## Aptitude Test

100 Marks

All questions carry equal marks. Answer all questions. Read instructions carefully and mark the correct answer using a Tick (//) mark in the appropriate box in the separately supplied. Marks placed other than in the box will not be considered.

Direction: Fill in the gap mentioned as question mark from the four options given below:-

$$1\frac{8}{9} + \frac{3}{7} + \frac{2}{3} + ? = \frac{158}{63}$$

- a) 145 b) 11 c) 111 d) 145 21 63

$$\frac{2}{\sqrt{3}} + \frac{1}{2\sqrt{3}} + \frac{1}{3\sqrt{3}} = ?$$

- a)  $\frac{11}{6\sqrt{3}}$  b)  $\frac{6\sqrt{3}}{11}$  c)  $\frac{2\sqrt{3}}{11}$  d)  $\frac{3\sqrt{3}}{11}$

$$3 2 \frac{1}{17} 2 \frac{1}{17} - ? = 2 \frac{1}{17}$$

- a)  $\frac{1}{17}$  b)  $2\frac{1}{17}$  c)  $1\frac{1}{17}$  d)  $\frac{17}{13}$

$$4 \qquad \left(13 - \frac{5}{8} + 9 - \frac{3}{8}\right) - \left(15 - \frac{2}{5} + 7 - \frac{3}{5}\right) = ?$$

- a) 0
- b) 23 c) 46
- d) 64

$$\frac{5}{13} \quad x \quad \frac{6}{13} \quad x \quad 5 \quad \frac{19}{30} = ?$$

- a) 0 b) <u>1</u> c) <u>2</u> d) 1

6 When simplified the product?

$$(2-\frac{1}{3})$$

$$(2-\frac{3}{5})$$

$$\left(2-\frac{1}{3}\right)$$
  $\left(2-\frac{5}{5}\right)$   $\left(2-\frac{5}{7}\right)$  .....  $\left(2-\frac{997}{999}\right)=$  ?

$$(2-\frac{997}{999})=$$

- a) <u>5</u> b) <u>1001</u> c) <u>1001</u> d) None

7 
$$(856+167)^2 + (856-167)^2$$
  $(856X856) + (167X167)$   
a) 1 b) 2 c) 689 d) 1023

8 What least value must be given to \* so that the number 451 \* 603 is exactly divisible by 9 a) 2 b) 5 c) 8

- d) 7
- 9 On dividing a number by 999, the quotient is 366 and the remainder is 103. The number is a) 364724 b) 365737 c) 365387
- d) 366757

10 T	he L.C.M.	of 2 <sup>3</sup>	$x3^{2}x5x11$	$2^3x3^3x5^2x7^2$	and 25x3	$3^{3}x5^{3}x7^{2}x^{1}$	l1 is
------	-----------	-------------------	---------------	-------------------	----------	--------------------------	-------

- a)  $2^5 \times 3^4 \times 5^3 \times 7^2 \times 11$  b)  $2^5 \times 3^4 \times 5^3$
- c)  $2^3x3^2x5x7x11$  d)  $2^3x3^2x5$

## 11 The HCF of two numbers is 11 and their LCM is 7700. If one of these numbers is 275, then the other one is

- a) 279
- b) 283
- c) 318
- d) 308

13 Find the greatest fraction of

$$\frac{41}{37}$$
,  $\frac{41}{27}$ ,  $\frac{41}{17}$ ,  $\frac{41}{7}$ 

- a) 41 b) 41 c) 41 d) \_\_\_

1.2, 2.1, 0.12, 0.21

a) IV II III I

b) II IV I III

c) II I IV III

d) IV III I II

$$\begin{array}{ccc}
15 & \underline{63} & \underline{\phantom{0}} & \underline{?} \\
81 & \underline{\phantom{0}} & \underline{\phantom{0}} & \underline{\phantom{0}} & \underline{\phantom{0}} & \underline{\phantom{0}} \\
\end{array}$$

