



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



BPSC



UP TET



IBPS RRB



IBPS CLERK



IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

RRB Group D 2018 Question Paper (30-Oct-2018) (Shift 3)

Total Time: 1 Hour : 30 Minute

Total Marks: 100

Instructions

1. Test will auto submit when the Time is up.
2. The Test comprises of multiple choice questions (MCQ) with one correct answers.
3. The clock in the top right corner will display the remaining time available for you to complete the examination.

Navigating & Answering a Question

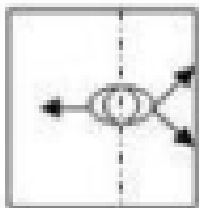
1. The answer will be saved automatically upon clicking on an option amongst the given choices of answer.
2. To deselect your chosen answer, click on the clear response button.
3. The marking scheme will be displayed for each question on the top right corner of the test window.

Your Personal Exams Guide

Test

1. A farmer's rectangular field is 250 m long and 380.5 m wide. He expects to sow varieties of rice that yield 30 quintals per hectare, which he will sell at ₹620 per quintal in the market. Calculate his expected income. (+1, -0.33)
- a. ₹176932.5
 - b. ₹716932.5
 - c. ₹179632.5
 - d. ₹176923.5
-
2. Who is the author of the book 'One Indian Girl'? (+1, -0.33)
- a. Chetan Bhagat
 - b. Twinkle Khanna
 - c. M. M. Agrawal
 - d. K. Natwar Singh
-
3. A spherical mirror and a thin spherical lens each have a focal length of -20 cm. In such a scenario, which of the following is likely to be true? (+1, -0.33)
- a. Both are convex.
 - b. The mirror is convex and the lens is concave.
 - c. Both are concave.
 - d. The mirror is concave and the lens is convex.

4. Which pattern will be the same as the transparent sheet when it is folded along the dotted line? (+1, -0.33)



- a. D
- b. A
- c. B
- d. C

Your Personal Exams Guide

5. Anangpal Tomar of the Rajput dynasty founded the kingdom of _____. (+1, -0.33)

- a. Malwa
- b. Gujarat
- c. Delhi
- d. Ajmer

6. Taps A and B fill a tank in 5 and 20 hours respectively. Tap C empties a full tank in 10 hours. If all three taps are opened together how long will it take to fill the tank completely? (+1, -0.33)

- a. $\frac{17}{5}$ hours
- b. $\frac{20}{6}$ hours
- c. $\frac{29}{2}$ hours
- d. $\frac{20}{3}$ hours

7. Which of the following increases or decreases with height? (+1, -0.33)

- a. Mechanical energy
- b. Nuclear energy
- c. Potential energy
- d. Chemical energy

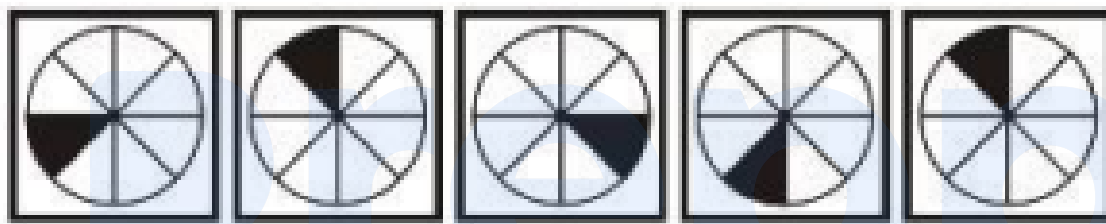
8. Political leader Nitish Kumar is from which of the following Indian states? (+1, -0.33)

- a. Bihar
- b. Uttarakhand
- c. Chhattisgarh
- d. Uttar Pradesh

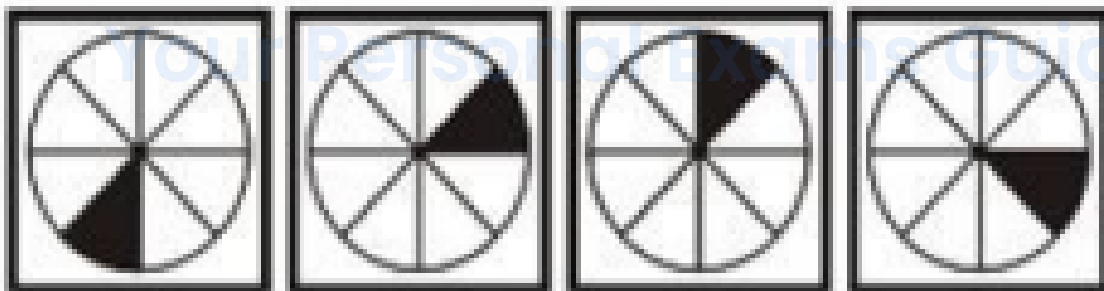
9. _____ is known as the first 3D animation film of Karnataka. (+1, -0.33)

- a. Man on Mars
- b. Chota Chetan
- c. Roadside Romeo
- d. Slim Rick

10. Choose the correct figure from the answer figures that will come next in the order of the five given figures. (+1, -0.33)



Option Figures:



A

B

C

D

- a. A
- b. C

c. B

d. D

11. The term e-NAM recently seen in the news is related to which of the following? (+1, -0.33)

a. Agricultural market

b. State tax

c. Customs

d. Stock market

12. A and B individually take 25 and 45 days respectively to complete a task. A started alone and B joined later. The task was completed in 20 days in total. After how many days did B join? (+1, -0.33)

a. 12

b. 11

c. 9

d. 10

13. Identify the odd one: (+1, -0.33)

$\frac{5}{E}$	$\frac{T}{20}$	$\frac{10}{J}$	$\frac{15}{O}$
A	B	C	D

- a. B
- b. A
- c. C
- d. D

14. There is a specific relation between two given words; one word is on one side of :: and the other on the other side of ::. Find another word from the given options that has the same relation with the given word as the pair of words below. (+1, -0.33)

JACKED : AKDJEC :: BRAZEN : _ _ _ _ _

- a. RNZBEA
- b. RZNBAE
- c. RNZAEB
- d. RZNBEA

15. Mr X starts a marathon from point A. He runs 5 km north to B, then turns right and runs 6 km to C, turns right and runs 8 km to D, turns right and (+1, -0.33)

runs 10 km to E, turns right and runs 6 km to F, turns right and runs 1 km to G, turns right and runs 3 km to H. Which direction is Mr X facing at point F?

