

Test for Talent'

1. I Carried 1000 kg. of watermelon in summer by train .In the beginning, the water content was 99%. By the time I reached the destination, the water content has dropped to 98%. The reduction in the weight of the watermelon was

- (A) 10 kg. (B) 0 kg. (C) 100kg. (D) 500 kg.

2. In town of 500 people, 285 read Hindu and 212 read Indian express and 127 read Times of India 20 read Hindu and times of India and 29 read hindu and Indian express and 35 read times of India and Indian express. 50 read no news paper. Then how many read only one paper?

- (A) 55 (B) 45 (C) 65 (D) 50

3. One boy can eat 100 chocolates in half a minute, and another can eat half as many in twice the length of time. How many chocolates can both boys eat in 15 seconds?

- (A) 60 (B) 55 (C) 52.5 (D) 62.5

4. A coffee seller has two types of coffee Brand A costing 5 bits per pound and Brand B costing 3 bits per pound. He mixes two brands to get a 40 pound mixture. He sold this at 6 bits per pound. The seller gets a profit of $33 \frac{1}{2}$ percent. How much he has used Brand A in the mixture?

- (A) 30 (B) 35 (C) 42 (D) 38

5. A Cow is tied to a corner (vertex) of a regular hexagonal fenced area of side a meters by a rope of length $\frac{5a}{2}$ metres is a grass field. (The cow Cannot graze inside the fence area). What is the maximum possible area of the grass field to which the cow has access to graze.

- (A) $5\pi a^2$ (B) $5/2\pi a^2$ (C) $6\pi a^2$ (D) $3\pi a^2$

6. when a number is added to a second number. The sum is $1000/3$ % to the second number. What is the ratio between The first number and the second number.

- (A) 3:7 (B) 7 :3 (C) 7:4 (D) data inadequate

7. Last vacation, my cousin came over to stay at my home. We made the most of her stay at my place... and I even earned a few chocolates. Everyday, we would play a game of Chess. Whoever lost the game owed a chocolate to the other. After the last game we played (that was the day she was to leave), we counted the number of games each of us had won and lost. Wow! I had won more than her. So, she handed me 17 chocolates... though she herself was the winner in 8 games. How many days did my cousin spend at my place?

- (A) 37 (B) 33 (C) 43 (D) 40

8. There are 600 tennis players 4% wear wrist band on one wrist Of the remaining, 25% wear wrist bands on both hands How many players don't wear a wrist band?

- (A) 332 (B) 443 (C) 432 (D) 323

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9. Three types of tea the a,b,c costs Rs. 95/kg,100/kg and70/kg respectively. How many kgs of each should be blended to produce 100 kg of mixture worth Rs.90/kg, given that the quantities of b and c are equal

- (A) 70,15,15 (B) 50,25,25 (C) 60,20,20 (D) 40,30,30

10. If all the 6 are replaced by 9, then the algebraic sum of all the numbers from 1 to 100(both inclusive) varies by

- (A) 332 (B) 330 (C) 430 (D) 323

11.A closed conical vessel is filled with water fully and is placed with vertex down. The water is let out at a constant speed. After 21 minutes it was found that the height of mater column is half of the original 'height. How much more time is minutes does it require to empty line vessel.

- (A) 21 (B) 14 (C) 7 (D) 3

(12) when a length of a rectangular plot is increased by Four times its perimeter becomes 480 metres and area become 12800 sq metres, what was its original length (in mere)?

- (A) 20 (B) 40 (C) 80 (D) 160

(13) A Person drive from Delhi to Agra at speed of 20 km/h and return back with speed of 30 km/h. The average speed of his journey will be (is km/h)

- (A) 25 Km/h (B) more Than 25km/h (c) Less then 25km/h

(D) Can't be determine Since distance between Delhi and Agra not given

(14) The three different faces of a diagonal of a Cuboid have lengths 39. 40, 41. The length of the main diagonal of the cuboid which Joins a pair of opposite corners is

- (A) 49 (B) $49\sqrt{2}$ (C) 60 (D) $60\sqrt{2}$

(15) The percentage Profit earned by selling an article for Rs. 1920 is equal to the percentage loss incurred by selling the same article Rs. 1280. At what price article should be sold to make 25 % Profit

- (A) Rs. 2200 (B) Rs. 2400 (C) Rs.2000 (D) Rs.2560

16. The sides of a triangle ABC are positive integers. The smallest side has length 1. Which of the following Statements is true?

