**Directions (Qs. 1-2):** In the survey conducted in Mumbai out of 63 newly married house wives not a single house wife felt that the husbands should take equal part in the household work as they felt they loose their power over their husbands. Inspite of their careers they opt to do the kitchen work themselves after coming back to home. The wives get half as much leisure time as the husbands get at the weekends.

- 1. Housewives want the husbands to take part equally in the household
  - a) True b) False
  - c) Can't say d) None
- 2. Wives have half as much leisure time as the husbands have
  - a) True b) False
  - c) Can't say d) None
- 3. Fill the best alternative choices given in the place of question mark:



4. *Statement-1:* "The number of positive integers less than 72 and relatively prime to 72 is 24"

*Statement-2:* "The number of positive divisors of 72 is 12."

- a) Statement-1 is true, statement-2 is true; Statement-2 is a correct explanation for statement-1.
- b) Statement-1 is true, statement-2 is true; statement-2 is not a correct explanation for statement-1.
- c) Statement-1 is true, statement-2 is false.
- d) Statement-1 is false, statement-2 is true
- 5. The following questions consist of problem

figures followed by answer figures. Select a figure from amongst the answer figures which will continue the same series or pattern as established by the problem figures.



**Directions (Qs. 6-9):** Read the following information and answer the questions given below it. Net profit of two companies over the years are given in the following graph.



- 6. Over the given years, average profit of company A is more/less from company B by:
  - a) more by Rs. 60 crore
  - b) less by Rs. 8.5 crore
  - c) more by Rs. 7.5 crore
  - d) less by Rs. 6.5 crore
- 7. If the total expenditure of company B was Rs. 485 crore in 2007, What was the total income of the company in that year?
  - a) Rs. 385 Cr. b) Rs. 585 Cr.
  - c) Rs. 565 Cr. d) Rs. 465 Cr.
- 8. What was the percentage change in the profit of company A in 2003 as compared to 2002?
  - a) 40% b) 50%
  - c) 25% d) 20%

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- 9. In how many years, net profit of company B was more than the average profit over the given years?
  - a) 2 b) 3
  - c) 4 d) 5

**Directions (Qs. 10-11):** These questions are based on the letter series. In each of these series, some letters are missing. Select the correct alternative. If more than five letters are missing, select the last five letters of the series:

- 10. aba\_\_a\_\_ba\_\_b\_
  - a) bbabb b) abbbb
  - c) abbba d) abbab
- 11. x\_xxy\_x\_xy\_yxx\_ \_yy\_y

a)	хуууу	b)	ххуух

c) yxxyx d) xyxyx

## **Directions (Qs. 12-16):** Area and production of different Cereals

Cereals	Area (Hec)	Production
		(Tonnes)
Wheat	8200	22960
Rice	8800	19360
Jowar	2600	3380
Maize	3800	5320
Bajra	4200	6720

- 12. In which of the cereals, productivity was maximum?
  - a) Wheat
  - b) Rice
  - c) Maize
  - d) Bajra
- 13. What was the average productivity of all the cereals taken together?
  - a) 1.8 T/Hec b) 2.1 T/Hec
  - c) 2.3 T/Hec d) 2.4 T/Hec
- 14. If the Area of wheat is increased by 10 percent and productivity also increases by 10 percent by what will the production of wheat www.arbindsingh.com

#### increases?

a)	10%	b)	20%
c)	21%	d)	25%

- 15. If Area of Rice in increased by 10 percent but its productivity falls by 10 percent what will be the percentage change in production?
  - a) No change
  - b) increase by 1 percent
  - c) fall by 1 percent
  - d) Data inadequate
- 16. What is the average productivity of Jowar, Bajra and Maize?
  - a) 1.38 T/Hec
  - b) 1.45 T/Hec
  - c) 1.48 T/Hec
  - d) 1.51 T/Hec

**Directions (Qs. 17-20):** *Read the following information and answer the questions given below:* 

A home-tutor X has a busy daily routine. He provides his service to six students A, B, C, D, E and F on each day of a week. He does not provide his service simultaneously to any two persons.

