CAT FULL LENGTH TEST 7

No of questions: 185

Directions for questions 1 to 3: In each of the following questions, you are given a complete sentence. Then you are given specific instructions relating to the rewritten sentence with four answer choices 1,2,3,and 4. In rewriting the sentence, make whatever changes the new sentence structure requires without changing the basic meaning of the sentence. Then read the answer choices carefully and select the answer that is best.

	dden changes in the genes of chromosomes may give rise to excellent new varieties of plant. Rewritten: ent new varieties of plants Next words in the rewritten sentence are
1	may give rise may change with genes or chromosomes may rise
2. Sir Negro Rewri	
Negro	es have Somewhere in the part of the written sentence indicated by underline is the word occupied being race members
An ide	good dictionary might be used as an ideal first aid for increasing your command of words. Rewritten: eal way to The next word in the rewritten sentence is use increasing increase develop
Direct error.	tions for questions 4 to 0: The sentences are divided into four parts. Select the part which has an
4.	The number of people who own colour T.V. are increasing every year.
5.	Every year nearly 40,000 students appear in the IMS
6.	Only after waiting for one and half hour was I admitted into the great man's room.
7.	Her speech neither brought credit to nor prestige to their country.
8.	Together we went to the canteen for having a drink.
9.	Never I will understand his intentions.
10.	By the by, have you heard from your girl friend recently?

Directions for questions 11 to 17: in each of these questions, a sentence has been divided into four parts and marked a, b, c, d. One of these parts contains a mistake in grammar idiom or syntax. Identify that part and mark it as the answer.

- 11. On entering the auditorium, loud cheers greeted the President who acknowledged them with a smile and waved back happily at the gathering.
- 12. Much of the students
 are weak in Mathematics and therefore
 the Principal has arranged for special tuition
 in the evening after class-hours.

- 13. I am very sure that if your were me and had been talked to in a similar manner. you would also have lost your temper and talked back as I did.
- 14. Her Uncle advised her to forget the past, and stop crying on split milk and work hard in the future avoiding the mistakes earlier committed.
- 15. He declined our offer of help saying that he is very proud to accept money from neighbours like us whom he has known just for a week.
- 16. Whenever my son brings me a problem in AccountsI help to solve it becauseI have always liked the subjectand also like teaching young children.
- 17. An extremely versatile student,good at studies, sports,the accomplishments of Rajan are worthy of emulationby all the other students of the class.

Directions for questions 18 to 22: In each of the following sentences four words or phrases have been underlined. Only one underlined part in each sentence is not acceptable in standard English. Pick up the part 1 or 2 or 3 or 4. If there is no mistake mark'5'

18. I am sorry that a previous appointment will prevent me being present at the meeting.

1 2 3 4 5

19. He laid for half an hour in an unconscious state until a cop picked him up.

1 2 3 4 5

20. The journey by train is as quick and perhaps quicker than by car.

1 2 3 4 5

21. He told the members of his staff that every one of them should carry out his task oneself.

1 2 3 4 5

22.This year the monsoons failed which caused a terrible famine in the country.

1 2 3 4 5

Directions for questions 23 to 28: For each question, select the word which has a meaning most nearly opposite to that of the given word.

23.CARNAL:

fat intellectual remorseful recurring

24.SCANTY:

straying evil luxuriant cruel

25.SCION:

41. FORAGE:

ancient hunt warning fluency

42. DESCRY:

abuse observe criticize damage

Directions for questions 43 to 47: For each question, select the word which is closest in meaning to the given word.

43. GAWKY:

proud awkward greedy undisciplined

44.ESPOUSE:

intensify advocate describe marry

45. FOIBLE

tale fault incapability illusion

46. BLITHE:

sacrosanct obscure cheerful transparent.

47.ABYSMAL

bottomless eternal external sweet

Directions for questions 48 to 50: For each question below, select the word among the given choices which is nearly opposite to it in meaning.

48. RAZE:

demolish sleep reconstruct agree

49. TRUNCATE:

lengthen trespass agree stammer.

50.IMPECCABLE

faulty unfriendly vulnerable irritating.

51. Find the 75th term of the series 2,6,10,14....

3022 296 299 300

52. Find the sum of series 2,4,6,8..... up to 40 terms

1000 960 1640 1650

53. In how many ways can the face words be equally divided into two groups

482 ways 350 ways 450 ways 462 ways

54. 5 balls have to be placed in 12 boxes, which are divided into 3 rows of equal number of boxes. The ball must be place in such a way that each row contains at least one ball. In how many ways can this be done.

680 492 486 692

55. How many ways are there to race two Dai so that the of the values on the upper force is divisible by 4

11 9 10 12

56. In a race of Bulls chances that A will win are 60%, B will win are 20% and that c will win are 30% what is the possibility that one of them will win.

57. Akash and Anand throw with two dice. If Ashok throws 11 what is Anands chance of throwing a higher number?

1/36 2/15 1/12 3/20

58. From 10 books in how many way can a selection of 5 be made, when one specified book is always included 132 ways 126 ways 148 ways 150 ways

59. Referring to the above question find the number of ways a selection can be made if one book is to be always excluded.