- a) 36
- b) 49 c) 7 d)  $\frac{1}{49}$

- a) 1.8 b) 2.04 c) 2.2 d) \( \sqrt{1.6} \)

- a) -19
- b) 29
- c) -29
- d) 19

- a) 121796
- b) 121966
- c) 121866
- d) 121956

- a) 3775
- b) 2525
- c) 2975
- d) 3225

- a) 20
- b) 22
- c) 21
- d) 23

21 The next number in the sequence

- a) 49 b) 37 c) 37 d) 49 28 29
- 22 The greatest possible length of scale to measure exactly 6 mt 25 cm, 9 mtr 50 cm and 12 mt 25 cm is
  - a) 50 cm
- b) 25 cm
- c) 125 cm
- d) none of these
- 23 If  $5+2\sqrt{3}$  /  $7+4\sqrt{3} = a+b\sqrt{3}$ 
  - a) a=11, b=-6
    - b) a=-6, b=11
  - c) a=-11, b=6
    - d) a=-11, b=-6
- 24 Which of the following numbers is prime?
  - a) 117
- b) 147 c) 159
- d) 149
- 25 A boy was asked to multiply a number by 7/8 Instead he divided the number by 7/8 and got the result 15 more than the correct result. The number was
  - a)
- 96
- b) 36
- c) 56
- d) 65
- 26 The eigth term of 9,6,3,0..... is
  - a) 8
- b) -12 c) -14
- 27 The expression log 11 + log 14 log 22 is equal to  $\frac{22}{5}$  is equal to
  - a) log 2
- b) log 3 c) log 7
- d) log 5
- 28 If a=1.2, b=2.1, C=-3.3 find the value of  $a^3+b^3+c^3$ -3abc

  - a) o b) 11 c) 2 d) 3
- 29 if  $\frac{x}{2v} = \frac{3}{2}$ , the value of  $\frac{2x+y}{x-xy}$  equals

- a)  $\frac{1}{7}$  b)  $\frac{7}{10}$  c) 7 d)  $\frac{10}{7}$
- 30 The difference between the place values of 7 and 3 in the number 527435 is
- b) 6790 c) 3690
- d) 6970

DIRECTION TO Q.No. TO 31 TO 35: The following questions consists of two words each of them have certain relationship to each other, followed by four lettered pairs of words. Select the lettered pair that has the same relationship as of the original pair of words.

- 31 Trees: Branches
  - a) River : Tributaries
- b) Continent: Island
- c) Stream : Delta
- d) Ocean: Seas

32 Relax: work a) Play: Cheat b) Lunch: Dinner c) Smile: Laugh d) Fresh: Stale 33 Square: Cube a) Line: Cylinder b) Triangle: Prism c) Circle: Sphere d) Sphere: Earth 34 Carnivore : Herbvivore a) Animal: Bird b) Camel: Giraffe c) Flesh: Plant d) Horse: Lion 35 Accident : Mishap a) Abrubt : Sudden b) Eminent: Notorious c) Pacify: Provoke d) Dearth: Plenty DIRECTION FOR Q.No. TO 36 TO 39: In each of the following questions two words indicated by I and II have been left out. The correct word to come in place of 1 is given as one of the four alternatives against one and the correct word to come in place two is given as one of the four alternatives against two. Read with correct words, there is some relationship between the two words to the left of the sign (::) and the same relationship obtains between the two words to the right of sign (::). The correct combination is given as one the four alternatives (A), (B), (C), and (D) find the correct combination in each case. 36 I: Insert : : Active II I (a) static (b) statics (e) Helium (d) Air II (e) Gymnast (f) Dynamic (g) Participation (h) Smart (C) ch (A) af (B) be (D) dg 37 I: Ocean:: Stone II I (a) Glacier (b) lake (c) Continent (d) River II (e) Rock (f) Pebble (g) Granite (h) Mountain

38 I: Dog : : Goat II

I (a) Bitch (b) Pubby (c) Cat (d) Colt II (e) lamp (f) Cub (g) Pony (h) Farrow

(A) ag

(A) ch (B) af (C) dg

(B) be

39 I: Shoe :: Table II

I (a) Foot (b) Socks (c) Heel (d) Factory
II (e) Drawer (f) Chair (g) Wood (h) Carpenter

(A) af (B) dh (C) ce (D) bg

(C) ch

(D) df

(D) be

DIRECTION FOR Q. NO.40 & 41: In each of the following question a group three interrelated words is given. Choice a word from the given alternatives, that belongs to the same group.