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

16. The mass of Earth is _____.

(+1, -0.33)

- a. 6×10^{22} kg
- b. 6×10^{25} kg
- c. 6×10^{23} kg
- d. 6×10^{24} kg

17. Two containers have honey and water in ratios 4:3 and 6:7 respectively. To obtain in the first container the same ratio as in the second, how many litres of mixture from the other container must be added to 3.5 litres of mixture in the first? (+1, -0.33)

- a. 6.5 litres
- b. 6 litres
- c. 7.5 litres
- d. 7 litres

18. After Ashok Gajapathi Raju resigned as Civil Aviation Minister in March 2018, who is now in charge of the Ministry of Civil Aviation? (+1, -0.33)

- a. Rajnath Singh
- b. Sushma Swaraj
- c. Narendra Modi
- d. Arun Jaitley

19. A man sells two houses at ₹1.995 lakh each. He earns 5% profit on one house and suffers a 5% loss on the other. His overall profit or loss percentage is: (+1, -0.33)

- a. 0.25% loss
- b. 0.05% loss
- c. 0.25% profit
- d. 0.15% profit

20. An electrical appliance consumes 1000 J of energy per second. If it runs for one hour how much electricity will it have consumed? (+1, -0.33)

- a. It will consume 1 unit of electricity, i.e. 1 kWh.
- b. It will consume 1 unit of electricity, i.e. 1 Wh.
- c. It will consume 1 unit of electricity, i.e. 100 kWh.
- d. It will consume 1 unit of electricity, i.e. 10 kWh.

21. What is rancidity? (+1, -0.33)

- a. Oxidation of fatty acids
- b. Acid rain
- c. Ripening of fruits
- d. Bleaching

22. If α and β are complementary angles and $\operatorname{cosec} \alpha = \frac{5}{3}$, find the value of $\sin \alpha \cos \beta - \cos \alpha \sin \beta$. (+1, -0.33)

- a. $\frac{7}{25}$
- b. $\frac{25}{7}$
- c. $\frac{-7}{25}$
- d. $\frac{-25}{7}$

23. Complete the series by choosing the correct option. (+1, -0.33)
TABCT, TZYXT, TBCDT, TYXWT, _____, _____

- a. TCDET, TXYZT
- b. TEFGT, TXYZT
- c. TCDET, TYXZT
- d. TCDET, TXWVT

24. What is the value of $25 + 2 \div 26 + 2 \div 27 + 2 - 50 + 8$? (+1, -0.33)

- a. 42
 - b. 58
 - c. 52
 - d. 48
-

25. Gir National Park is in _____. (+1, -0.33)

- a. Chhattisgarh
 - b. Gujarat
 - c. Madhya Pradesh
 - d. Rajasthan
-

26. The correct expansion of NALSA is: (+1, -0.33)

- a. National Legal Safety Authority
 - b. National Legal Services Affairs
 - c. National League Supreme Authority
 - d. National Legal Services Authority
-

27. Consider the statements as true even if they seem to be at variance from commonly known facts, and decide which of the conclusions follow. (+1, -0.33)

Statements:

- 1) All carpets are red.
- 2) Not all carpets are typically woollen.

3) Some woollens are soft.

Conclusions:

I. No carpet is soft.

II. Some carpets may be woollen.

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

28. Two brothers run a sweet shop. At the end of the year, their profit was 50% of their initial investment. They invested ₹4,00,000 at the start of the year. On average, how much do they earn each quarter? (+1, -0.33)

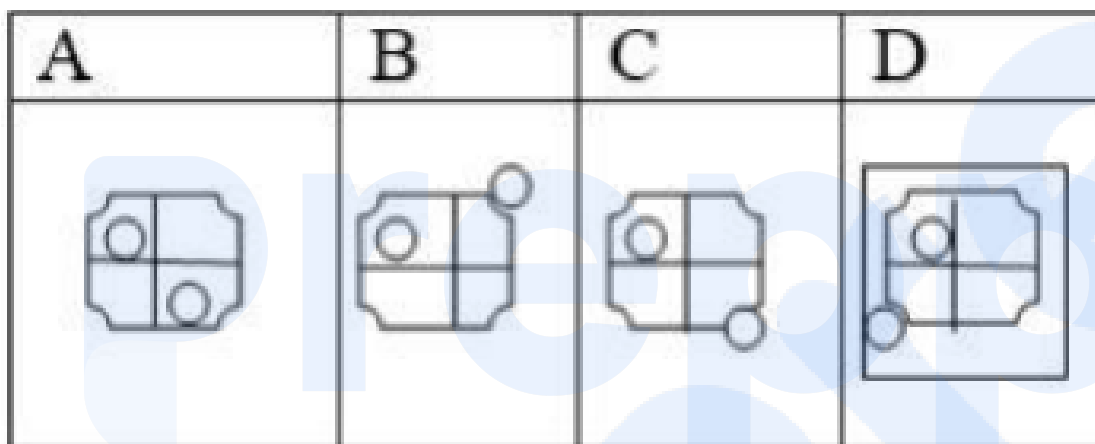
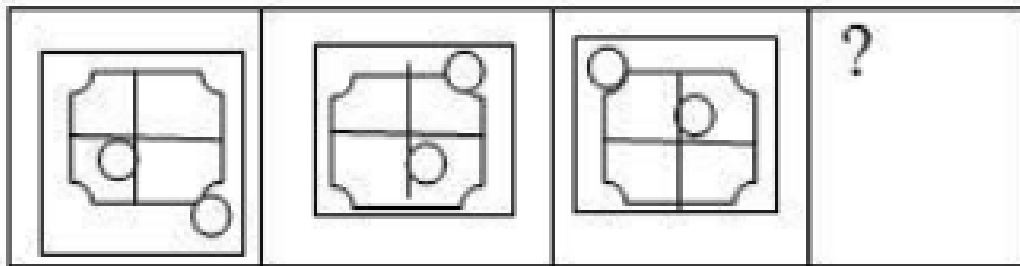
- a. ₹45,000
- b. ₹30,000
- c. ₹60,000
- d. ₹50,000

29. In a code language, ATE is written as ZGV. What is the code for PEEL? (+1, -0.33)

- a. KXXO
- b. KVVO
- c. KUVO
- d. KWWO

30. Identify the pattern that will come next.

(+1, -0.33)



- a. B
- b. D
- c. C
- d. A

31. From which of the following locations did ISRO launch 31 satellites in a single mission?

(+1, -0.33)

