, Propanone

---

42. Which of the following options is the closest approximate value which will come in place of question mark (?) in the following equation? (+1, -0.33)

$$26.52 \times 3.89 - 7.79 \times 2 + 27.39 = ?$$

- a. 136
- b. 181
- c. 119
- d. 82

---

43. A man buys 15 identical articles for a total of Rs. 15. If he sells each of them for Rs. 1.23, then his profit percentage is: (+1, -0.33)

- a. 23%
- b. 8%
- c. 50%
- d. 32%

---

44. Which of the following established by Raja Rammohan Roy was a precursor in socio-religious reforms in Bengal? (+1, -0.33)

- a. Prarthana Samaj
- b. Arya Samaj
- c. Atmiya Sabha
- d. Dharma Sabha

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45. Find the roots of  $\frac{6}{x} - \frac{2}{x-1} - \frac{1}{x-2} = 0$  (+1, -0.33)

- a.  $\frac{4}{5}$  and 3
- b.  $\frac{4}{3}$  and  $\frac{3}{2}$
- c.  $\frac{4}{5}$  and  $\frac{3}{2}$
- d.  $\frac{4}{3}$  and 3

---

46. Which of the following was the guest nation at the Hyderabad Literary Festival 2022? (+1, -0.33)

- a. China
- b. Canada
- c. United Kingdom
- d. Australia

---

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

**Statement:**

$$B \geq M > G, G \geq Y = L$$

**Conclusions:**

$$B > Y, M = L$$

- a. Only conclusion 1 is true
  - b. Only conclusion 2 is true
  - c. Both conclusions 1 and 2 are true
  - d. Neither conclusion 1 nor 2 is true
- 

48. The country's first commercial-scale biomass-based hydrogen plant is coming up in which district of Madhya Pradesh? (+1, -0.33)

- a. Khandwa
  - b. Agar Malwa
  - c. Betul
  - d. Anuppur
- 

49. About 85% of the Indian population of colonial India depended on which of the following sectors of the economy? (+1, -0.33)

- a. Hospitality and real estate
  - b. Handicraft industries
  - c. Transport
  - d. Agriculture
-

50. Two wires A and B are made of the same material and have the same length but different cross-sectional areas. If the resistance of wire A is 9 times the resistance of wire B, the ratio of the radius of wire A to that of wire B is: (+1, -0.33)
- a. 3 : 1
  - b. 1 : 9
  - c. 1 : 3
  - d. 9 : 1
- 

51. Which of the following pairs of numbers are co-primes? (+1, -0.33)
- a. 34 and 35
  - b. 12 and 18
  - c. 7 and 14
  - d. 17 and 170
- 

52. If  $x^2 + 2x + 9 = (x - 2)(x - 3)$ , then the resultant equation is: (+1, -0.33)
- a. a cubic equation
  - b. a cubic polynomial
  - c. a quadratic equation
  - d. not a quadratic equation
-

53. What is the assistance to be given to the elderly, per person per month, after the age of 60 years, under the 'Jiyo Parsi' Scheme with effect from 22 October 2021? (+1, -0.33)
- a. Rs. 20,000
  - b. Rs. 15,000
  - c. Rs. 10,000
  - d. Rs. 25,000
- 

54. A magnet, when moved near a coil, produces an induced current. Which of the following method(s) can be used to increase the magnitude of the induced current? (+1, -0.33)
- (i) Increasing the number of turns in the coil
  - (ii) Increasing the speed of the magnet
  - (iii) Increasing the resistivity of the wire of the coil
- a. Only (i)
  - b. Only (iii)
  - c. Both (ii) and (iii)
  - d. Both (i) and (ii)
- 

55. Three of the following statements pertaining to non-biodegradable plastics indicate their implications on animals, plants, and our surroundings. Choose the odd one out. (+1, -0.33)
- a. Plastic bags are durable carry bags

- b. Choke the drains
- c. Reduce the fertility of the soil
- d. Can prove fatal when eaten by animals

---

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

**Statements:**

All toys are plastics. All plastics are disposables. Some toys are fibres.