	40 Patr	na : Bombay : I	Dispur				
		a) Cochin	b) Tro	ombay	c) Udayapur	d) Madra	as
	41 Pota	ato : Carrot : R	adish				
		a) Tomato	b) Gro	ound	c) Spinach	d) Sesai	me
DI	RECTIC	ON FOR Q. NO	). 42 to 45 :	Each of the fo	llowing question	n as for alternati	ve responses.
	42 Whi	ch of the follow	ving is the sa	ame as flood,	fire, Cyclone?		
		a) Damage	b) Ea	rthquake	c) Rain	d) Accident	
	43 Whi	ch of the follow	ving is the sa	ame as Rabbit	t, Rat, Mole?		
		a) Mongoose	b) Fro	og	c) Earthworm	d) Ant	
	44 Whi	ch of the follow	ving is the sa	ame as Measl	es, Rabies, Car	ncer?	
		a) Pneumonia	a b) Dia	betes	c) Tetanus	d) Hepatitis	
	45 Whi	ch of the follow	ving is the sa	ame as Wrestl	ing, Karate, Bo	xing?	
		a) Swimming	b) Jud	do	c) Pole Vault	d) Polo	
					• •	•	e of group of letters given alternatives.
46 J2Z, K4X, I7V,? H16R, M22P							
		a) 111T	b) L11S	c) L12T	d) L11T		
47 Q1F, S2E, U6D, W21C,?							
		a) Y66B	b) Y44B	c) Y88B	d) Z88B		
	48 In a	certain code, l	MONKEY is	written as XD	JMNL, How is <sup>-</sup>	ΓIGER written in	that code
	49 If a	a) QDFHS certain langua	b) SD ge NATURE	,	,	JHFS is FAMINE cod	ed in that code.
		a) FBMJND	b) FZ	MHND c)	GANIOE d) E	ALIME	
		ock is called te ed Iron, in wha			oven, oven is ca	alled grinder and	I grinder is
		a) Radio	b) Oven	c) Grinder	d) Iron		
						ar, car is called s to plough a field	
		a) train	h) hus	c) tractor	d) car		

52	52 Pointing to an man on the stage, Rita said "He is the brother of the daughter of the wife of my husband". How is the man on the stage related to Rita?									
	a) :	Son	b) Husband	l c) C	ousin	b) Brother-in-law				
53	53 Rahul told Anand "Yesterday I defeated the only brother of the daughter of my grand mother". Whom did Rahul defeat									
	a) :	Son	b) Father	c) B	rother	b) Father-in-law				
54	54 There are five different houses A to E in a row. A is the right of B and E is the left of C and right of A, B is to the right of D which of the house is in the middle.									
	a) l	D	b) B	c) A	d) E					
55	55 A man is facing south. He turns 135 degrees in the anticlockwise direction and then 180 degree in the clockwise direction. Which direction he is facing now?									
	a)	North-Ea	st b)	North-We	est	c) South-East	d) South-West			
56	6 Which o	f the follow	ving sets is b	est repres	sented in	the adjoining diagra	am			
	<ul> <li>a) Animals, Insects, Cockroaches,</li> <li>b) Country, States, Districts</li> <li>c) Animals, Males, Females and Hermaphrodites</li> <li>d) State, Districts, Union Territory</li> </ul>									
circle Read	es each re d the state	presenting	g certain sect each of the fo	ion of the	people.	elow, there are thre Different regions are and choose the let				
		Chinese	← a d	b f c e g	) → Paiı	nter				
57	7 Chinese	who are p	ainters but n	Musiciar ot musicia						
		a) b	b) c	c) d	d) g					
58	3 Painters	who are r	either Chine	se nor mu	usicians					
		a) b	b)c	c) f	d) g					
59	Ohinese	who are n	nusicians but	t not paint	ers					
		a) c	b) d	c) b	d) a					
60	) Chinese	who are p	ainters as w	ell as mus	sicians					
		a) a	b) b	c)c	d) d					

