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

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

- 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

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

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

6 When simplified the product?

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

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

$$\left(2-\frac{5}{7}\right)$$

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

- 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 b) 5 c) 8

- a) 2
- 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 The L.C.M. of $2^3 \times 3^2 \times 5 \times 11$, $2^3 \times 3^3 \times 5^2 \times 7^2$ and $2^5 \times 3^3 \times 5^3 \times 7^2 \times 10^3$
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- 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

12 The expression (11.98x11.98 + 11.98 x X + 0.02 x 0.02) will be a perfect square for X equal to a) 0.02 b) 0.04 c) 0.2 d) 0.4

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) ___

14 Arrange in descending order

a) IV II III I

b) II IV I III

c) II I IV III

d) IV III I II

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

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

16 ?-\ 0.04 =2

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

17 If 45 -[28-(37-{15-*})]=58 then * =

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

18 75983x 75983 - 45983 x 45983 / 30000 = ?

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

19 (51+52+53+ +100) is equal to

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

20 A gardener arranges 441 plants in such a way that each one contains as many plants as there are rows. Find the plants in a row.

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

21 The next number in the sequence

$$\frac{4}{23}$$
 , $\frac{9}{24}$

- 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

- 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

c) 56

- 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

(A) ag (B) be (C) ch (D) df

38 I: Dog : : Goat II

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

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

39 I: Shoe : : Table II

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

(B) dh

(A) af

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.

(C) ce

(D) bg

	40 Patna : Bombay : Dispur						
		a) Cochin	b) Tro	ombay	c) Udayapur	d) Madra	as
41 Potato : Carrot : Radish							
		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,? H	I16R, M22P				
		a) 111T	b) L11S	c) L12T	d) L11T		
	47 Q1F	F, S2E, U6D, W	/21C,?				
		a) Y66B	b) Y44B	c) Y88B	d) Z88B		
	48 In a	certain code, l	MONKEY is	written as XD	JMNL, How is ⁻	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?								
	а) Son	b) Husban	d c) C	ousin	b) Brother-in-law			
53		told Anand did Rahul d	•	defeated	the only l	prother of the daugh	nter of my grand mother".		
	а) Son	b) Father	c) B	rother	b) Father-in-law			
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.									
	а) D	b) B	c) A	d) E	Ē			
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?								
	а) North-Ea	ast b)	North-We	est	c) South-East	d) South-West		
56	Which	of the follow	wing sets is t	est repres	sented in	the adjoining diagra	am		
	 a) Animals, Insects, Cockroaches, b) Country, States, Districts c) Animals, Males, Females and Hermaphrodites d) State, Districts, Union Territory 								
circle Read	DIRECTION FOR Q. NO.57 to 60: In the figure given below, there are three intersecting circles each representing certain section of the people. Different regions are marked a to g. Read the statements in each of the following questions and choose the letter of the region which correctly represents the statement.								
		Chinese	← a d	b f c e g	> Pai	nter			
57	Chines	se who are p	painters but	Musiciai not musici					
		a) b	b) c	c) d	d) g				
58	Painte	rs who are i	neither Chine	ese nor mu	usicians				
		a) b	b)c	c) f	d) g				
59	Chines	se who are i	musicians bu	ut not pain	ters				
		a) c	b) d	c) b	d) a				
60) Chines	se who are p	painters as v	vell 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?
 - a) Pastries b) Dry fruits c) Bengali Sweets d) None of them
- 62 Which combination of month & item is true for Jayanth
 - a) March Pastries'b) February-Pastriesc) February-Ice creamd) None of these
- 63 What is the choice of Kamal
 - a) Ice creamb) Bengali Sweetsc) Dry fruitsd) None of these
- 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.
 - a) Immediate right of Cardilacb) Immediate left of Bedfordc) Between Bedford and Fargod) 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 Maruthib) Maruthi & Fiatc) Fiat & Mercedesd) 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 pasecond car there	are two scooter ber of scooters i	le row. After the fir	est car there is one scooter after the rest three scooters and so on f the row.				
71 How many number but also has 4 as a) 7	a digit) are there each of) 20 d) 21	which is not only exactly divisible by four				
,	than 3 but less	,	ater than 6 but less than 10. The number is				
73 In row of trees on a) 8		m either end of the) 10 d) 11	row. How many tree are there in a row				
The effect on reve a) Decrease c) Decrease	enue is by 12 % by 8 %	b) Decreas c) None of	them				
75 A Gardener want to plant 17956 trees in his garden and arranges in such away that there are as many as trees in a row. What is the total number of the trees in a row?							
a) 56	b) 67	c) 47	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				
			:3. If 7 ltrs of water is added to the mixture e quantity of alcohol in the mixture.				
a) 12 ltrs	b) 8 ltrs	c) 9 ltrs	d) 15 ltrs.				

19	waiking 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	30 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					
	a) Partially elastic b) Elastic c) Inelastic d) None of the above.					
84	A red hot steel bar is an example of					
	a) Mechanical Energy b) Vibrational Energy c) Kinetic Energy d) None of the above.					
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 Th	e type of radiati a) Alpha rays c) Gama rays	3	radio active subs b) Beta rays d) All of these	stance are		
92 WI	hich of the follow a) Hailey's	ving comets a b) Hon	appear after 76 ye ne's c) Don) Alpha centuari	
93 Th	e angle in the c a) 90 degree		molecule is appro degrees c)	ximately 105 degrees	d) 75 degr	ees
94 Ato	oms with the sa a) Isotones	me atomic nu b) Isob	mber but differen ars c)Isom		rs are called) Isotopes	
95 WI	hich type of cell a) Mitosis	division occu b) Mei	rs in cancer cells' osis c) both) Cell division does	n't occur
96 Th	e sensation of a) decrease i b) Minor wea c) Accumulat d) None of th	in supply of o r and tear of tion of lactic a	xygen muscle fibres	longed strenu	ous physical work i	s caused by
97 Mi	lk, Meat and Eg	gs are good s	sources of			
	a) Fats	b) Carbohy	drates c)	Proteins	d) Vitamins	
98 Sa	offron is dried a) Flower bud	ds b) Style	es c) Stigr	mas dj) Perianth	
99 An	nimal which uses a) Dog	s sound as its b) Bat	"eyes" is c) cat	d) snake		
100 Th	e computer spe a) Kilobyte	ed is measur b) Bite		z d) Mega	abyte	