- (A) The area of ABC is always a rational number
(B) The area of ABC is always a irrational number
(C) The perimeter of ABC is an even integer

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(D) The information provided is not sufficient to conclude any of 'the statement A, B or C above

17. consider a square ABCD of Side 12 and let M, N be The midpoints of AB, CD respectively Take a point P on MN and let $AP=r$, $PC=s$. Then the area of the triangle whose sides are r , s , 12 is

- (A) 72 (B) 36 (C) $rs/2$ (D) $rs/4$

18. The radius of the cylinder is half of its height and area of the inner Part is 616 59 meters. How many Litters of milk it contains (answer in approximate Litters)

- (A) 1.5 (B) 2.2 (C) 1.7 (D) 1.4

19. walking $\frac{3}{4}$ of the usual speed Harsh arrived his office 25 minutes late. What was the usual time he had taken ?

- (A) 60 minutes (B) 80 minutes (C) 75 minutes (D) 100 minutes

20. By Selling an article for Rs 56 a Person earn percentage profit equal to its cost Price, then the cost price was

- (A) Rs. 28 (B) Rs. 36 (C) Rs.56 (D) Rs.40

21. In a town 65% people watched the news on television, 40% read a newspaper and 25% read a newspaper and watched the news on television also. What percent of the people neither watched the news on television nor read a news paper ?

- (A) 5 (B) 10 (C) 15 (D) 20

22. A man sold two radio each for Rs 500 He earns profit of 20%. On the first radio and loss of 20% on the other. His overall profit or loss percent on the whole transaction is

- (A) no profit no loss (B) 4 % profit (C) 4 % loss (D) 2 % loss

23. The ratio between present ages of Harsh and Kanishk is 5:3 respectively The ratio of Harsh's age 4 year ago and Kanishk's age after 4 year is 1:1. What is the ratio between Harsh's age after 4 year and Kanishk age 4 year ago ?

- (A) 3:1 (B) 1:3 (C) 2:1 (D) 4:1

24. The difference between simple interest and compound Interest on a certain sum of money for 2 years at rate of 4 % Per annum is Rs. 40. Then the principle will be

- (A) 400 (B) 12500 (C) 25000 (D) 2500

25. A sum of money, is to be distributed among A B C in the ratio 6: 19: 7. If C gives Rs. 200 from his share to B. The ratio of A B and C becomes 3:10:3. What is the total sum

- (A) 3200 (B) 6400 (C) 12800 (D) data inadequate.

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Ans.

26. If the length of a rectangle increased by 40% and breath is decreased by 30%. Then the area A rectangle change by

- (A) 2% increase (B) 4% Increase (C) 2% decrease (D) 4% Decrease

27. Out of forty students, there are 14 who are taking Physics and 29 who are taking Calculus. What is the probability that a randomly chosen student from this group is taking only the Calculus class?

- (A) 0.5 (B) 0.7 (C) 0.6 (D) 0.2

28. In a two digit number the digit in the unit's place is more than twice the digit in ten's place by 1. If the digits in the unit place and the ten's place are interchanged. Then the difference between newly formed number and the original number is 1. What is the original number?

- (A) 52 (B) 73 (C) 25 (d) 37

29. 97 baseball teams participate in an annual state tournament. The champion is chosen for this tournament by the usual elimination scheme. That is, the 97 teams are divided into pairs, and the two teams of each pair play against each other. The loser of each pair is eliminated, and the remaining teams are paired up again, etc.

How many games must be played to determine a champion?

- (A) 96 (B) 76 (C) 86 (D) 80

30. A pipe can filled an empty tank in 8 hours, another can filled in 10 hours. But there is a hole on the bottom of tank which make full tank empty in 6 hours. If both pipes open to gather In how many hours an empty tank will be filled.

- (A) $117/7$ hr (B) $120/7$ hr (C) $115/7$ hr (D) 20 hr

31. A mountain goat attempts to scale a cliff sixty feet high. Every minute, the goat bounds upward three feet but slips back two. How long does it take for the goat to reach the top .