**Conclusions:**

- I) Some fibres are plastics.
  - II) Some disposables are fibres.
  - III) No fibre is a disposable.
- a. Only conclusions I and II follow
  - b. Only conclusions II and III follow
  - c. Either conclusion I or conclusion III follows
  - d. None of the conclusions follow

---

57. How many seconds will a boy take to run one complete round around a square field of side 38 metres, if he runs at a speed of 6 km/h? (+1, -0.33)

- a. 50.1

- b. 91.2
- c. 61.2
- d. 71.2

---

58. Two pipes X and Y can fill a cistern in 21 hours and 24 hours, respectively. **(+1, -0.33)**  
The pipes are opened simultaneously, and it is found that due to a leakage in the bottom, it takes 48 minutes more to fill the cistern. When the cistern is full, in how much time will the leak empty it if no pipe is open during that time?

- a. 168 hours
- b. 120 hours
- c. 130 hours
- d. 144 hours

---

59. L, K, J, H, G, F, D, and S live on eight different floors of the same building. **(+1, -0.33)**  
The lowermost floor in the building is numbered 1, and the topmost floor is numbered 8. L lives exactly one floor above K and exactly one floor below G. Only K lives between H and L, whereas H lives exactly one floor above J. Only D lives between S and J. F lives on the 8th floor, while S lives on the 1st floor.

On which floor does K live?

- a. 5th
- b. 3rd
- c. 7th

d. 4th

---

60. A certain number of people are sitting in a row, facing the north. Only 7 persons sit between F and U. F is at one of the extreme ends of the row. Only 9 persons sit between H and U. Only 12 persons sit between E and H. E is at the extreme right end. H is at the 19th position from the extreme left end. H is 14th from the extreme right end. If no other person is sitting in the row, what is the total number of persons seated? (+1, -0.33)

a. 33

b. 34

c. 32

d. 31

---

61. Find the mode of the data 2, 2, 3, 5, 15, 15, 15, 20, 21, 23, 25, 15, 23, 25. (+1, -0.33)

a. 25

b. 23

c. 21

d. 15

---

62. P, Q, R, S, and T are sitting in a straight row, facing north. Neither Q nor S sit at the exact central position of the row. R is adjacent to S, while P and T are sitting at the extreme ends of the row. Who is sitting at the exact central position of the row? (+1, -0.33)

a. Q

- b. R
- c. S
- d. T

---

63. Three statements are given, followed by two conclusions numbered I and II. 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:** Some avalanches are precipitations. Some cataclysms are avalanches. All avalanches are storms.

**Conclusions:**

I. Some storms are cataclysms.

II. No precipitation is a storm.

- a. Only conclusion I follows
- b. Only conclusion II follows
- c. Both conclusions I and II follow
- d. Neither conclusion I nor II follows

---

64. Which of the following is NOT a part of the 5 R's needed to be followed for sustainable development? (+1, -0.33)

- a. Refuse
- b. Regeneration
- c. Repurpose

d. Recycle

---

65. The Asiatic lion population largely resides in the protected park area of \_\_\_\_\_ ( +1, -0.33)

- a. Bhitarkanika National Park
  - b. Gir National Park
  - c. Anamudi Shola National Park
  - d. Balphakram National Park
- 

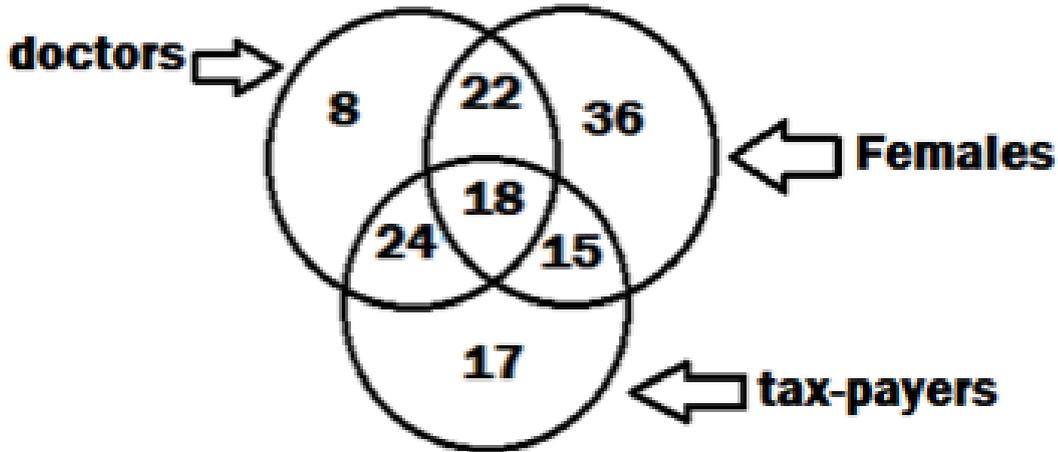
66. Two angles are complementary. The larger angle is  $6^\circ$  less than thrice the measure of the smaller angle. What is the measure of the larger angle? ( +1, -0.33)

- a.  $54^\circ$
  - b.  $63^\circ$
  - c.  $57^\circ$
  - d.  $66^\circ$
- 

67. If  $3x - 2y = 10$  and  $xy = 11$ , the value of  $27x^3 - 8y^3$  is \_\_\_\_\_ ( +1, -0.33)

- a. 2569
  - b. 3336
  - c. 2980
  - d. 3170
-

68. Study the given diagram carefully and answer the question. The numbers (+1, -0.33) in different sections indicate the number of persons.