160 ways 126 ways 150 ways 190 ways

60. In the given series select the item that does not fit in the series OMN, RPQ, UTS, YWX

UTS RPQ

61. Spot the odd one in the given series 8,125,512,729

729 125 8 512

62. Find the odd one out from 36, 1,81, 27, 64, 125

81 36 1 125

63. Find the odd one 4,1,5,4,7,10

10 7 5 4

64. Find the odd one out CBA, GDE, KHI, OLM

CBA KHI OLM **GDF**

65. Find the odd one out

 $(435 \times 2^3) / 2^2$ 5800 x 15% 17400 x 5% 174 x 5 870 x 1%

66. Find the odd one out}

 $65^{2} + 2^{2} 3^{2}$ (33) % of 14406 200% of 23770 20% of 23770

67. The population of a town increased by 10% every year for two years and the decrease by 10% every year for two years. If the population just before 4 years was 20,000, what was it after four years

24200 21180 22000 19602

68. At an election a candidate secures 30% of the total votes but is defeated by another candidates by 2100

votes. Find the total number of notes polled

5625 5575 5250 5500

69. The entry fee to an amusement park was Rs.2 . Later this reduced by 50% and the sale increased by 25%Find the % increase in the number of visited

150 % 160% 175% 155%

70. The measure of one side of a rectangle is too long by 6% of its true length and that of the other is short by 10% of its true length. Find the errors percentage in measure obtained for the area of the rectangle

4.6% -4.6 % - 2.3% 2.5%

71. Between two railway station the I, II and III class fares are in the ratio 10:5:2 and in an year the ratio of percentage of I, II & III class was 3:4:5 respectively. If the total sale proceeds of the tickets during a year was

RS.12000 find the amount for which the ticket of the II class were sold during that year

Rs. 4000 Rs.5000 Rs.4200 Rs.4100

72. 15 horses and 10 cows were brought for Rs. 1500. If the average price of a horse is RS.80 find the average price of a cow.

37 Rs. 40 Rs. 35 Rs. 30 Rs.

73. The average of 11 numbers is 100. If the average of the first 8 in numbers is 98 and that of last six is 104, what is the sixth number?

100 84 110 112

74. There are 2 similar triangles. The lengths of the sides of one of them are 4 cm, 6cm and 8 cm. If perimeter of the 2nd triangle is 162 cm. Find the length of the corresponding sides of the other triangle

36,54 & 75 25,50 & 80 35,20 & 30 None of these

75. A rainy day occurs once in every 20days. Half of the rainy days produce rainbows. What % of all the days have no rainbows

97.5% 95% 100% 25%

76. Twenty people were invited for a wedding. In how many ways can they and the host be seated at a circular table?

20! 22! 23! 15!

77. From 5 different green balls, four different blue balls & 3 different red balls how many combinations of balls can be chosen taking atleast one green and one blue ball.

3720 5270 3270 7200

78. A draper sold 448 meters of cloth, part at 66 paise a metre and the remainder at 90 paise a meter and for the whole received Rs.362.88. How many meteres were sold at 90 paise.

280 m 360 m 140 m 120 m

79. A types a words in b minutes. B types x words in y minutes. The ratio of A's typing rate to B's rate is ab/xy ax/by None of these

80. The sum of 2 numbers is 3 times the difference of the 2 nos. If one of the number is 2, in the other is

3 2 1

81. A finished 2/5 of a work in 18 days and the remaining work he finished in 9 days with the assistance of B. Find in how many days B alone can finish that work

22 ½ days 24 days 21 days 2 days

82. A takes twice as much time as B and thrice as much as c to finish a piece of work. They together finish the work in one day. Find the time taken by B to finish the work.

3 days 2 days 6 days 5 days

83. In D XYZ, XA = AB = BZ. If the area of D YAZ is 96, what is the area of D XYZ

144 169 136 125

84. Triangle P,Q,R & S are congruent equilateral triangles what can be said about quadrilateral T.

T is a rectangle T is a rhombus T is a square None of these

85. Find area of a triangle whose co-ordinates are (5,2), (-9,-3), and (-3, -5)

29 31 42

86. Find the equation of a line, whose slope is 0.5 and passes through a point (3,2).

2y = x + 12x = y - 12x = 2y + 1None of these

87. Cost of painting 4 walls of a room 90meters x 40 meters at Rs. 10 per sg.m is RS.13000. Find the height of the room.

5 m 10 m 15 m 12 m

88. The lower part of a tent is a right circular cylinder and its upper part is a right cone. The diameter of the base is 140 m and then total height is 30m and the height of the cylindrical part is 6 m .Find the cost of material at Rs. 20 per sq.m

Rs. 3,78,400 Rs.2,50,000 Rs. 3,45,500 Rs. 3,35,200 89. A right circular cylinder of height 20cm and radius of base 12 cm is taken from this cylinder, a right circular cone of the same ht & base is removed. What will be the volume of the remaining solid.

1920 P 1260 P 1290 P 1395 P

90. 3 plots having an area of 132,204 & 228 sq.m respectively are to be subdivided into equalized flower beds. If the breadth of a bed is 36 meters find the maximum length that a bed can have.