- (A) 48 minutes (B) 60 minutes (C) 58 minutes (D) 68 minutes

32. The area of a right angled triangle is two third of the area of a rectangle The base of the triangle is 80% of the breath of the rectangle. If the perimeter of the rectangle is 200 cm, what is the height of the triangle

- (A) 20 Cm (B) 30 cm (C) 15 cm (D) Data Inadequate

33. A man swim 16 km/h in upstream and 20 km/h in downstream what is the speed of current of water ?

- (A) 18 km/h (B) 4 km/h (C) 1 km/h (D) 2 km/h

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34. In how many Ways 9 cubical dice can be painted by Six different colours.

- (A)1 (B) 6 (C) 720 (D) 15

35. Farhan town and Rajuville are 81 miles apart. A Farhan travels at 8 miles per hour from Farhan town to Rajuville, while a Raju travels at 1 miles per hour from Rajuville to Farhan town.If both set out at the same time, how many miles will the hare have to travel before meeting the Raju en route?

- (A)41 (B) 46 (C) 40 (D) 45

36. If the difference of two numbers is 10 and their product is 12, what is the sum of their squares

- (A) 68 (B) 76 (C) 78 (D) 84

37. In a group of persons travelling in a bus, 6 persons can speak Tamil, 15 can speak Hindi and 6 can speak Gujarati. In that group, none can speak any other language. If 2 persons in the group can speak two languages and one person can speak all the three languages, then how many persons are there in the group?

- (A) 21 (B) 23 (C) 22 (D)24

38. The average temperature of days from Monday to Wednesday is 37 degree Celsius and that of from Tuesday to Thursday is 34 degrees. The temperature of Thursday is $\frac{4}{5}$ th of Monday. Then the temperature of Thursday is

- (A) 30 degrees (B) 31 degrees (C) 26 degrees (D) 36 degrees

39. A cube of 12 mm is painted on all its side. If it is made up of small cubes of size 3mm. If the big cube is splitted into those small cubes, the number of cubes that remain unpainted is

- (A) 8 (B) 7 (C) 9 (D)10

40. Out of a total of 120 musicians in a club , 5% can play all the three instruments- Guitar, violin and Flute. It so happens that the number of musicians who can play any two and only two of the above instruments is 30. The number of musicians who can play the guitar alone is 40. What is the total number of those who can play violin alone or flute alone ?

- (A) 30 (B) 38 (C) 44 (D) 45

41. B is 50% faster than A. If A starts at 9 A.M. and B starts at 10 A.M. A travels at a speed of 50 km/hr. If A and B are 300 km apart, The time when they meet when they travel in opposite direction is ?

- (A) 1P.M (B) 12A.M (C) 2P.M (D)11.30A.M

42. A man jogs at 6 mph over a certain journey and walks over the same route at 4 mph. What is his average speed for the journey?

- (A) 2.4 mph (B) 4 mph (C) 4.8 mph (D) 5 mph

Ans. D

43. 2) Paul the octopus who has been forecasting the outcome of FIFA world cup matches with tremendous accuracy has now been invited to predict ICC world cup matches in 2011. We will assume that the world cup contenders have been divided

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into 2 groups of 9 teams each. Each team in a group plays the other teams in the group. The top two teams from each group enter the semi finals (after which the winner is decided by knockout).

However, Paul has a soft spot for India and when India plays any team, Paul always backs India. Alas, his predictions on matches involving India are right only 2 out of 3 times. In order to qualify for the semi finals, it is sufficient for India to win 7 of its group matches. What is the probability that India will win the ICC world cup?

- (A) $(\frac{2}{3})^{10}$ (B) $(\frac{2}{3})^9 + \frac{8}{3} * (\frac{2}{3})^9$ (C) $\frac{8}{3} * (\frac{2}{3})^9$ (D) $(\frac{2}{3})^{10} + \frac{8}{3} * (\frac{2}{3})^9$

44. What two numbers have a product of 48 and, when the larger number is divided by the smaller, a quotient of 3?

- (A) 4 and 12 (B) 3 and 16 (C) 6 and 8 (D) None.

45. At a family reunion were the following people: one grandfather, one grandmother, two fathers, two mothers, four children, three grandchildren, one brother, two sisters, two sons, two daughters, one father-in-law, one mother-in-law, and one daughter-in-law. But not as many people attended as it sounds. How many were there?