## DIRECTION FOR Q. NO. 61 TO 64:

- i) Jayanth, Kamal, Namitha, Asha and Tanmay are five members of a family.
- ii) They have birth dates from January to May, each member in one of these months
- iii) Each one likes one particular item for his / her birthday out of Bengali sweets, chocolates, Pastries', Ice cream & dry fruits
- iv) The one liking pastries' is born in the month which is exactly middle in the months given.
- v) Asha does not like ice cream but bring chocolates for Jayanth in February.
- vi) Tanmay who is pond of Bengali sweets is born in the next month immediately after Namitha
- 61 What is the choice of Asha?
  - b) Dry fruits c) Bengali Sweets d) None of them a) Pastries
- 62 Which combination of month & item is true for Jayanth
  - a) March Pastries' b) February-Pastries c) February-Ice cream d) None of these
- 63 What is the choice of Kamal
  - a) Ice cream b) Bengali Sweets d) None of these c) Dry fruits
- 64 In which month was Kamal born
  - a) January b) May c) January or May d) None of these

## DIRECTION FOR Q. NO. 65 TO 69:

In Car exhibition seven cars of seven different companies namely: Cardilac, Ambassador, Fiat Maruti, Mercedes, Bedford and Fargo were displayed in a row facing east such that

- 1 Cardilac car was to the immediate right of Fargo
- 2 Fargo was fourth to the right of Fiat
- 3 Maruthi car was between Ambassador and Bedford
- 4 Fiat which was third to the left of Ambassador car was at one of ends.
- 65 Which of the following was the correct position of the Mercedes.
  - b) Immediate left of Bedford a) Immediate right of Cardilac c) Between Bedford and Fargo d) Fourth to the right of Maruthi
- 66 Which of the following is true
  - a) Fargo car is between Ambassador and Fiat
  - b) Cardilac car is to the immediate left of Mercedes
  - c) Fargo is to the immediate right of Cardilac
  - d) Maruthi is the fourth to the right of Mercedes
- 67 Which cars are on the immediate either sides of the Cardilac car?
  - a) Ambassador and Maruthi b) Maruthi & Fiat c) Fiat & Mercedes d) None of these

a) Maruthi is immediate left of Ambassador b) Bedford is to immediate left of Fiat c) Bedford is at one of the ends. d) Fiat is to the second to the right of Maruthi 69 Which of the following group of car is to the right of Ambassador car? a) Cardilac, Fargo & Maruthi b) Maruthi, Bedford & Fiat c) Mercedes, Cardilac & Forgo								
70 36 vehicles are second car ther	e are two scooters	igle row. After the start, after the thire in the second h	ne first car there is one scooter after the d car there are three scooters and so on alf of the row.					
71 How many num but also has 4 a a) 7	ıs a digit		h of which is not only exactly divisible by four 21					
,	er than 3 but les	,	greater than 6 but less than 10. The number is					
73 In row of trees of a) 8		rom either end o c) 10 d)	f the row. How many tree are there in a row 11					
<ul> <li>74 The tax on a commodity is dimnished by 20% and its consumption increases by 15%. The effect on revenue is <ul> <li>a) Decrease by 12 %</li> <li>b) Decrease by 9 %</li> <li>c) Decrease by 8 %</li> <li>c) None of them</li> </ul> </li> <li>75 A Gardener want to plant 17956 trees in his garden and arranges in such away that there are</li> </ul>								
as many as tree a) 56	es in a row. Wha b) 67	t is the total num c) 47	nber of the trees in a row?  d) 52					
76 If the length and breath of rectangular plot are increased by 50% and 20% respectively, the new areas will be how many times than that of original area?								
a) 4	b) 9/6	c) 11/5	d) 9/5					
77 The Average weight of a class of 29 students is 40 kgs. If the weight of the teacher be included, grms the average rises by 500 grms. What is the weight of the teacher?								
a) 45 Kg	b) 55 Kg	c) 62 Kg	d) 40 Kg					
	78 A mixture contains alcohol and water in the ratio of 4:3. If 7 ltrs of water is added to the mixture the ratio of alcohol and water becomes 3:4. Find the quantity of alcohol in the mixture.							
a) 12 ltrs	b) 8 ltrs	c) 9 ltrs	d) 15 ltrs.					