- a. Ahmedabad
- b. Bhopal

c. Sriharikota

d. Bengaluru

32. If an object covers unequal distances in equal time intervals, it is said to be in _____. (+1, -0.33)

a. Non-uniform motion

b. Uniform motion

c. Transformed motion

d. Rotational motion

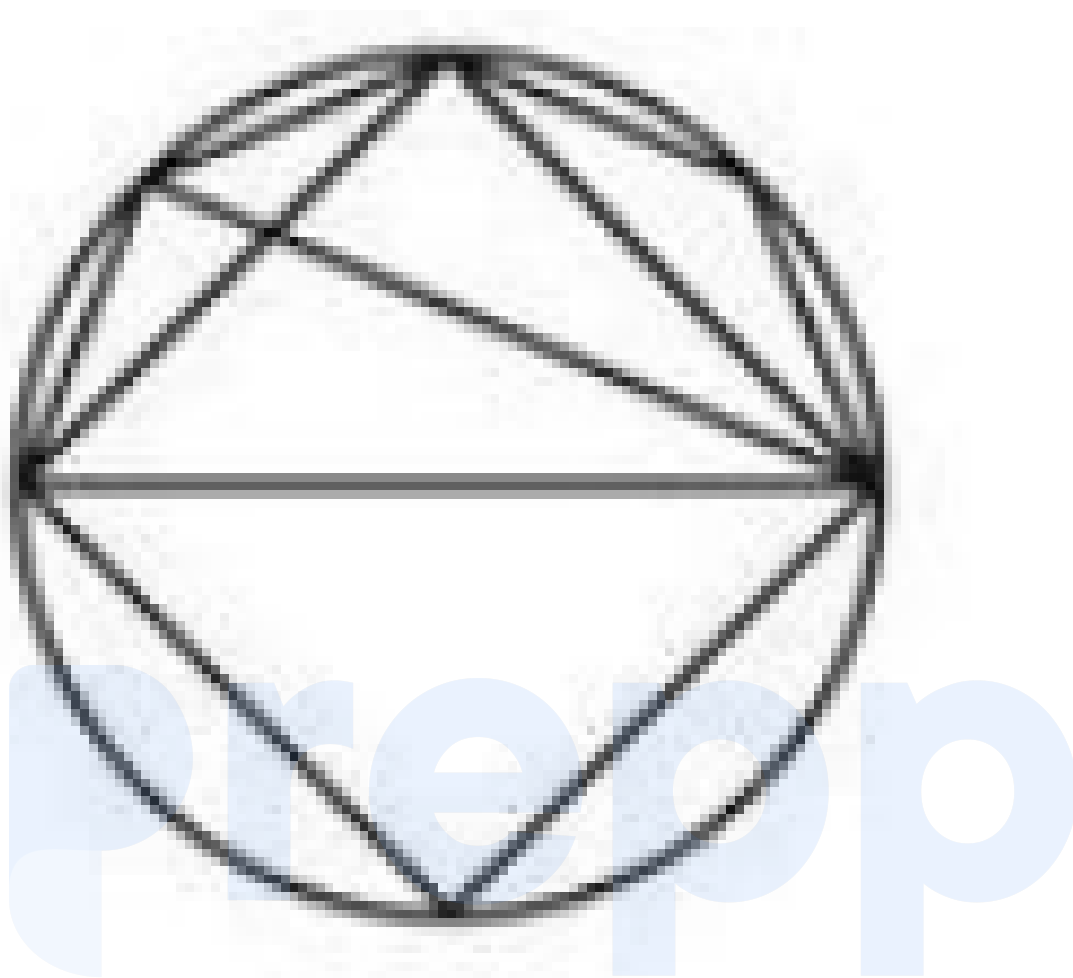
33. Which of the following organisms reproduces by multiple fission? (+1, -0.33)

a. Spirogyra

b. Plasmodium

c. Planaria

d. Hydra



34. The number of triangles in the figure above is: (+1, -0.33)

- a. 9
- b. 10
- c. 8
- d. 11

35. The square root of 5929 is: (+1, -0.33)

- a. 73

b. 77

c. 87

d. 83

36. A father divides ₹2,345 among his three sons such that the eldest gets one-fifth of the amount and the rest is divided between the other two sons in the ratio 3:4. How much money (in ₹) does the third son get? (+1, -0.33)

a. 1,234

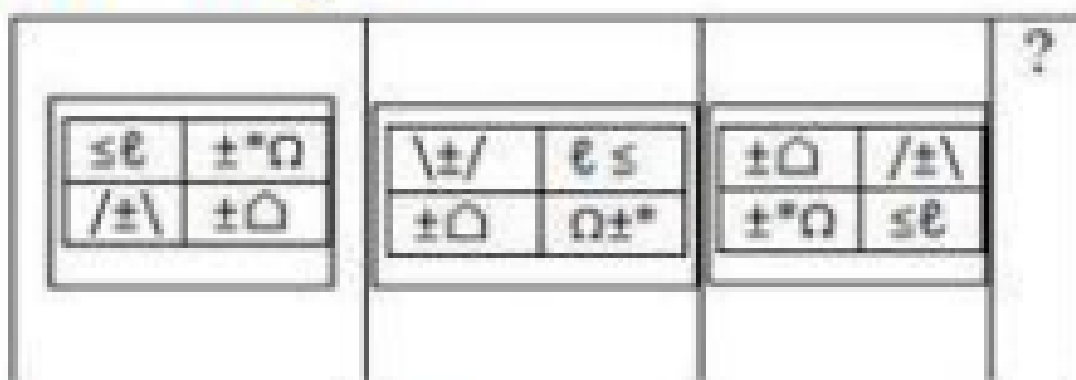
b. 469

c. 804

d. 1,072

37. Select the option figure that will complete the question-figure series. (+1, -0.33)

Question Figure:



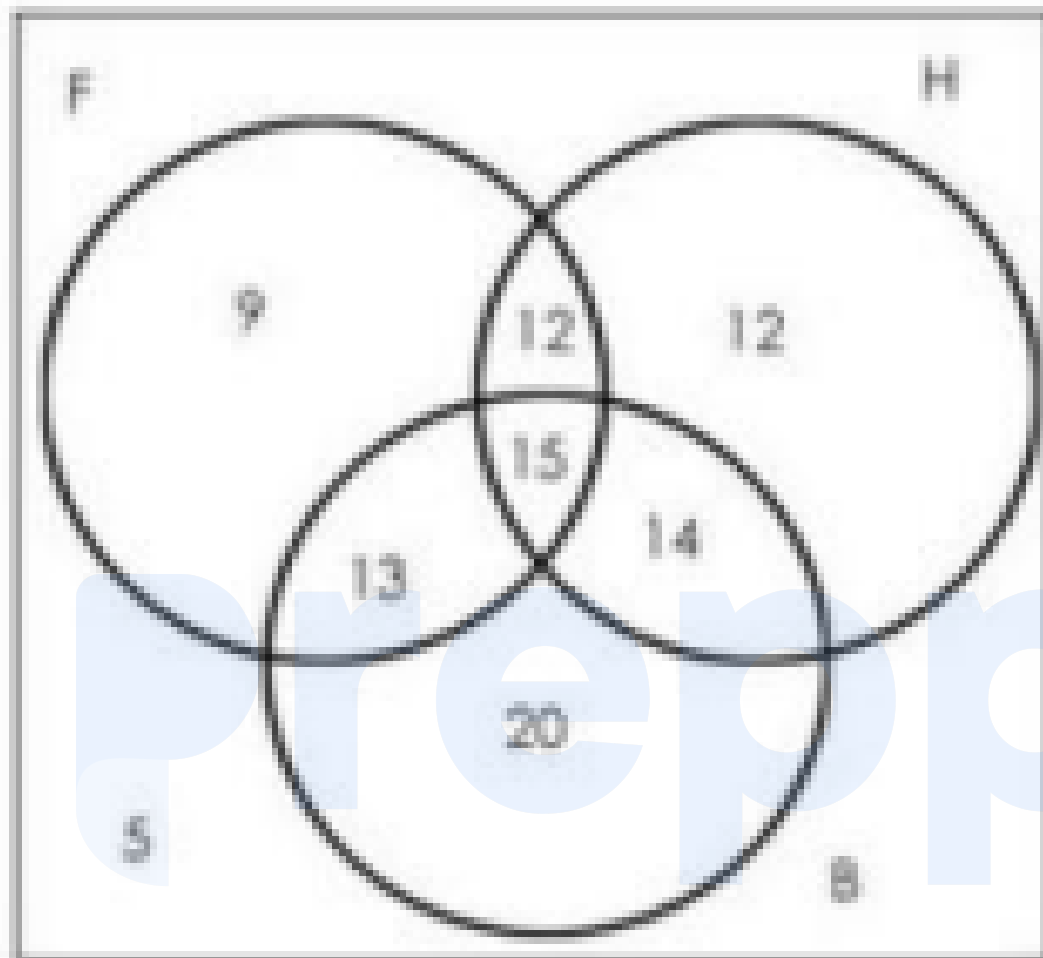
Option Figures:

A <table border="1"> <tr> <td>$\pm \triangle$</td><td>$\Omega \pm^*$</td></tr> <tr> <td>$\ell \leq$</td><td>$/\pm^*$</td></tr> </table>	$\pm \triangle$	$\Omega \pm^*$	$\ell \leq$	$/\pm^*$	B <table border="1"> <tr> <td>$/\pm^*$</td><td>Ω</td></tr> <tr> <td>$\ell \leq$</td><td>$\pm \triangle$</td></tr> </table>	$/\pm^*$	Ω	$\ell \leq$	$\pm \triangle$
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C <table border="1"> <tr> <td>$\Omega \pm^*$</td><td>$\pm \triangle$</td></tr> <tr> <td>$\ell \leq$</td><td>$\backslash \pm /$</td></tr> </table>	$\Omega \pm^*$	$\pm \triangle$	$\ell \leq$	$\backslash \pm /$	D <table border="1"> <tr> <td>$\Omega \pm^*$</td><td>$/\pm^*$</td></tr> <tr> <td>$\ell \leq$</td><td>$\pm \triangle$</td></tr> </table>	$\Omega \pm^*$	$/\pm^*$	$\ell \leq$	$\pm \triangle$
$\Omega \pm^*$	$\pm \triangle$								
$\ell \leq$	$\backslash \pm /$								
$\Omega \pm^*$	$/\pm^*$								
$\ell \leq$	$\pm \triangle$								

- a. B
- b. A
- c. C
- d. D

38. Which sport is India's top-ranked player Aakarshi Kashyap associated with? (+1, -0.33)

- a. Cricket
- b. Football
- c. Boxing
- d. Badminton



39. The given diagram shows the number of students in a class who play football (F), hockey (H) and basketball (B). What is the total number of students who play B and H but not F? (+1, -0.33)

- a. 14
- b. 29
- c. 46
- d. 32

40. Manu Bhaker secured a women's quota place for the 2018 Youth Olympic Games (YOG). She is associated with which of the following sports? (+1, -0.33)

- a. Sprinting
- b. Wrestling
- c. Shooting
- d. Boxing

41. $\frac{\tan 45^\circ}{1+\cos 45^\circ} + \frac{1+\sin 45^\circ}{\cot 45^\circ} = ?$ (+1, -0.33)

- a. $\sqrt{2}$
- b. $-\frac{\sqrt{2}}{2}$
- c. $3 - 2\sqrt{2}$
- d. $3 - \frac{\sqrt{2}}{2}$

42. In a group of boys, 22 like sweets, 10 like puffs and 10 like cakes. 3 like all three. 7 like at least two of the items. How many like only one item? (+1, -0.33)