How many such females are there who are also tax-payers but NOT doctors?

- a. 18
  - b. 40
  - c. 15
  - d. 33
- 
69. Which of the following numbers will replace the question mark (?) in the given series? (+1, -0.33)

13, 21, 33, 54, 91, ?

- a. 183
- b. 162
- c. 175

d. 153

70. The following chart shows the numbers of cars sold by a company at its six branches named A, B, C, D, E, and F. Study the chart and answer the question. (+1, -0.33)

| Car Model | Number Sold |
|-----------|-------------|
| A         | 850         |
| B         | 725         |
| C         | 650         |
| D         | 555         |
| E         | 700         |
| F         | 410         |

For how many branches was the sale of the cars above the average sale for all six branches?

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

71. A spherical mirror forms an erect and diminished image. Identify the correct statement(s) about the spherical mirror. (+1, -0.33)

- (A) The mirror is concave.
- (B) The mirror forms a virtual image.

(C) The mirror has positive focal length.

- a. Only B
  - b. Both A and B
  - c. Only A
  - d. Both B and C
- 

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

BE 2, GJ 3, LO 5, QT 7, ?

- a. VY 6
  - b. VY 11
  - c. WX 6
  - d. WX 7
- 

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73. In how many years will a sum of ₹10,000 become ₹13,310 at 10% compound interest per annum, compounded annually? (+1, -0.33)

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

74. As per NITI Aayog National Multidimensional Poverty Index – 2021, which state is the poorest? (+1, -0.33)
- a. Jharkhand
  - b. Chhattisgarh
  - c. Bihar
  - d. Himachal Pradesh
- 

75. The magnetic field produced due to a circular coil carrying a current having six turns will be how many times that of the field produced due to a single circular loop carrying the same current? (+1, -0.33)
- a. 2 times
  - b. 4 times
  - c. 8 times
  - d. 6 times
- 

76. Which of the following options is the closest approximate value which will come in place of question mark (?) in the following equation? (+1, -0.33)

$$48.9 \times 3.95 - 2.97 + 17.86 = ?$$

- a. 125
- b. 140
- c. 211
- d. 250

---

77. The area (in square units) of the triangle formed by the vertices  $(0, 2)$ ,  $(2, 3)$ , and  $(3, 1)$  is: (+1, -0.33)

- a. 2.5
- b. 3.5
- c. 5.5
- d. 4.4

---

78. Vikas took a bus from a bus stop. The bus travelled 50 m towards the west. Then, it took a right turn and travelled 70 m. Then, it took a left turn and travelled 15 m. Then, it took a left turn and travelled 30 m. Then, it took a left turn and travelled 35 m. Then, it took a right turn and travelled 10 m. Finally, it took a left turn and travelled 30 m to reach the school. How far and in which direction is the bus stop from the school? (All turns are 90 degree turns only) (+1, -0.33)

- a. 30 m, South
- b. 30 m, North
- c. 40 m, South
- d. 40 m, East

---

79. If 10% of 24% of  $x$  is 240, then  $x = ?$  (+1, -0.33)

- a. 100
- b. 100000
- c. 1000

d. 10000

---

80. If  $\sec 4A = \operatorname{cosec} (3A - 50^\circ)$ , where  $4A$  and  $3A$  are acute angles, find the value of  $A + 75$ . (+1, -0.33)

a.  $67^\circ$

b.  $95^\circ$

c.  $78^\circ$

d.  $105^\circ$

---

81. What is the angle traced by the hour hand in 23 minutes? (+1, -0.33)

a.  $12.5^\circ$

b.  $13^\circ$

c.  $11.5^\circ$

d.  $12^\circ$

---

82. Oral contraceptive pills work by stopping \_\_\_\_\_ . (+1, -0.33)

a. ovulation

b. ovulation and implantation

c. ovulation and fertilisation

d. fertilisation and implantation

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83. Identify the FALSE statement.