79	Walking 6/7 of his usual speed, a man is the 25 Minutes too late. Find the usual time.
	a) 2 Hours 45.Minutes b) 3 Hours c) 2 Hours 30.Minutes d) None of these
80	The diameter of the driving wheel of a bus is 140 Cm. How many revolution per minute must the wheel make to keep a speed of 60 Km per hour
	a) 210 b) 230 c) 210 d) 250
81	The weigh of an object would be miniumum when it is placed at the
	a) North pole b) South pole c) Equator d) Centre of the earth
82	A car and a loaded truck are moving with the same speed along a road. As compared to the truck, the car shall possess.
	a) More kinetic energy b) More potential energy c) Less kinetic energy d) Less potential energy
83	When two bodies stick together after collision, the collision is said to be
	<ul><li>a) Partially elastic</li><li>b) Elastic</li><li>c) Inelastic</li><li>d) None of the above.</li></ul>
84	A red hot steel bar is an example of
	<ul><li>a) Mechanical Energy</li><li>b) Vibrational Energy</li><li>c) Kinetic Energy</li><li>d) None of the above.</li></ul>
85	The time taken by light to travel from the sun to the earth is approximately a) 8 seconds b) 8 minutes c) 8 hours d) 8 light years
86	The velocity of sound is largest in a) Air b) Water c) Oil d) Steel
87	The super sonic speed of an Aeroplane is expressed in a) Mach number b) Decibel c) Hertz d) None of them
88	The quality of sound is judged by a) Its frequency b) Its various over tones c) longer wave lengths d) All the above
89	One can't hear sound on the moon because it has no a) Light b) Atmosphere c) Darkness d) None of the above.
90	A spherical mirror is nothing but one a) A spherical ball polished on its surface b) A plane mirror only c) A large number of plane mirrors equally inclined to each other d) None of the above.

91 The	e type of radiation in the type of radiation and the type of type	}	<b>;</b>						
92 Wh	ich of the follow a) Hailey's	ving comets b) Hor		6 years? Donati's	d) Alpha	centuari			
93 The	e angle in the ca a) 90 degrees		molecule is ap degrees	proximately c) 105 degre	ees	d) 75 degrees			
94 Ato	ms with the sar a) Isotones	me atomic nu b) Isol		rent mass nu somer	mbers are o d) Isotop				
95 Wh	ich type of cell a) Mitosis	division occu b) Mei		ells? ooth a & b	d) Cell di	vision doesn't occur			
96 The	<ul> <li>The sensation of fatigue in the muscles after prolonged strenuous physical work is caused by a) decrease in supply of oxygen</li> <li>b) Minor wear and tear of muscle fibres</li> <li>c) Accumulation of lactic acid</li> <li>d) None of the above.</li> </ul>								
97 Milk, Meat and Eggs are good sources of									
	a) Fats	b) Carbohy	drates	c) Proteins	d) '	Vitamins			
98 Saf	fron is dried a) Flower bud	ds b) Styl	es c) S	Stigmas	d) Periar	nth			
99 Anii	mal which uses a) Dog	s sound as its b) Bat	s "eyes" is c) cat	d) snake	Э				
100 The	e computer spe a) Kilobyte	ed is measu b) Bite		Hertz d) l	Megabyte				