2 m 3 m 4 m 5 m

91. Which of the following is the square of a Natural Number

385641 138927 1267543 410882

92. Four bells begin to ring together and ring respectively at interval of 4,5,6 and 10 seconds. How many times will they ring together in one hour, including the one at the start

57 62 60 50

93. $(0.6)^4 - (0.3)^4 / (0.6)^2 + (0.3)^2$ is equal to 1.8 0.18 0.27 2.7

94. If (sqrt 1 + 29/36) = (1 + x/14) then the value of x is

2 1 1.5 3

95. For a sphere of radius 20cm, the numerical value of the surface area is how many percent of the numerical value of its volume

15% 30% 10% 20%

96. The average marks obtained by 150 candidates was 40. If the average of passed students was 45 and that of failed student was 20, the number of student who failed in the examination is

60 90 120 30

97. An alloy contains Zinc and nickel in the ratio 2: 3 and another alloy contains Zinc and nickel in the ratio 3: 4. If equal amounts of both the alloy are melted together, then the ratio of zinc and nickel in the resulting alloy is

4:5 29:41 16:21 39:51

98. Alok started a business with Rs. 12000 and is joined afterward by Arun with Rs 20,000. After how many months did Arun join, if the profit at the end of the year are divided equally.

4 month 3.5 months 3.6 months 4.8 months

99. A can do a piece of work in 36 days if B is 20% more efficient than A then the number of days required by B to do the work is

25 days 15 days 30 days 20 days

100. One year ago jai and Ajay's ages was 3 : 4 one year hence the ratio of their ages will be 4 : 5 the present age of jai is

7 years 12 years 15 years 13 years

101. What time will a fast clock show at mid - night on Tuesday?

I. It was set right at 12 noon on Sunday

II. It loses 4 minutes everyday

1 2 3 4 5

102. How long will it take for the share value of Company A to double itself.

I. The present value of the share is double its value four years back.

II. The present value is Rs 50 and will be Rs. 62.50 next year.

Indiainfoline - Business School

3

5

diainfol	ine - Bu	isiness S	School				
I. Tap P can fill the tank in 3 hours II. Tap Q can empty the tank in 4 hours.							
	1	2	3	4	5		
1. A	depos	it of F	Rs 600) beco	f compound interest given by a bank if ? omes Rs 660 in 5 years. erest Annually.		
	1	2	3	4	5		
I. Th	eir av	erage	weig	ht 6 i	weight of workers in a factory. months back was 48 kgs nally joined the factory last month.		
	1	2	3	4	5		
I. Th	e first	two	terms	are 1	n of a given sequence? 1, 0 4 th term are -1, -2		
	1	2	3	4	5		
I. PC	and	Rs ar	e para	allel a	QRS s square nd equal and equal		
	1	2	3	4	5		
I. Pi		ater tl	ter th				
	1	2	3	4	5		
118. What is the volume of a conical vessel ? I. The perimeter of the base of vessel is 80 cm. II. The volume of the vessel is ¼ the volume of a cylinder with twice the height and the same base							
	1	2	3	4	5		
I. Th	ree ye	ears a	igo th	e rati	of a mother and a daughter is ? o was 4 : 1 atio will be 3 : 1		
	1	2	3	4	5		
I. Th	120. What is the angle between the hands of a wall clock? I. The time is between 6 and 7. II. Half an hour back the angle was 0.						
	1	2	3	4	5		

121. What is the radius of the wheel of a cart . I. The number of revolution made by lit while travelling from x to y is 2000. II. If it had traveled one more metre, it would have revolved 500 more times.

I. Tł	ne pole	e is 10) ft he	eight	the shadow cost by a person 4 ft tall standing near a pole. the pole.
	1	2	3	4	5
I. a	Is a / b = ² > b	6 / 5			
	1	2	3	4	5
heig I. Tł	ht of t ne min	he ne imum	w stu heigh	dent nt for	s in Beverly high school. The average height of 10 students is 170 cm. What is the? admission in the school is 160 cm. bins the total height is 30 cm.
	1	2	3	4	5
I. Tł	ne tota	al num	iber o	f coin	spee coins and 2 rupee coins. What is the total amount in the box if is 100 replace by equal number of two rupee coins the amount will increase by Rs.10
	1	2	3	4	5
l. x	receiv	es 1 /	'5 th of	f wha	kimum if Rs 300 are divided among x, y, & z. t Y & Z receive together. t x and z receive together.
	1	2	3	4	5
l. x		umber			$x^2 + 6x + 5 = 0$ $2x^2 + 3x - x = 0$
	1	2	3	4	5
I. a	lies be	etweer	า 15 ส	and 2	prime number 0. visible by 5
	1	2	3	4	5
I. H	e spok	e at a	ın ave	erage	ister's speech last ? of 40 words for every 50 seconds for 5 more minutes his speech rate would be 5 words less per minute
	1	2	3	4	5
I. Th	ne rati	o of p	ost gr	aduat	ge of post graduate employees in a company. tes to non post graduates is 2 : 3. t graduates in 81.
	1	2	3	4	5
Th _o	tabla	holos	a, air,	00 th	e number of days worked by employees of five grades A R C D & F in the

different departments.