- (A) (B) (C) (D)

46. A drove of sheep and chickens have a total of 99 heads and feet. There are twice as many chickens as sheep. How many of each are there?

- (A) nine sheep and eighteen chickens. (B) eight sheep and eighteen chickens.
(C) nine sheep and sixteen chickens. (D) none

47. On a man's tombstone, it is said that one sixth of his life was spent in childhood and one twelfth as a teenager. One seventh of his life passed between the time he became an adult and the time he married; five years later, his son was born. Alas, the son died four years before he did. He lived to be twice as old as his son did. How old did the man live to be?

- (A) 74 years (B) 72 years (C) 84 years (D) 80 years

48. A number when divided by D leaves a remainder of 8 and when divided by 3D leaves a remainder of 21. What is the remainder left, when twice the number is divided by 3D?

- (A) 13 (B) 42 (C) 3 (D) cannot be determined

49. Given a collection of points P in the plane, a 1-set is a point in P that can be separated from the rest by a line, .i.e the point lies on one side of the line while the others lie on the other side. The number of 1-sets of P is denoted by $n_1(P)$. The minimum value of $n_1(P)$ over all configurations P of 5 points in the plane in general position (.i.e no three points in P lie on a line) is

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75. A man sold two cows for Rs. 210 at a total profit of 5 %. He sold one cow at a loss of 10% and another at a profit of 10%. What is the price of each cow?

- (A) Rs. 150 and Rs. 50 (B) Rs. 160 and Rs. 40
(C) Rs. 140 and Rs. 60 (D) Rs. 155 and Rs. 45

76. The angles of a quadrilateral are in arithmetic progression with common difference 10° . Then the greatest angle of quadrilateral will be

- (A) 100° (B) 105° (C) 110° (D) 95

77. In how many ways a seven member committee can be seated around a circular table such that vice president and secretary must be Seated either side of president.

- (A) 24 (B)720 (C) 120 (D)48

78. If the length of shadow of a pole is equal to length of pole. Then angle of elevation of sun is

- (A) 30° (B) 45° (C) 60° (D) 90°

79. The distance between Station Delhi and Station Jaipur is 84 miles. A train starts from Delhi towards Jaipur. A bird starts at the same time from Jaipur straight towards the moving train. On reaching the train, it instantaneously turns back and returns to Jaipur. The bird makes these journeys from Jaipur to the train and back to Jaipur continuously till the train reaches Jaipur. The bird finally returns to Jaipur and rests. Calculate the total distance in miles the bird flies at 80 miles per hour and the speed of the train is 60 miles per hour

- (A) 112 (B) 110 (C) 115 (D) 92

80. In an examination 30. % failed in General Studies and 65% failed in comprehensive aptitude test; 15% failed in both the Section. If 6000 student appear in the examination, how many of them passed in both the section

- (A) 600 (B) 300 (C) 1200 (D)1000

81. what is the area of triangle formed by the points $(-5, 7)$, (-4.5) and $(1-5)$.

- (A) 18 sq unit (B) 24 sq unit (C) 12 sq unit (D) 0

82. which of the following points do not lie on the line $4x - 3y + 7 = 0$

- (A) $(-1, 1)$ (B) $(2, 5)$ (C) $(4, 1)$ (D) $(8, 13)$

83. Mona speaks 60 % truth while Leena speaks 70 % truth,, what is the probability that they will contradict each other about Same fact.

- (A) 46 % (B) 10 % (C) 30% (D)42%

84. A wire of length 44 cm is bent in form of square, Then what will be the area of square whose one side is the length of diagonal of square formed ?

- (A) 121 sq cm (B) 242 sq cm (C) $121\sqrt{2}$ sq cm (D)484 sq cm

85. A policeman fires 3 successive bullets to shoot a criminal. The probability that he targeted successfully are $\frac{1}{3}, \frac{1}{4}, \frac{1}{5}$ respectively. what is the probability that criminal is being killed

- (A) $\frac{1}{60}$ (B) $\frac{2}{5}$ (C) $\frac{3}{5}$ (D) $\frac{1}{5}$

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86. In a circle AB and CD are two chords intersect internally at point P in the circle. If PA = 4 cm, PB = 6 cm, PC = 3cm. The length A PD will be