He has a fixed schedule for doing his work. One of the significant features of his schedule is that he starts teaching his first student at 10 AM and teaches him for 30 minutes. He takes as many minutes in reaching the next. Again he teaches this student for 40 minutes and takes as much time in reaching the third student. In this way both his teaching time and reaching time go on increasing by 10 minutes for every successive student. After teaching the last student he leaves for home. The time taken for the homeward journey is as much as in teaching the last student. Study the following clues and answer the questions following it.

- (i) Mr X has to teach A immediately before C and immediately after D.
- (ii) At least two students are taught immediately before and after A.
- (iii) Mr X does not provide his services first

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either to B or to E.

- (iv) B is taught before at least three persons.
- 17. At what time does Mr X reach home?
  - a) 9 AM b) 9 PM
  - c) 6.20 PM d) 10.30 PM
- 18. At what time does Mr X usually meet B for teaching?
  - a) Data inadequate
  - b) 11.00 AM
  - c) 11.40 AM
  - d) 12.20 AM
- 19. Who among the following is the last student of the day whom X provides his service?
  - a) Data inadequate b) E
  - c) C d) F
- 20. Next fortnight D has to appear in annual examination, therefore he requested Mr X to visit his home twice to teach. If Mr X wants to fulfill the request of D and decides to visit D's home after teaching the last student, then on that day at what time will Mr X reach his home? [Note that during the expansion of schedule he follows the same trend as expressed in the direction.]
  - a) Data inadequate
  - b) 10.30 PM
  - c) Midnight
  - d) 11 PM

**Directions (Qs. 21-25):** Read the following information and answer the questions given below it.

- i) Eight persons A, B, C, D, E, F, G and H are seated round a table.
- ii) C and E are not adjacent to each other.iii) B is on the left of E.
- iv) H is on the right of D.
- v) There are three persons between Band H. vi) A is adjacent to F.
- vii)F is on the left of C.

- 21. Assuming A to be at the first position and moving clockwise, who occupies the sixth position?
  - a) B b) G
  - c) C d) Can't be determined
- 22. Which of the following statements is true?
  - a) C is second to the right of E.
  - b) A is on the immediate right of F.
  - c) E is on the immediate left of D.
  - d) None of these
- 23. Which of the following is an incorrect pair of persons seated opposite each other?
  - a) EAb) DCc) BHd) None of these
- 24. If each person interchanges his or her position with the person seated opposite, who will be on the right of D?
  - a) E b) F
  - c) G d) None of these
- 25. If A interchanges his position with D, and so do Hand C, which of the following will be true?
  - a) H is second to the left of E.
  - b) B and A are opposite each other.
  - c) F is on the immediate left of C.
  - d) A is on the immediate left of H.

**Directins (Qs. 26-30):** *Distribution of marks obtained by 200 students in three subjects:* 

Subject mark 80-100	0-19	20-3940-5960-7			
English	11	29	85	42	33
Maths	17	22	78	57	26
Science	8	32	88	62	10

26. If Criteria for passing is minimum 40% marks what percentage of students fail in maths?

a)	40	b)	19.5
c)	29	d)	11

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- 27. If first division awarded on scoring 60% and above then the difference between percentage of students getting first division in Maths and Science is:
  - a) 5.5 b) 11.0
  - c) 36 d) 41.5
- 28. How many students scored first division in all the three subjects?
  - a) 115 b) 230
  - c) 161 d) Data inadequate
- 29. If 18 students failed in all the three subjects, 20 students failed in atleast two subjects, how many students failed in one subject, if 40 students failed in all three subjects?
  - b) 2 a) 20
  - c) 23 d) 22
- 30. What percentage of students scored first division in Science, if first division awarded on scoring 60% and above?
  - a) 24 b) 32
  - c) 36 d) 41
- 31. In how many ways can 5 men and 5 women be seated along a circle so that they are alternate?
  - a)  $5! \times 5!$
  - b)  $5! \times 6!$
  - c)  $4! \times 5!$
  - d)  $4! \times 6!$
- 32. If the length of each side for a regular tetrahedron is 12 cm, then the volume of the tetrahedron is:
  - a)  $144\sqrt{3}$  cu. cm.
  - b)  $72\sqrt{3}$  cu. cm.
  - c)  $8\sqrt{3}$  cu. cm.
  - d)  $12\sqrt{3}$  cu. cm.
- 33. The simplest value of

$$\frac{1}{1+\sqrt{2}} + \frac{1}{\sqrt{2}+\sqrt{3}} + \frac{1}{\sqrt{3}+\sqrt{4}}$$
 is:  
a) -1 b)  $\sqrt{2} + \sqrt{3}$ 