- a. 35
- b. 24
- c. 25
- d. 38

43. From which constituency was Narendra Modi elected in the 2014 Lok Sabha elections? (+1, -0.33)

- a. Ahmedabad
- b. Varanasi
- c. Gandhinagar
- d. New Delhi

44. The angles of a quadrilateral are in the ratio 3:5:7:9. Find the largest angle. (+1, -0.33)

- a. 140°
- b. 120°
- c. 180°
- d. 135°

45. What is the 10th term in the following geometric progression?
4, 8, 16, ... (+1, -0.33)

- a. 3207
- b. 2018
- c. 2048
- d. 2032

46. Which of the following bodies is made of two layers of cells? (+1, -0.33)

- a. Liver fluke
- b. Tapeworm
- c. Hydra
- d. Planaria

47. The study of human evolution indicates that we all belong to a single species which evolved in _____. (+1, -0.33)

- a. America
- b. Central Asia
- c. West Asia
- d. Africa

48. In $\triangle ABC$ where $\angle B = 90^\circ$. Which of the following options is correct? (+1, -0.33)

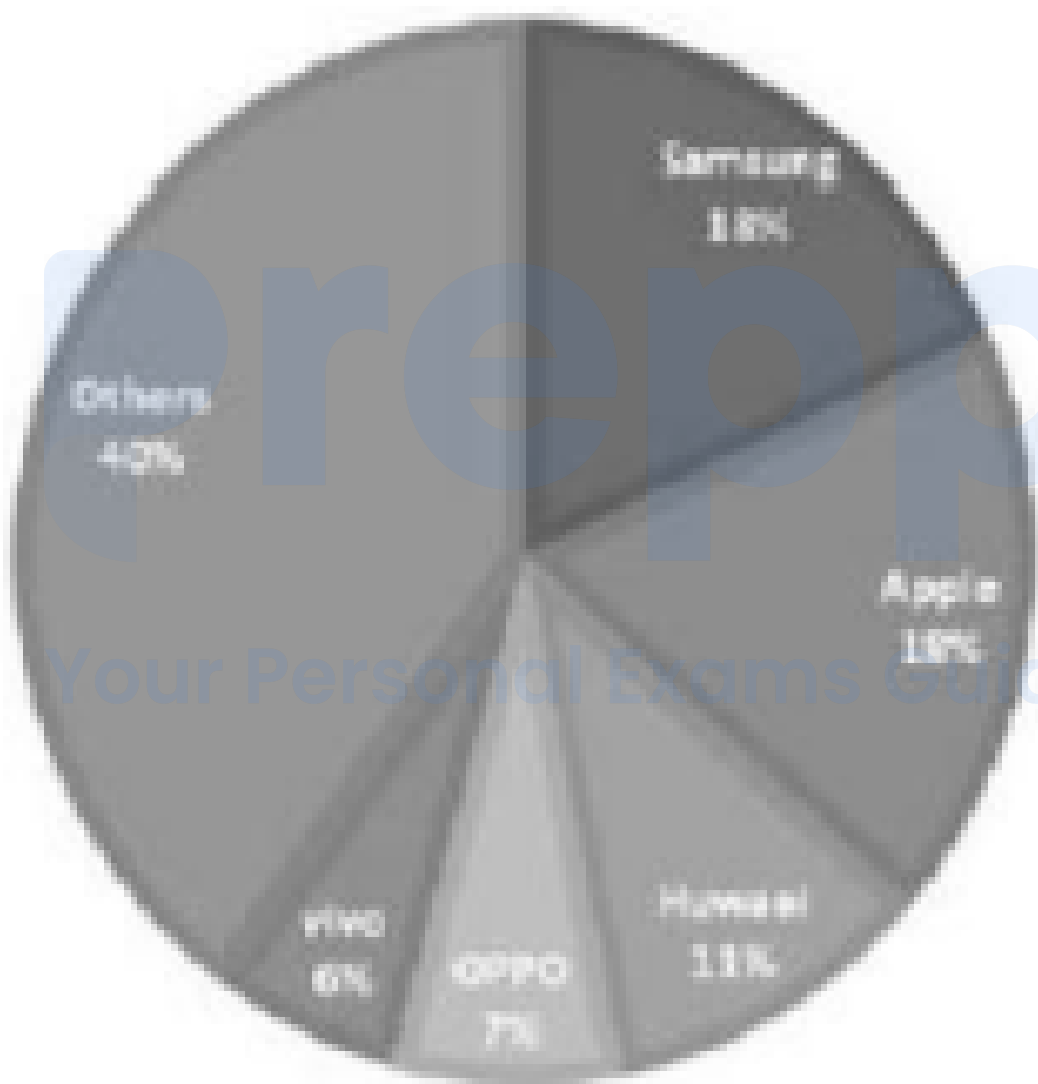
- a. $\cos C = \frac{AC}{AB}$
- b. $\tan C = \frac{AC}{AB}$
- c. $\sec C = \frac{AB}{BC}$
- d. $\sin C = \frac{AB}{AC}$

49. The idea of the divisibility of matter was long considered in _____. (+1, -0.33)

- a. Russia
- b. India

- c. China
- d. Greece

50. The given pie chart shows the total sales made by various mobile companies in 2017. If total sales in 2017 were ₹5,000 crore, the total sales by 'Other' companies were ₹_____ crore. (+1, -0.33)



- a. ₹2,000

b. ₹2,500

c. ₹3,500

d. ₹1,000

51. In which of the following cases will a person have maximum potential energy? (+1, -0.33)

a. Sitting on a table

b. Sitting on the roof

c. Sitting on a chair

d. Sitting on the ground

52. $\sqrt[3]{0.000216} = ?$ (+1, -0.33)

a. $2\sqrt{16}$

b. 0.06

c. 0.6

d. 6

53. A part of a square garden is 1 m 80 cm long. It is expanded by digging a 20 cm wide border all around. Find the area of the expanded garden. (+1, -0.33)

a. 4.8 m^2

b. 4.82 m^2

c. 4.84 m^2

d. 4.81 m^2

54. Read the statements and conclusions carefully and select which conclusion(s) logically follows. (+1, -0.33)

Statements:

- I. No monkey is an ape.
- II. No ape is a human.

Conclusions:

- 1. Some monkeys can be apes.
- 2. All apes can be humans.

- a. Only conclusion 1 follows
 - b. Both 1 and 2 follow
 - c. Neither 1 nor 2 follows
 - d. Only conclusion 2 follows
-

55. A current of 0.75 A is drawn by the filament of an electric bulb for 1 minute. Find the amount of electric charge that flows through the current. (+1, -0.33)

- a. 495 C
 - b. 240 C
 - c. 225 C
 - d. 45 C
-

56. The elements of the first groups are called _____. (+1, -0.33)

- a. Halogens
- b. Noble gases
- c. Alkaline metals
- d. Alkali metals

57. Because carbon is tetravalent and forms covalent bonds, carbon shows _____. (+1, -0.33)

- a. Allotropy
- b. Hydrocarbon
- c. Single covalent bonds
- d. Catenation

58. _____ is perhaps the largest group of animals. (+1, -0.33)

- a. Annelida
- b. Arthropoda
- c. Nematoda
- d. Mollusca

59. A ball thrown vertically upward returns to the ground in 12.5 seconds. Find the velocity with which it was thrown up. ($g = 10ms^{-2}$) (+1, -0.33)

- a. 12.5 m/s
- b. 65 m/s
- c. 10 m/s
- d. 125 m/s

60. Which assumptions are implicit in the following statement? (+1, -0.33)

As project work, the Class V science teacher asked students to visit the zoo this month.

Assumptions:

- I. The teacher wants children to gain information about animals.
- II. The teacher wants children to see animals directly.