- (A) 8cm (B) 9cm (C) 5cm (D) 7cm

87. How many three digit numbers can be made with digit 0,1, 2,3 4, 5. If repetition of digits are not allowed.

- (A) 60 (B) 180 (C) 48 (D)52

88. In a triangle ABC, AB= AC ,AD is bisector of angle A. If angle B is 40° , Find angle ADC

- (A) 60° (B) 70° (C) 90° (D) 100°

89. Six friends decide to share a big cake. Since all of them like the cake, they begin quarreling who gets to first cut and have a piece of the cake. One friend suggests that they have a blindfold friend choose from well shuffled set of cards numbered one to six. You check and find that this method works as it should simulating a fair throw of a die. You check by performing multiple simultaneous trials of picking the cards blindfold and throwing a die. You note that the number shown by the method of picking up a card and throwing a real world die, sums to a number between 2 and 12. Which total would be likely to appear more often – 8,9 or 10?

- (A) 8 (B) 10 (C) 9 (D) All are equally likely

90. In how many ways 4 boys and 4 girls can be seated is a row so that neither any two boys nor any two girls may sit together ?

- (A) 576 (B) 1152 (C) 48 (D) None

91. There are two water tanks A and B, A is much smaller than B. While water fills at the rate of one litre every hour in A, it gets filled up like 10, 20, 40, 80, 160... in tank B. (At the end of first hour, B has 10 litres , second hour it has 20, and so on). If tank B is $\frac{1}{32}$ filled after 21 hours, what is the total duration required to fill it completely?

- (A) 26 hrs (B) 25 hrs (C) 5 hrs (D) 27 hrs

92. what is least number of 3 digit when it divided by 5,7,9 leaves remainder 2, 4,6 respectively.

- (A) 627 (B) 312 (C) 318 (D)633

93. A solid sphere of radius 42 cm.is melted and Wires drawn from it of radius 7 cm then the length of wire is

- (A) 20.16cm (B)2016m (C) 20.16m (D)10.08m

94. A shopkeeper sells his article at his cost Price but uses a faulty balance which reads 1000 gm for 800 gm. What is his actual profit percentage ?

- (A) 20%. (B) 24%. (C) 22%. (D) 25%

95. Francois Pachet , a researcher at Sony Computer Science laboratories is also a jazz musician. He decided to build a robot able to improvise like a pro. Named Continuator, the robot can duet with a live musician in real- time. It listens to a musical phrase and then computes a complementary phrase with the same playing style. If the cost of making the robot is divided between and then computes a complementary phrase with the same playing style. If the cost of making the robot is divided between materials , labour and overheads in the ratio of 4:6:2.If the materials cost \$108. the cost of the robot is

- (A) \$270 (B) \$324 (C) \$216 (D) \$ 648

96. Geometric mean of - 9 and -16 is

- (A) 12 (B) -12.5 (C) -12 (D)12.5

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97. Spores of a fungus, called late blight, grow and spread infection rapidly. These pathogens were responsible for the Irish potato famine of the mid-19th century. These seem to have attacked the tomato crops in England this year. The tomato crops have reduced and the price of the crop has risen up. The price has already gone up to \$45 a box from \$27 a box a month ago. How much more would a vegetable vendor need to pay to buy 27 boxes this month over what he would have paid last month?

(A) \$27 (B) \$ 18 (C) \$45 (D) \$ 486

98. A man borrow Rs.3600 and agree to pay in 40 installments which are in Arithmetic Progression after being paid 30 instalments he died and remains one third of amount unpaid. The amount of instalment due Just after his death was

(A) 1200 (B) 101 (C)111 (D)51

99. By walking 4 km/h Sonu reach his office 10 minutes late, if he walked 6 Km/h ,he Would name reached there 5 minutes early. The distance If his office from his house is

(A) 2.4km (B) 3.6km (C) 4km (D) 3km

100. Two twins have certain peculiar characteristics. One of them always lies on Monday, Wednesday, and Friday. The other always lies on Tuesdays, Thursdays and Saturdays. On the other days they tell the truth. You are given a conversation.

Person A -- today is Sunday my name is Anil
Person B -- today is Tuesday, my name is Bill
what day is today ?

(A) Tuesday (B) Wednesday (C) Thursday (D) Saturday

Ans: Tuesday

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