(No. Of days worked in a Year)

Grade	Finance	Marketing	Production	Personnel
А	300	307	300	290
В	320	314	315	300
С	310	322	315	310
D	290	313	365	305
E	250	318	365	300

131. The number of days worked in Finance department was highest for grade

В

Ε

D С

132. The grade which worked least in all the departments is

Grade A in Personnel

Grade C in Finance

Grade B in Marketing

Grade E in

Finance

133. Can we infer that production was throughout the year

Can't say

Need more data

134. If average day is 8 hours then the amount of work put by grade c is

1257 hrs.

10000 hrs

10056 hrs

None of the above.

135. If we say production was non stop throughout the year without a single day's break then the current year.

it is not a leap year

it is a leap year

cannot say for sure

data is insufficient

136. If the number of holidays in the year was 15 then average absenteeism of grade E workers in finance during the year is

75 days

100 days

115 days

15 days

137. Across various departments the number of days put was most by grade

Α

C

138. Across various departments the average number of days put was least by

D

C

Α F

139. The average number of days worked by Grade D is

299.25

318.25

320

327

140. The average number of days worked by Grade e is

308.25

318.25

327 341

141. The department which had the most in terms of employee attendance is

Finance

Personnel

Marketing

Production

142. The department which had the most in terms of absenteeism is

Production

Finance

Personnel

143. The average number of days people across a;; grades worked in Personnel is

301

302

300

144. The average number of days people across all grades worked in Production is

333

329

331

299

332

145. If grade D got Rs.20 more per day than grade E average earning of Grade D workers over Grade E Workers Rs.365 Rs.7200 Rs.7300 Rs.1000

The following is the result in the T.Y.B.Com exams in Colleges. These figures are the number of students who have passed in Percentage.



146. In which college is the number of girls who have passed is the highest.

A B C Need more data.

147. The number of student in TYBcom in college A is 600, one third of men being girls. The number of boys who have passed is

280 420 70 90

148. In College D the number of girls are twice the number of boys. The no.of girls more than the boys who have passed if there are 300 people is

75 70 80 160

149. Which of the following may be untrue

girls have performed in most colleges better than boys

girls have performed as well as boys in college E

boys have performed better in college D

boys in college D are more intelligent than girls

150. If the number of student who have appeared for the exam in college E is 200. The number of student failing is

80 160 40 20

151. In case of college D which of the following is possibly the number of boys.

58 59 60 6

152. If in college B the number of absentees were 20 boys then out of the 200 boys how many failed.

50 60 120 80

153. If in college A the number of boys are 200 and in college B they are 100 then the number of boys who have failed is

the same as those of B

is more by 20 than B

is less by 20 than B

None of the above.

154. The percentage of girls failing is the highest in

colleges A & B

Colleges B,D and E

Colleges A & C

Colleges A,B,E

155. The percentage of boys failing is the lowest in

College B

College B,C,E

College D

College A

Directions for questions 156 to 157: Given below is a capitalized pair of words which bear a certain relationship to each other. From the alternatives, choose the pair that does not bear the same relationship as the capitalized pair.

156. LASSITUDE: SYNCOPE caterpillar : pupa kernel : shell larva : cocoon passenger: car 157. PARENT: OFFSPRING mother : spring sororal : fraternal father : son paternal: daughterly Directions for questions 158 to 162: Fill in the blanks with the pair of words that best completes the 158. _____ arose within the government when it was found that one of the leader was _____. grief..... guilty trouble.....guilty celebration....ill joy.....dead 159. She says she is being _____ because she did not act according to the ____ of her superior. victimized.....wishes wished.....birthday accused.....crimes noticed.....commands 160. Being the editor of such a good newspaper has many _____, but it has one_____. downsides....joy friends....enemies joys....downside jobs.....holiday 161. After nearly three decades in the industrial _____, Karnataka is back with a _____. arena.....thought field.....agenda backwoods.....vengeance party.....bang. 162. I've been _____ of all sorts of things, _____, some not. thinking....perhaps certain....maybe something new....some hot accused.....some true Directions for questions 163 to 165:Read the following carefully and answer the questions that follow. In the village of Shantinagar, all inhabitants always answer any question with two sentences, one of which is always true and the other always false. While visiting the village, you find Shyam, Sunder, Mani near the village court. One of them is wearing a dhoti. Knowing that they were there to resolve a dispute over the ownership of some property, you ask them, "who got the land?". They answer as follows: Shyam: "I got the chair. Mani is wearing a dhoti". Sunder: "I am wearing a dhoti. I got the land". "I got the land. I am not wearing a dhoti". 163. Who is wearing a dhoti? Sunder Mani Shyam None of them. 164. Who got the land? Shyam Can't say Sunder Mani On waking up the next morning, you find that your motor-cycle has been stolen. You question them(knowing that only one of them is guilty), and they reply as follows: Shyam : "Sunder did not do it. I did not do it." Sunder: "I did not do it. Mani did not do it." Mani : "I did not do it. I do not know who did it." 165. Who stole the motor-cycle? Can't say Mani Sunder Shyam

Directions for questions 166 to 170: In each of the following questions one interrogative statements

followed by	y two arguments,or	e beginning with	' yes	' and the other	with ' no	'. Mark:

(b (c)), if only arg , if both 1 ar	ument 1 is force ument 2 is force nd 2 are forceful nor 2 is forcefu	eful				
1.\	es, because	cy survive in India people in India ar corruption in the	e democratic in		nas made the p	eople lose faith in it.	
	1 2	3 4					
1.Y	es, because t	omy the best typ he competition be blic sector is a los 3 4	tween the publi	c sector and		will benefit the public in many ways e exchequer.	
1.Y	es, because n		ople in India are	illiterate.		not spare time for education.	
1. \ 2.N	es, because	ost of governors I governors look to nief Ministers of I 3 4	the interest of	the central g		y. of the state remains a vital link	
1. Ye	es, because pr	colleges be take ivate organization overnment undert 3 4	ns run the collec	je with moti			
Dire 171.	=			odd one out ectacles	from the grou	up of four words.	
172	Sonnet	Haiku	Limerick		Epilogue		
173.	Skin	Nails	Eyes		Nose		
174.	Mediocre	Terrible	Averag	e	Medium		
175.	Transmiss	sion Osmos	sis Trai	nsgression	Infiltrat	ion	
	•	estions 176 to 1 lical manner:	80 : Fill in the	blanks with	n the word or p	ohrase that completes the	
176.	When I come pass	e face to face with collide com	you, we municate	in a v	very special ma	nner.	
	Some guidelin munication. participate	es to manage im understan	_	t the manag grow	ers to	in developing strategic	
178.\	While opportu go a step		tay the same, to the same		xetingved further	, making it the hot choice. are attractive	

179.Time flies	when you	are 1	Time drags when yo	ou have insomnia.
fat and	heavy	fast asleep	happy	on the move
	_			
180.A quiet no	ote of	amidst th	e cacophony in cor	nsumer banking.
spirit	noise	dignity r	evelry	

Directions for Qs 181-185 Read the following passage and answer the questions below

Human being is a singular creature. He has a set of gifts which make him unique among the animals: so that, unlike them, he is not figure in the landscape – he is a shaper of the landscape. In body and in mind he is the explorer of nature, the ubiquitous animal, who did not find but has made his home in every continent.

It is reported that when the Spaniards arrived overland at the Pacific Ocean in 1769 the California Indians used to say that all full moon the fish came and danced on these batches. And it is true that there is a local variety of fish, the grunion that comes up out of the water and lays its eggs above the normal high-tide mark. The females bury themselves tail first in the sand and the males gyrate round them and fertilize the eggs as they are being laid. The full moon is important, because it gives the time needed for the eggs to incubate undisturbed in the sand, nine or ten days, between these very high tides and the next ones that will wash the hatched fish out to seed again.

So millions of years of evolution have shaped the grunion to fit and sit exactly with the tides. But nature – that is, biological evolution – has not fitted man to any specific environment. On the contrary, by comparison with the grunion he has a rather crude survival kit; and yet- this is the paradox of the human condition – one that fits him to all environments. Among the multitude of animals which scamper, fly, burrow, and swim around us, human being is the only one who is not locked into his environment. His imagination, his reason, his emotional subtlety and toughness, make it possible for him not to accept the environment but to change it. And that series of inventions, by which man from age to age has remade his environment, is a different kind of evolution – not biological, but cultural evolution. I call that brilliant sequence of cultural peaks the ascent of Man.

Of course, it is tempting to a scientist – to hope that the most original achievement of the mind are also the most recent. And we do indeed have cause to be proud of some modern work. Think of the unraveling of the code of heredity in the DNA spiral; or the work going forward on the special faculties of the human brain. Think of the philosophic insight that saw into the theory of relativity or the minute behavior of matter on the atomic scale.

Yet to admire only our own successes, as if they had no past (and were of the future) Would make a caricature of knowledge. For human achievement, and science in particular, is not a museum of finished constructions. It is a progress, in which the first experiments of the alchemists also have a formative place, and the sophisticated arithmetic that the Mayan astronomers of Central America invented for themselves independently of the Old World. The stone work of Machu Picchu in the Andes and the geometry of the Alhambra in Moorish Spain seem to us, five centuries later, exquisite works of decorative art. But if we stop our appreciation there, we miss the originality of the two cultures that made them. Within their time, they are constructions as arresting and important for their peoples as the architectures of DNA for us.

- 181. The writer's view that man did not find but his made his home means that other animals has no choice but to live wherever they got protection.

 man's dominance of nature was so complete that he could decide where to build his home.

 man has learnt to co-exist with other animals.

 all of the above
- 182. The writer cites the example of the grunion's reproduction method to stress that the natural law of reproduction of species is at work everywhere. evolution helps every species adapt itself to fit into its environment. the law of survival of the fittest operates even at the lowest level. evolution took the first steps on the beaches of the world.
- 183. According to the author, the paradox of man's condition is that his crude survival kit has not helped man to fit into some kind of environment.

with his crude survival kit, man has developed capacity to fit into all type of environment. Man cannot scamper, fly or burrow, yet he has locked himself into his Environment. all of the above.

184. Why do we hope that the most original achievement of the mind are also the most recent?

We are too prejudiced to admit the past achievement of our forefathers.

We believe that the earlier inventions were too primitive to be of any use to be of any use to We do not realize that progress is a matter of continuity, so we view every past achievement isolation from our own.

us. in

We regard progress as mere change.