- a. Only assumption I is implicit
- b. Neither assumption I nor II is implicit
- c. Both assumptions I and II are implicit
- d. Only assumption II is implicit

61. If $\times$ means $+$, $+$ means $\div$, $-$ means $\times$ and $\div$ means $-$, what is the value of $11 \times 2 - 12 + 2 \div 7$? (+1, -0.33)

- a. 20
- b. 16
- c. 23
- d. 25

62. The current Chief Minister of Karnataka, H. D. Kumaraswamy, belongs to which political party? (+1, -0.33)

- a. BJP
- b. AIADMK
- c. Congress
- d. Janata Dal (Secular)

63. Choose the incorrect statement. (+1, -0.33)

- a. Na's first ionisation energy is less than Mg's first ionisation energy.
- b. Mg's second ionisation energy is greater than Na's second ionisation energy.
- c. Al's first ionisation energy is less than Mg's first ionisation energy.
- d. Mg's third ionisation energy is greater than Na's third ionisation energy.

64. Select the option related to the third term in the same way as the second term is related to the first. (+1, -0.33)

Green : Colour :: Apple : _____

- a. Red
- b. Fruit
- c. Round
- d. Sweet

65. You are required to take the given statement to be true, even if it appears to be contrary to commonly known facts, and then decide which of the following conclusions logically follow from the given statement. (+1, -0.33)

Statement:

This year, a large number of Class 12 students passed because of the question paper.

Conclusions:

1. The authorities checked the quality of the question paper to ensure that it was appropriate.
 2. Easier question papers should be prepared in the future so that more students can pass and gain admission to professional colleges.
- a. Only conclusion 2 follows
 - b. Either conclusion 1 or 2 follows
 - c. Only conclusion 1 follows
 - d. Neither follows

66. The battles of Plassey and Buxar established British rule over _____. (+1, -0.33)

- a. Odisha
- b. Awadh
- c. Bihar
- d. Bengal

67. Select the option related to the third word in the same way as the second word is related to the first word. (+1, -0.33)

Stagnant : Flow :: Clarity : ?

- a. Delusion
 - b. Goal
 - c. Mission
 - d. Decide
-

68. Who was the first finance minister of independent India? (+1, -0.33)

- a. B. R. Ambedkar
 - b. R. K. Shanmukham Chetty
 - c. Sardar Vallabhbhai Patel
 - d. Rajendra Prasad
-

69. What are auditorium ceilings and walls covered with to reduce echo? (+1, -0.33)

- a. Rubber
 - b. Plastic
 - c. Metal
 - d. Fibreboard
-

70. X and Y together finish a task in 12 days. X can do it alone in 20 days. If each day X only works half a day, how many days will X and Y take to complete the task? (+1, -0.33)

a. $17\frac{4}{7}$ days

b. $18\frac{3}{7}$ days

c. $17\frac{1}{7}$ days

d. $16\frac{6}{7}$ days

71. What is the largest number that divides 258 and 323 leaving remainders 2 and 3 respectively? (+1, -0.33)

a. 24

b. 40

c. 132

d. 64

72. Which Union minister inaugurated the ASEAN-India Pravasi Bharatiya Divas (PBD) 2018? (+1, -0.33)

a. Gopinath Munde

b. Nitin Gadkari

c. Ravi Shankar Prasad

d. Piyush Goyal

73. A candidate obtains 20% marks and fails by 35 marks, while another candidate obtains 50% marks which is 32 more than the minimum required to pass. What is the maximum marks of the examination? (+1, -0.33)

- a. 500
- b. 450
- c. $\frac{670}{3}$
- d. 250

74. Which of the following statements is NOT true about acids? (+1, -0.33)

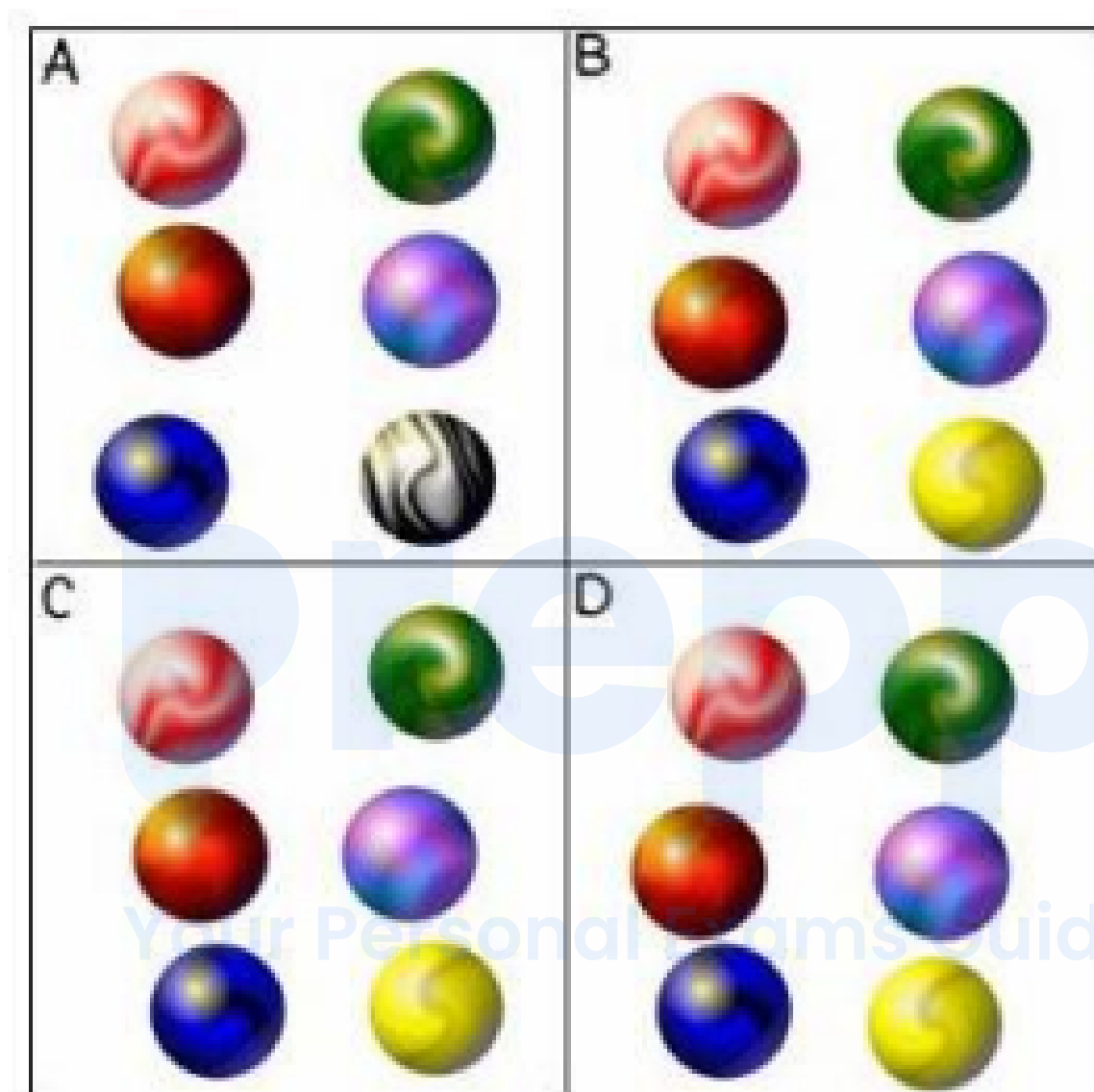
- a. They produce OH^- in aqueous medium/liquid state.
- b. They turn blue litmus red.
- c. They react with metals and bicarbonates to produce H_2 CO_2 and salts.
- d. They taste sour.