- c)  $4 \sqrt{3}$ d) 1
- 34. Due to increase of 30% in the price of a colour TV, the sale is reduced by 40%, then what will be the percentage effect on revenue? ,011
  - a) 10% increase
  - b) 10% decrease
  - c) 35% decrease
  - d) 22% decrease
- 35. A shopkeeper claims that he sold all the article at his cost price but he cheat the people 20% in purchasing of goods and 20% in selling of the goods. What is his overall profit or loss percent?
  - a) No profit no loss b) 40% profit
  - c) 4 % loss d) 44% profit
- 36. A shopkeeper purchases a packet of 50 pens at Rs 10 per pen. He sells a part of the packet at a profit of 30%. On the remaining part, he incurred of loss of 10%. If his overall profit on the whole packet is 10%, the number of pens he sold at profit is:
  - a) 25 b) 30 c) 35 d) 40
- 37. The sum of four numbers is 64. If you add 3 to the first number, 3 is subtracted from the second number the third is multiplied by 3 and the fourth is divided by 3, then all the results are equal. What is the difference between the largest and the smallest of the original numbers?
  - a) 32 b) 27
  - c) 21 d) None of the above
- 38. From 5 different green balls, four different blue balls and three different red balls, how many balls can be selected without observing its colour for taking at least one ball of each colour?
  - a) 5 b) 3
  - c) 6 d) 10
- 39. A ship develops a leak 12 km from the shore. Despite the leak, the ship is able to move towards the shore at a speed of 8 km/hr.

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However, the ship can stay afloat only for 20 minutes. If a rescue vessel were to leave from the shore towards the ship and it takes 4 minutes to evacuate the crew and passengers of the ship, what should be the minimum speed of the rescue vessel in order to be able to successfully rescue the people aboard the ship?

- a) 53 km/hr b) 37 km/hr
- c) 28 km/hr d) 44 km/hr
- 40. The difference between five times a certain number and two times the same number is 36. The number is
  - a) 10 b) 11
  - c) 12 d) 15
- 41. Three strings of different lengths, 240 cm, 318 cm and 426 cm are to be cut into equal lengths. What is the greatest length of each piece?
  - a) 6 cm b) 2 cm
  - c) 3 cm d) 12 cm
- 42. A finish the work in 16 days. B is 60% efficient than A. In how many days does B take to finish the work?
  - a) 10 b) 14
  - c) 18 12 d)
- 43. A software engineer has the capability of thinking 100 lines of code in five minutes and can type 100 lines of code in 15 minutes. He takes a break for five minutes after every ten minutes. How many lines of codes will he complete typing after an hour?
  - a) 300
  - b) 400
  - c) 200
  - d) None of the above
- 44. There are 40 trees at equal distances of 10 meters in a line with a well. The distance of the well from the nearest tree is 5 m. A gardener waters the tree all separately starting from the well one by one. Then the total distance travelled by gardener is?
  - a) 16005
  - b) 15600

- c) 15605
- d) None of the above
- 45. A bag contains 7 green and 8 white balls. If two balls are drawn simultaneously, the probability that both are of same colour is: .011

a)	$\frac{8}{15}$	b)	$\frac{2}{15}$
c)	$\frac{7}{15}$	d)	$\frac{11}{15}$

- 46. The number of words which can be made out of the letters of the word MOBILE when consonants always occupy odd places is
  - b) 36 a) 20 c) 30 d) 720
- 47. What is the probability that a leap year has 53 Sundays and 52 Mondays?
  - b)  $\frac{1}{7}$ a) 0 c)  $\frac{2}{7}$ d)  $\frac{5}{7}$
- 48. AB is a chord to a circle and PAT is the tangent to the circle at A. If  $\angle BAT = 75^{\circ}$ and  $\angle BAC = 45^\circ$ , C being a point on the circle, then  $\angle ABC$  is equal to

a)	40°	b)	45°
c)	60°	d)	70°

- 49. The vertices of a  $\triangle$  are (2, 2), (2, 6) and (8, 10). Then the co-ordinates of the trisection point of each median which is nearer the opposite side.
  - a) (6,4) b) (-6,-4) d) None of the above c) (4,6)
- 50. How many diagonals can be formed in a decagon?
  - a) 45 b) 35 c) 25 d) 15
- 51. 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?