(+1, -0.33)

- a. Hydrotropism is the tendency to grow in moist areas, i.e., the movement of roots towards high humidity.
  - b. The sunflower is a phototropic plant.
  - c. Geotropism is demonstrated by the downward migration of roots.
  - d. The growth of pollen tubes towards ovules is an example of geotropism.
- 

84. Which of the following is the most electropositive element?

(+1, -0.33)

- a. Cs
  - b. Mg
  - c. Ca
  - d. Na
- 

85. Which of the following medicinal plants is the best remedy to treat blood pressure?

(+1, -0.33)

- a. Navmallika
  - b. Rajnigandha
  - c. Alukam
  - d. Sarpagandha
-

86. G, H, I, J, K, and L live on six different floors of the same building. The lowermost floor in the building is numbered 6, the floor above it is numbered 5, and so on till the topmost floor is numbered 1. (+1, -0.33)

J lives on an even-numbered floor. G and K each live on an odd-numbered floor. I lives on floor number 2. H lives on an odd-numbered floor, immediately above L and immediately below I. G does not live on the topmost floor. Who lives on the lowermost floor?

- a. J
- b. K
- c. G
- d. L

---

87. Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number. (+1, -0.33)

3 : 12 :: 25 : 78 :: 21 : ?

- a. 66
- b. 63
- c. 48
- d. 42

---

88. Caustic soda is generally NOT used in the \_\_\_\_\_. (+1, -0.33)

- a. detergent industry

- b. fabric industry
- c. paper and pulp industry
- d. manufacture of ammonia

---

89. A and B invest Rs. 42,000 and Rs. 56,000 respectively, in a business. At the end of the year they make a profit of Rs. 87,220. Find B's share in the profit. **(+1, -0.33)**

- a. Rs. 47,240
- b. Rs. 48,480
- c. Rs. 49,840
- d. Rs. 45,620

---

90. Select the set in which the numbers are related in the same way as are the numbers of the following set. **(+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, 51, 5)
- (5, 36, 7)
- a. (19, 44, 3)
- b. (11, 51, 6)
- c. (14, 120, 16)

d. (13, 10, 7)

---

91. The apparent position of a star keeps on changing slightly because: (+1, -0.33)

- a. the physical conditions of the atmosphere are stationary
  - b. the atmosphere scatters star light
  - c. the atmosphere consists of a mixture of gases
  - d. the physical conditions of the atmosphere keep changing
- 

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

K I O X J E T R U L E B A C K J M N

How many such vowels are there each of which is immediately followed by at least two consonants appearing together in the above series?

- a. 2
  - b. 4
  - c. 1
  - d. 3
- 

93. Find the smallest number by which 6300 must be multiplied to make it a perfect square. (+1, -0.33)

- a. 6
- b. 12

c. 7

d. 15

---

94. The sum of ages of P and Q is 15 years more than the sum of ages of Q and R. How many years younger is R as compared to P? **(+1, -0.33)**

a. 19

b. 15

c. 13

d. 12

---

95. All the compounds of which of the following sets belong to the same homologous series? **(+1, -0.33)**

a.  $C_3H_8$ ,  $C_4H_{10}$ ,  $C_5H_{12}$

b.  $C_6H_{10}$ ,  $C_6H_{12}$ ,  $C_6H_{14}$

c.  $C_4H_8$ ,  $C_5H_8$ ,  $C_6H_{10}$

d.  $C_2H_6$ ,  $C_2H_4$ ,  $C_2H_2$

---

96. The smallest natural number that must be added to 1212 to make it a perfect square is: **(+1, -0.33)**

a. 18

b. 27

c. 13

d. 24

---

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

2, 14, 70, 210, ?

a. 210

b. 420

c. 410

d. 630

---

98. Which Indian Badminton Player won a silver medal in the All England Badminton Championships 2022 in Birmingham? (+1, -0.33)

a. Kidambi Srikanth

b. Lakshya Sen

c. PV Sindhu

d. Saina Nehwal

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99. If  $a + b = 56$  and  $(a - b)^2 = 496$ , find the value of the product of a and b. (+1, -0.33)

a. 460

b. 660

c. 760

d. 560

---

100. Two resistors of  $6\Omega$  and  $12\Omega$  are connected in parallel. What is the equivalent resistance?

(+1, -0.33)

a.  $3\Omega$

b.  $4\Omega$

c.  $2\Omega$

d.  $5\Omega$

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