185. Man does not accept the environment but becomes the shaper of the landscape of: his love for exploration

his ability to plan, imagine, and put different talents together.

the genetic change that he introduced in his own species.

all of the above.

Explanatory answers to CAT Exam Paper VII

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1.[4]
       2.[1]
               3.[3]
                       4.[3] 5.[4]
                                      6.[3]
                                              7.[2] 8.[4]
                                                             9.[2]
                                                                     10.[1]
11.[a]
       12. [a]
               13.[a]
                       14.[b]
                                15.[b]
                                         16.[b]
                                                 17.[c]
                                                           18. [c]
                                                                    19. [1]
                                                                              20.[2]
                        24.[c]
                                 25.[a]
                                          26.[d]
                                                  27.[c]
                                                           28.[d]
21.[4]
       22.[2]
                23.[b]
                                                                   29.[c]
                                                                           30.[a]
31.[d]
       32.[b]
                33.[b]
                        34.[c]
                                 35.[b]
                                          36.[d]
                                                  37.[a]
                                                           38.[b]
                                                                   39.[b]
                                                                            40.[c]
              43. [b] 44.[b]
                                         46.[c]
                                                 47.[a]
41.[b]
       42.[b]
                                 45.[b]
                                                          48.[c] 49.[a]
                                                                           50.[a]
```

```
= 3+296 = 299

Hence [3]

52. d=2, n = 40, a = 2

Sn = 40/2 (2x2 + 39x2)

= 40/2 [4 + 78]

= 40 x 41 = 1640

Hence [3].
```

 $51.75^{th} = a + (n-1)d$

= 3 + 74x4

53. Total face cards are 12, can be divided into two groups in $(12c_6 6 c_6)/2 = 462$ ways

Hence [4]

54. Total number of filling and 5 balls in the given 12 boxes - 12 c $_5$ = 792 ways.

Choosing the first two rows 5 balls can be 8c₅

```
= 56 ways
```

Choosing the last two rows 5 balls can be places in 8c5 = 56 ways

Total number of unfavorable ways = 56 + 56

= 112 ways

No. of favorable ways = 792 - 112 = 680 ways.

Hence[1]

55. The various arrangement divisible by 4 are (1,3), (2,2), (3,5), (4,4),(5,3),(6,2) and (6,6). There are totally 9 outcomes hence [2].

56. $P(A) \times P(B^{-1}) \times P(C^{-1}) + P(A) \times P(B) \times P(C^{-1}) + P(A^{-1}) \times P(B^{-1}) \times P(C) = 0.6 \times 0.8 \times 0.7 + 0.4 \times 0.2 \times 0.7 + 0.4 \times 0.8 \times 0.3 = 0.488$ Hence [3]

```
57. Total number of outcomes of throwing two dice = 6 \times 6 = 36
Anand must throw 12 which can be done in one way only (6 + 6)
Thus his chance of throwing 12 is 1/36
Hence [1].
58. Since one book is always included the selection can be in 9 c4 ways
= 126 ways
Hence [2].
59. Since one book is to be always excluded selection can be made in 9c5 ways selection can be made in 9c5
ways.
= 126 ways
Hence [1].
60. UTS is does not fit into the series as the order of the alphabets is 312
Hence [2].
61. The order of the series is 2^3,5^3,8^3 the next should be 11^3
Hence [4].
62. The order of the series is
62,13,72,33,82,53
81 is the odd one
Hence [1]
63. The order of the series is
4 \circ 1^{2} \circ 4 + 1 \circ 2^{2} \circ 5 + 2 \circ 3^{2}
10 is the odd one
Hence [2].
64. The order of the series is
412
Hence [1].
65. Since 870 x 1% 87 it is the odd one
Hence [4]
66. Since all the others equate to 4754
C is incorrect
Hence [3].
                                  Ш
                                         IV
                         Ш
Population 20,000 22,000 24,200 21,780 19,602
Hence [4].
68. Let the total number of votes be x
Candidate 1 secure 30x/100
Candidate 2 secure 70x/100
70x - 30x/100 = 2100
40x = 2100 \times 100
x = 5250 \text{ votes}
Hence [3].
69. Earlier Entry =Rs.2
Earlier Number of visitor = Y
Earlier Sale = Rs. 2y
New Entry fee = Re.1
New Number of Visitors = x
New sale = RS. X
X = 125/100 \times 2y
```