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- a) 121 sq cm
- b) 242 q cm
- c) 121/2 q cm
- d) 484 q cm
- 52. A person was appointed to ALS in the Pay scale of Rs 15000 500 21000. Find how many years he will take to reach the maximum of the scale.
  - a) 10 b) 11
  - c) 12 d) 13
- 53. If the maximum number of trials required to open all locks when there are n locks and n keys is 105, then n =
  - a) 13
    b) 15
    c) 35
    d) None of these
- 54. 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 = 3 cm. The length of PD will be
  - a) 8 cm b) 9 cm
  - c) 5 cm d) 7 cm
- 55. How many such pairs of letters are there in the word, UNWANTED, each of which has as many letters between its two letters as there are between them in the English alphabets?
  - a) Threeb) Oned) None of these
- 56. In a certain code WEAK is written as 5%9and WHEN is written as 5\*%7. How is HANK written in that code ?
  - a) \*9\$7b) 9\*\$7c) \$97\*d) None of these

**Directions (Qs. 57):** These questions are based on the following letter/number/symbol arrangement. Study it carefully and answer the questions.

1 % B 7 @ 4 D G 2 I 9 A K 6 # E 3 © U C 8 Z \$ 5

57. Three of the following four are alike in a certain way based on their positions in the given arrangement and so form a group. Which is the one that does not belong to the group ?

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a) 4G@	b) ©U3
c) 9KI	d) 74B

Directions (Qs. 58 to 60): In each question below are three statements followed by two conclusions numbered I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts. Give answer —

- a. If only conclusion I follows.
- b. If only conclusion II follows.
- c. If either conclusion I or II follows.
- d. If neither conclusion I nor II follows.
- 58. Statements:

Some squares are circles. All circles are rectangles. Some rectangles are cones. *Conclusions:* 

- I. Some cones are squares.
- II. Some squares are rectangles.
- 59. Statements:

All letters are words. Some pages are words. All pages are books. *Conclusions:* I. Some words are books.

- I. Some words are books. II. Some pages are letters.
- 60. Statements:

Some trees are leaves. Some leaves are roots. Some roots are flowers. *Conclusions:* 

I. Some roots are trees.

II. Some leaves are flowers.

**Directions (Qs. 61-63):** *The symbol* @, ©, \$, % *and H are used with different meanings as follows :* 

'P  $\bigcirc$  Q' means 'P is either greater than or equal to Q'.

'P Q' means 'P is either smaller than or equal to Q'.

'P % Q' means 'P is neither greater than nor smaller than Q'.

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'P H Q' means 'P is greater than Q'.

'P @ Q' means 'P is smaller than Q'.

In each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are definitely true. Give answer-

- a) If only conclusion I is true.
- b) If only conclusion II is true.
- c) If either conclusion I or conclusion II is true.
- d) If neither conclusion I nor conclusion II is true.
- 61. Statements:

W \$ N, N % B, B H F Conclusions: I. B % W II. B H W

- 62. Statements: FHG, G©R, R@K *Conclusions:* I. KHG II. R @ F 63. Statements:
- Y H M, M % N, N \$ D Conclusions: I. YHN II. DHM
- 64. A litre of water evaporates from 6L of sea water containing 4% salt. Find the % of salt in the remaining solution



- 65. Buy two get 5 free. Then the discount percent is (assumes all articles are of same price)
  - b)  $87\frac{1}{2}\%$ a)  $61\frac{3}{4}\%$
  - c)  $71\frac{3}{7}\%$  d)  $67\frac{3}{7}\%$
- 66. Some lemons are purchased by Monika at the rate of 8 for Re 1 and the same number of other variety at the rate of 6 for Re1. Now, the whole quantity is sold at the rate of 7 for

Re 1. What is the net profit or loss percent?