75. Ram's age is twice his daughter's current age. If the daughter's current age is 20 years, how many years ago was Ram three times his daughter's age? (+1, -0.33)

- a. 12 years, 0 months
- b. 12 years, 4 months
- c. 10 years, 8 months
- d. 10 years, 0 months

76. Which figure does not belong to the group?

(+1, -0.33)



- a. B
- b. D
- c. A
- d. C

77. Driving at 42 km/h a man reaches the office 2 minutes early, while driving at 36 km/h he reaches 5 minutes late. What distance (in km) does he cover? (+1, -0.33)

- a. 29.4
- b. 30.8
- c. 30.4
- d. 29.6

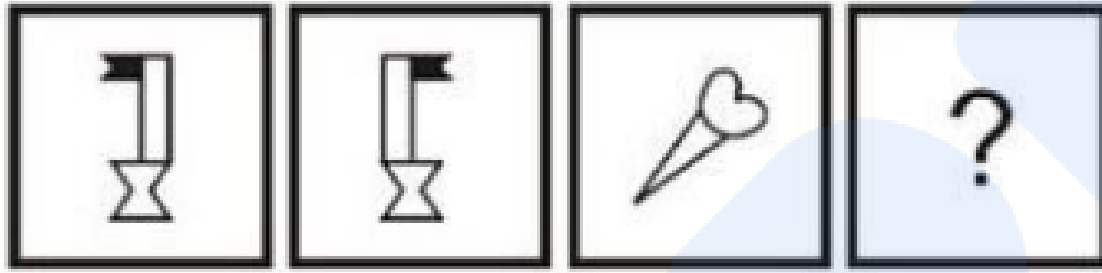
78. Which film won the National Film Award 2017 for Best Film on Environment Conservation? (+1, -0.33)

- a. Pink
- b. Loktak
- c. Kaasav
- d. Hindi Medium

79. ABCDEFGHIJKLMNOPQRSTUVWXYZ (+1, -0.33)

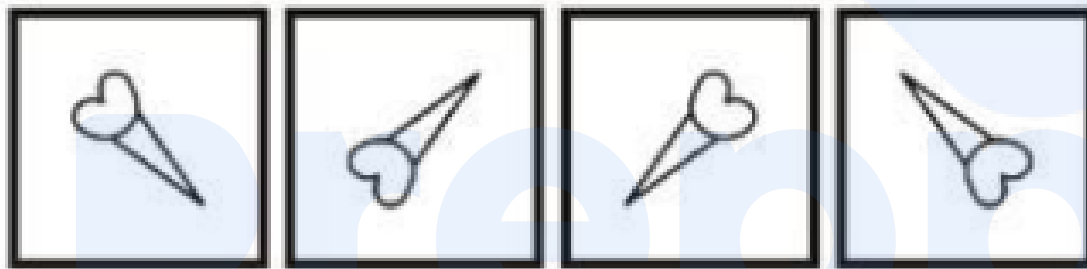
A meaningful word is formed using the letters at positions 5, 15, 16, 18 and 23. The second letter of that word is:

- a. W
- b. O
- c. R
- d. P



80. From the options given below choose the correct one that fits the question mark's place.

(+1, -0.33)



A

B

C

D

a. A

b. B

c. D

d. C

81. A milk container is $\frac{3}{5}$ full. When 20 litres of milk is taken out from it, it becomes $\frac{7}{12}$ full. What is the capacity of the container?

(+1, -0.33)

a. 1400 litres

b. 1200 litres

c. 1100 litres

d. 1000 litres

82. Ravi travels from one place to another first by bus, then by rickshaw and finally on foot. He covers $\frac{7}{9}$ of the distance by bus and $\frac{2}{15}$ of the total distance on foot. What fraction of the distance did Ravi travel by rickshaw? (+1, -0.33)

a. $\frac{2}{45}$

b. $\frac{4}{45}$

c. $\frac{1}{9}$

d. $\frac{1}{15}$

83. In which Indian state is Bodh Gaya located? (+1, -0.33)

a. Odisha

b. Jharkhand

c. Bihar

d. West Bengal

84. Who was elected to lead Asia on the Commonwealth Games Federation (CGF) Athletes Advisory Commission in July 2018? (+1, -0.33)

a. P. V. Sindhu

b. Saina Nehwal

- c. Sania Mirza
 - d. Dipika Pallikal
-

85. A ray of light returning to the same medium after meeting a polished surface is called: (+1, -0.33)

- a. Diffraction
 - b. Refraction
 - c. Rarefaction
 - d. Reflection
-

86. Which instrument is used to measure electric current? (+1, -0.33)

- a. Potentiometer
 - b. Voltmeter
 - c. Galvanometer
 - d. Ammeter
-

87. Each of the questions below has a statement followed by two assumptions I and II. Consider the statement and assumptions and decide which of the assumptions is implicit. (+1, -0.33)

Statement:

An advertisement says, 'Use this beauty cream and see twice as glowing complexion in a week'.