```
X = 250/100 y
Increase = 150\%
Hence [1].
70. x = \% charge in one side = +4
y = \% charge in other side = - 10
% error in area = (a+b) + (ab/100)
(6 - 10) - (60/100)
-4.6 %
Hence [1].
71. Let the fares be 10y, 5y, 2y. The ratio of passengers is 3:4:5. The collection from the three classes is Rs. 30x,
Rs. 20x, Rs.10x
30x + 20x + 10x = 12000
60x = 12000
x = 200
The collection for second class = 20 \times 200
= Rs.4000
Hence [1]
72. The average price of a horse = Rs. 80
\ total price of 15 horses = 80 \times 15 = 1200
Total price of 15 horses and 10 cows = 1500
Total price of 10 cows = Rs.300
\ average price a cow = Rs.30
Hence [4].
73. The total of 11 numbers = 11x100 = 1100
The total of the first six - 6 \times 98 = 588
The total pf the last six - 6 x 104 - 624
Hence [3]
74. Let the corresponding side of the other triangle be x,y, and z
\sqrt{x/4} = y/6 = x/8 = x+y+z/18 = 162/18 = 9
\ Required sides are 36 cm, 54 cm & 72 cm.
Hence [1].
75. Only one day per 40 days produce the rainbow.
\ out of 40 days, 39 days cannot produce the rainbow.
Hence [1].
76. There are 21 people to be seated fixing the seat of 1 person, the remaining can be seated in 20! ways hence
(1).
77. Atleast one green ball can be chosen from 5 green balls in 2^{5} - 1 = 31 ways
Atleast one blue ball can be chosen from 4 blue balls in 2^4 - 1 = 15 ways
Atleast one or no red ball can be chosen in 2^{3} = 8 ways.
\ By generalization of the fundamental principle required no.of ways = 31 x 5 x8 = \frac{3720}{1}
Hence [1].
78. Let x meters be sold at 90 ps
\sqrt{90 \times (448 - x)} = 36288
90 x + 29568 - 66 x = 36288
24x = 6720
Hence [1].
```

79. A. Required ratio = a/b/x/y = a/bxy/x = ay/bx

```
89. Volume of cylinder = P \times 12 \times 12 \times 20 = 2880 P
Volume of cone = 1/3 \times P \times 12 \times 12 \times 20 = 960 P
\ Volume of rem.Solid = 1920 P
Hence [1].
90. H.C.F = 2x2x3 = 12
Are of bed = 12 \text{ sq.m}
Length of bed = 12/6 = 2 \text{ m}
Hence [1].
91. Square of a natural number never ends with
2,3,7,8 Hence [1].
92. L.C.M of 4,5,6 and 10 is 60
So the bells will ring together after 60 sec.
1 hours, they will ring together = 60 \times 60 / 60 = 60 \times 10^{-2}
Hence [3].
93. Given expression = a^4 - b^4 / a^2 + b^2 where a = 0.6
and b = 0.3
= (a^2 - b^2) = (a-b) (a+b)
= (0.6 - 0.3) (0.6 + 0.3)
= 0.3 \times 0.9
= 0.27
Hence [3]
94. (1 + x/14) = (sqrt196 + 29 / 196)
(1 + x /14) = 15/14
14 + x = 15
\ \ x = 1
Hence [2].
95. Require % = Area / Volume x 100
= 4 P r^2 / 4/3 P r^3 \times 100
= 3/ r \times 100 = 3/20 \times 100 = 15\%
Hence [1].
96. Suppose x student passed
Then (150-x) failed
X \times 45 + (150 - x) \times 20 = 150 \times 40
45 x + 3000 - 20x = 6000
25x = 3000
Number of student failed = 150 - 120 = 30
Hence [4]
97. Zinc in 2 kg of new alloy = (2/5 + 3/7) = 29/35
Nickel in 2 kg of new alloy = (3/5 + 4/7) = 41/35
Ratio of Zinc and nickel in the new alloys = 29/35 : 41/35 = 29 : 41
Hence [2].
98. Suppose Arun joins after x months
Then he invested the money for (12-x) months
12000 \times 12 = 20000 (12-x)
144000 = 240000 - 20000 x
20000 x = 96000
x = 4.8 months
Hence [4].
```

```
99. A's 1 day work = 3/36 B's 1 day work = 120\% of 1/36 = 120/100 x 1/36 = 1/30 Number of days taken by B to finish the work = 30 days Hence [3].

100. Let their ages 1 year ago be 3x and 4x 3x + 2 / 4x + 2 = 4/5 15 x +10 = 16x + 8 x = 2 Jai present age = 3x + 1 = 7 years Hence [1].
```

- 101. Statement I alone is not sufficient as we do not know the rate at which the clock is gaining Statement II alone is not sufficient, as we don't know the time at which the clock was set right. Since we do not know which Sunday & which Tuesday are referred, both the statements are not sufficient. Hence [5]
- 102. Statement I alone is not sufficient as we do not know if the same trend will continue. Statement II alone is not sufficient as we do not know, when the value will become Rs 100. Both statements together are not sufficient to answer the question.
- 103. Statement I & II alone are not sufficient but combining both the statements we can get the age of P. Hence [3]
- 104. Statement I alone is not sufficient as we do not know Arun's salary last year. Statement II alone is not sufficient. Both the statements together are not sufficient. Hence [5]
- 105. Statement I alone is sufficient as the only possible number is 99. Hence [1]
- 106. Statement I alone is not sufficient as the workers can have different efficiency. Statement II alone is sufficient as 2000/10 = 200 toys on an average in one day Hence [2]
- 107. From statement I we get the combined price of 10 oranges and 5 apples From statement II we get the price of 10 apples From both the statements we can get the price of oranges. Hence [3]
- 108. Statement I alone is not sufficient as the number of tickets and the price of lottery is not known. Statement II alone is not sufficient, as the numbers of books sold is not kown .Combining both the statements we get the no. of tickets sold. Hence [3]
- 109. Statement I alone is not sufficient as we cannot find the side of the rhombus. Statement II alone is not sufficient as we cannot find the sides with one diagonal. Combining both the statements we can find the sides of the rhombus. Hence [3]
- 110. Both the statements together are insufficient. Hence [5]
- 111. Statement I alone is not sufficient eg. If a=3, b=4, c=5 a+b+c=12>0 If a=-20, b=20, c=5 a+b+c=5>0
- Statement II gives that either all should be positive or 2 should be negative . both the statements together are not sufficient. Hence [5]
- 112. Statement I alone is not sufficient as we do not know the rate of work done by tap Statement II alone is not sufficient as we do not know the rate of work done by tap p But combining both the statements we can find the rate of filling and the time. Hence [3]
- 113. Statement I alone is not sufficient as we do not know whether interest is calculated quarterly, in Monthly or annually. Statement II alone is not sufficient. But by combining both the statements we have = $600(1 + r / 100)^5$ Hence [3]
- 114. Both the statements individually as well as together are insufficient. Hence [5]

115. Statement I and II alone are insufficient as we do not know the type of sequence but combining both the statements.