- a) 0.6% loss
- b) 1.2% loss
- c) No profit no loss
- d) None of these
- 67. A person walking 5/6 of his usual rate is 40 minutes late. What is his usual time?
  - a) 2 hours 20 minutes
  - b) 4 hours
  - c) 3 hours 20 minutes
  - d) 3 hours
- 68. A monkey starts climbing up a tree 20ft. tall. Each hour, it moves up 3ft. and in second hour slips back 2ft. and so on. How much time would take by monkey to reach the top?
  - a) 18 hours
  - b) 20 hours
  - c) 40 hours
  - d) 35 hours
- Rs 395 is to be divided among A, B and C 69. such that B got 25 % more than A and 20% more than C then A has a share of Rs

a)	198	b)	180
c)	195	d)	120

- 70. A boat travels 20 km upstream in 6 hrs and 18 km downstream in 4 hours. Find the speed of the water current?
  - a) 1/2 kmph
  - b) 7/12 kmph
  - c) 5 kmph
  - d) None of these
- 71. Kanishk takes 15 days to complete a work and Harsh takes 18 days to complete the same work. If they work in alternate days, in how many days they finish the work?
  - a)  $16\frac{2}{5}$  b)  $16\frac{1}{3}$

d) None of these c) 16

72. A man spends 35% of his income on food, 25% on children's education and 80% of the remaining on house rent. What percent of his income is left with him? a) 8%

b) 10%

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c) 12%

d) 14%

- c)  $\frac{1}{360}$  d)  $\frac{1}{3}$
- 73. If a sum of money placed at compound interest doubles itself in 4 years. In how many years will it be eight times?
  - a) 16 years
  - b) 10 years
  - c) 12 years
  - d) None of these
- 74. The price of a T.V. is marked for Rs 17600, which includes sales tax at 10%. Calculate the sales tax in rupees.
  - a) Rs 1760
  - b) Rs 1600
  - c) Rs 1000
  - d) None of these
- 75. Everybody in a room shakes hand with everybody else. The total number of hand shakes is equal to 153. The total number of persons in the rooms will be
  - a) 18 b) 19
  - c) 17 d) 16
- 76. A police man fires 4 bullets to shootout criminals. The probability that he hit by using the four bullets are  $\frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{6}$  respectively. The probability that the criminal is still alive is

b)  $\frac{2}{3}$ 

- 77. A man is six times as old as his own son. After 20 years he will be twice as old as his son. What is the present age of the man?
  - a) 30 years
  - b) 32 years
  - c) 34 years
  - d) 36 years
- 78. A metal wire when bent in the form of a square encloses an area 484 cm<sup>2</sup>. If the same wire is bent in the form of a cirlce, then

(taking 
$$\pi = \frac{22}{7}$$
) its area is:

- a) 308 cm<sup>2</sup>
- b) 506 cm<sup>2</sup>
- c)  $600 \text{ cm}^2$
- d) 616 cm<sup>2</sup>
- 79. Sides of a parallelogram are in the ratio 5 :4. Its area is 1000 sq. units. Altitude on the greater side is 20 units. Altitude on the smaller side is:
  - a) 30 units b) 25 units
  - c) 10 units d) 15 units
- 80. The successive discounts of 10% and 20% are equivalent to a single discount of
  - a) 30% b) 28% c) 25% d) 27%

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#### ANSWERS

1.	В		29.	А	57.	В
2.	С		30.	С	58.	В
3.	D		31.	С	59.	A
4.	А		32.	А	60.	D
5.	А		33.	D	61	C
6.	C	-	34.	D	67	B
7.	В		35.	D	02.	b
8.	D		36.	А	63.	A
9.	С		37.	А	64.	D
10.	В		38.	D	65.	C
11.	А		39.	B	66.	D
12.	А	2	40.	C	67.	С
13.	В	4	41.	A	68.	D
14.	С	4	42.	Α	69.	D
15.	С		43.	C	70	D
16.	В		44.	С	70.	
17.	В		45.	С	71.	В
18.	В	2	46.	В	72.	A
19.	В	2	47.	В	73.	C
20.	С	2	48.	С	74.	В
21.	A	2	49.	C	75.	А
22.	D		50.	В	76	ח
23.	D		51.	В	70.	
24.	D		52.	C	//.	A
25.	А	-	53.	В	78.	D
26.	В	:	54.	А	79.	В
27.	А	:	55.	Α	80.	В
28.	D	:	56.	D		

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