Assumptions:

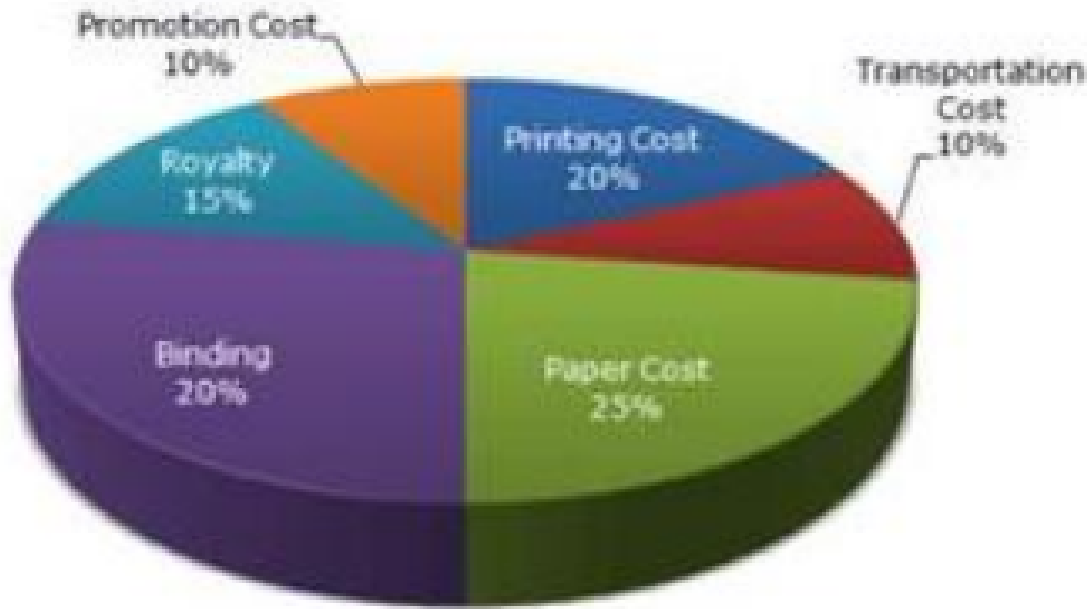
- I. The assurance is not real.
- II. People like to be beautiful.

- a. Both I and II are implicit
 - b. Only assumption II is implicit
 - c. Only assumption I is implicit
 - d. Neither I nor II is implicit
-

88. _____ is not a thermoplastic polymer. (+1, -0.33)

- a. Bakelite
 - b. Polyvinyl chloride (PVC)
 - c. Polystyrene
 - d. Teflon
-

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89. The pie chart shows the expenses of a publishing house in Karnataka. The central angle of the sector corresponding to paper cost is _____ degrees. [Image pie chart with Paper Cost 25%] (+1, -0.33)

- a. 36
- b. 90
- c. 54
- d. 72

90. Rationalise the denominator of $\frac{1}{(3\sqrt{3}+2)}$. (+1, -0.33)

- a. $\frac{3\sqrt{3}-2}{22}$
- b. $\frac{3\sqrt{3}-2}{22}$
- c. $\frac{3\sqrt{3}+2}{23}$

d. $\frac{3\sqrt{3}-2}{23}$

91. Sharad bought 2 bags for ₹900. He sold one at 25% profit and the other at a 25% loss. If the selling price of both bags is the same, what are their cost prices? (+1, -0.33)

- a. ₹437.5 and ₹462.5 respectively
- b. ₹330 and ₹570 respectively
- c. ₹337.5 and ₹562.5 respectively
- d. ₹347.5 and ₹552.5 respectively

92. Who among the following is the new President of South Africa? (+1, -0.33)

- a. Baleka Mbete
- b. Julius Malema
- c. Cyril Ramaphosa
- d. Jacob Zuma

93. If the sum of square roots of two integers is $\sqrt{18 + 8\sqrt{5}}$, what is the sum of squares of the two integers? (+1, -0.33)

- a. 144
- b. 388
- c. 164
- d. 624

94. Choose the incorrect statement.

(+1, -0.33)

- A. G on the Moon is one-sixth of that on Earth.
- B. G on the Moon is equal to G on Earth.
- C. Gravitational force between two point masses 2 kg and 3 kg placed 1 m apart is 40.02×10^{-11} N.
- D. The force is directly proportional to the product of the masses of two bodies.

- a. Only C and D are wrong
- b. Only C is wrong
- c. B, C and D are wrong
- d. Only A is wrong

95. The process of breathing involves -----.

(+1, -0.33)

- a. Cellular respiration and fermentation
- b. Turgor and expansion
- c. Inhalation and exhalation
- d. Ingestion and egestion

96. Read the given question and decide which statement is sufficient to answer.

(+1, -0.33)

Question:

T, Y, R, V and S stand in a row in ascending order of their weights. Who stands in the middle?

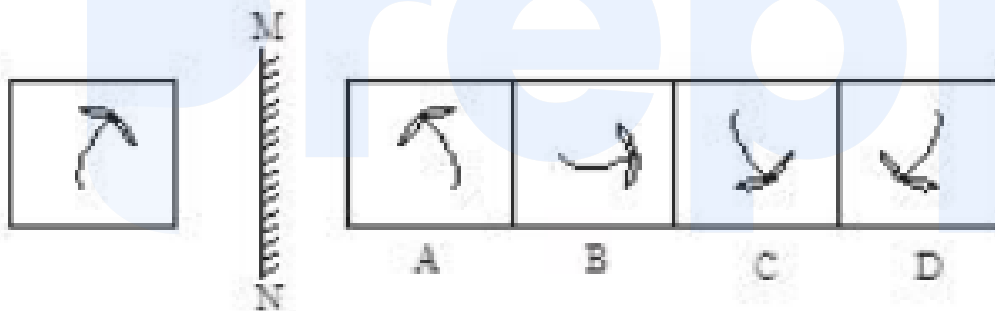
Statements:

1. T is heavier than Y and V is lighter than Y.
2. S is heavier than R and R is heavier than T.

- a. Only statement 1 is sufficient
- b. Statements 1 and 2 together are not sufficient
- c. Only statement 2 is sufficient
- d. Statements 1 and 2 together are sufficient

97. Select the mirror image for the figure below:

(+1, -0.33)



- a. A
- b. D
- c. C
- d. B

98. When $3x^2 + 2ax + 4b$ is divided by $x - 3$, the remainder is 15, and when $2x^2 + 3bx + 5a$ is divided by $x - 3$, the remainder is 65. Find the value of $a + b$.

(+1, -0.33)

- a. 11
- b. 6
- c. 9
- d. 7

99. Diffusion is fastest in _____. (+1, -0.33)

- a. gases
- b. solids
- c. liquids
- d. plasma

100. Consider the statement and the following arguments and decide which argument is strong. (+1, -0.33)

Statement:

Should water bodies be checked continuously for pollutants from the atmosphere?

Arguments:

I. Yes, this will ensure that surrounding areas get better water resources and underground channels.

II. No, there is no need to check. After rain, all the dirt will be washed away.

- a. Only argument II is strong
- b. Only argument I is strong

- c. Both arguments I and II are strong
- d. Neither I nor II is strong

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