```
We have the 10 th term as 1 + 9 (-1) Hence \{3\}
```

- 116. Statement I and II alone is not sufficient as it may be a parallelogram and not a square combining Both the statements PQRS may be either square or parallelogram Hence [5]
- 117. Both the statements together give pg > 2
- 118. Statement I alone is not sufficient as we do not know the height of the vessel. Statement II alone is not sufficient as the volume of the cylinder is unknown. Both the statements together are insufficient Hence [5]
- 119. Combining both the statements we can find the ratio Hence [3]
- 120. Statement I alone is not sufficient as we do not know the position of the minute hand Statement II alone is not sufficient. But by combining both the statements we can find the angle. Hence [3]
- 121. Statement I alone is not sufficient Statement II gives 500 * 2p r = 2000 Hence [2]
- 122. Statement I is not sufficient as we do not know the distance of the person from the pole. Statement II alone is not sufficient as we do not know the height of the pole. Both the statements are required to answer the question.
- 123. Statement I alone is not sufficient because if a = 6, and b = 5 then a > b but if a = -6 and b = -5 then a < b Statement II alone is insufficient as a can be less or greater than y depending on values of a and b as positive or negative.

Both the statements together are insufficient Hence [5]

- 124. Statement II alone is sufficient as we have the total height of all the students we can find out the height of the addition student. Hence [2]
- 125. Both the statement together are not sufficient as we don't know the distribution of the coins. Hence [5]
- 126. Statement I alone is insufficient as we do not know the respective shares of y & z Statement II alone is not sufficient as we don't know the respective shares of x & z combining Both the statement we can get who has the maximum share.
- 127. Statement I & II alone give 2 values of x hence are insufficient combining both the statements we Have 4 values for x Hence [5]
- 128. Both the statements together give A = 17 & 19. Therefore a is prime number. Hence [3]
- 129. Statement I alone is not sufficient as we do not know the number of words spoken Statement II is not sufficient, as we do not know the speech rate. Both the statements together give the time. Hence [3]
- 130. Statement I alone is sufficient as it gives the number of post graduates in the firm equal to $2/5\,$ * 100

Hence [1]

- 131. b
- 132. d
- 133. a
- 134. c
- 135. a
- 136. b
- 137. d
- 138. c
- 139. b
- 140. a

141. d 142. c

```
143. a
144. d
145. c
146. d (from the fraph we have only % and not actual figures)
147. a
148. b (girls 200 boys = 100 % of boys passing = 90% of girls = 160 diff=70)
149. d
150. c
151. c (60as 90% have passed i.e 54. You cannot have a non whole number of students which will be the case of other alternatives.
152. B
153. A
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```
153. A
154. B
155. D
156.(c)
          157.(b)
                    158.(c)
                              159.(a)
                                          160.(d)
161.(c)
                                          165.(c)
          162.(d)
                     163.(b)
                               164.(a)
          167.[d]
                    168.[b]
                               169.[b]
                                          170.[b]
166.[d]
171.[b]
          172.[d]
                                          175.[c]
                     173.[b]
                               174.[b]
176.[c]
          177.[a]
                    178.[c]
                              179.[b]
                                          180.[c]
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- 181. The first para states that man is a shaper of the lanscape who has made his home in places where he found it most beneficial to himself. Hence, [2].
- 182. The second para describes the synchronisation in the reproductive habits of the grandion and of the forces of nature to stress how each species evolves its own rhythm in order to adapt itself to survive in its environment. Hence, [2].
- 183. Unlike other species, man does not have any special survival kit but inspite of this "handicap', he has been able to fit himself, survue and thrive in all kinds of environments. Hence, [2].
- 184. In para 4, the author argues that it is tempting for the scientist to think that the most original discoveries have been made in the present but it is not so, for every discovery, is an improvement of what was achieved in the past. Progress is a manner of continuity, change, improvements and conjuctions with the past. Hence. [3].
- 185. Para 3 shows how man is set apart from animals as he does not allow himself to be locked in his environment, but shapes it with his superior faculties of the mind. Hence, [2].