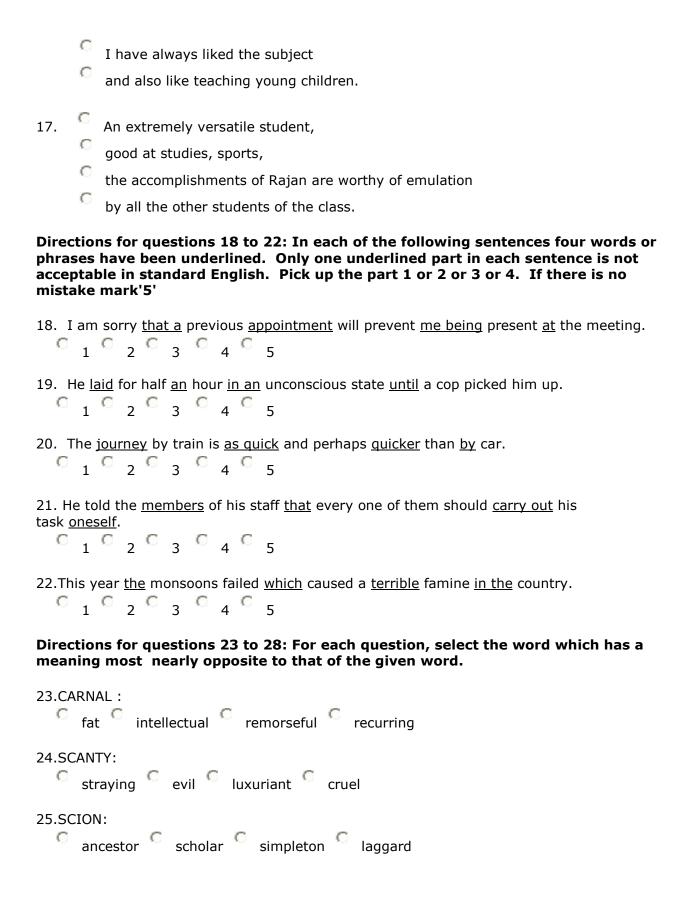
No of questions: 185

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.

		len changes in the genes of chromosomes may give rise to excellent new varieties . Rewritten:
Exc	ellen	t new varieties of plants Next words in the rewritten sentence are
(n	nay give rise may change with genes or chromosomes may rise
occı	upied	e prehistoric times most of the continent south of the Sahara Desert has been d by members of the Negro Race.
Neg	vritt roes erlin	have Somewhere in the part of the written sentence indicated by e is the word
(О	ccupied being race members
		od dictionary might be used as an ideal first aid for increasing your command of Rewritten:
		way to The next word in the rewritten sentence is
(u	se increasing increase develop
		ons for questions 4 to 0: The sentences are divided into four parts. Select t which has an error.
4.	С	The number of people $\ ^{f C}$ who own colour T.V. $\ ^{f C}$ are increasing $\ ^{f C}$ every year.
5.	С	Every year C nearly 40,000 students C appear C in the IMS
6.		Only after waiting for
	C	one and half hour was I admitted into the great man's room.
7.	С	Her speech $^{\mbox{\ensuremath{\square}}}$ neither brought credit to $^{\mbox{\ensuremath{\square}}}$ nor prestige $^{\mbox{\ensuremath{\square}}}$ to their country.
8.	C	Together we went to the canteen for having a drink.

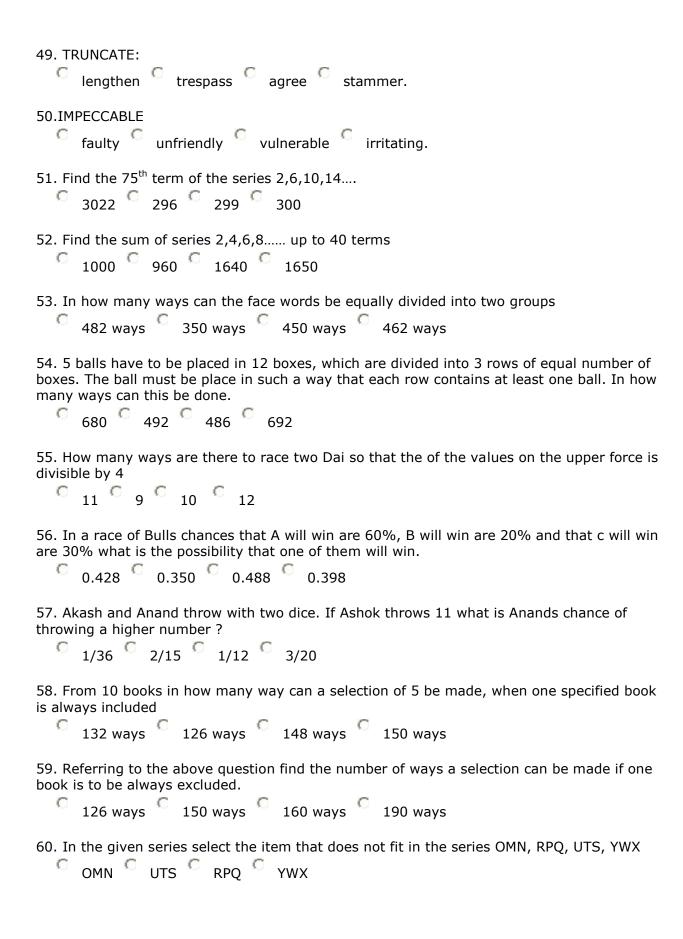
9.		Never C I will C understand C his intentions.
10.	С	By the by, $^{\circ}$ have you heard $^{\circ}$ from your girl friend $^{\circ}$ recently?
divid	ed	ns for questions 11 to 17: in each of these questions, a sentence has been into four parts and marked a, b, c, d. One of these parts contains a in grammar idiom or syntax. Identify that part and mark it as the answer.
11.	0 0 0	loud cheers greeted the President
12.	0 0 0	the Principal has arranged for special tuition
13.	0 0 0	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.	0 0 0	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.	0 0 0	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.	0	Whenever my son brings me a problem in Accounts I help to solve it because



26.ADAMANT: stubborn vague harmful meek
27.JUDICIOUS: unjust practical imprudent criminal
28.EGRESS: rejection slander thirst entrance
Directions for questions 29 to 32: After every pair of words, four choices of other pairs are given. Choose the pair which have very nearly a similar relationship with each other as the given pair. 29.CLOTH: TEXTURE house: residents paper: printing wood: grain story: theme
30.DEBILITY : STRENGTH modesty : strength cause : purpose mountain: hill see : belief
31.SPEECH : ORATION music : composition novel : plot painting : outline dance : choreography
32.TIGER : BARN Convict : prison monk : monastery soldier : barracks nun : convent
Directions for questions 33 to 36: Each sentence has one or two blanks, each blank indicating that a word or phrase is missing. From the choices, select the words or phrases which best fit the meaning of the sentence as a whole. 33.Blessed with a face, she proved an ideal model for advertisements for cosmetics. Cursory photogenic star like triangular
34.Credit must go to Indian, for developing hybrid varieties which have boosted up foodgrains production. economists agriculturists agronomists entomologists
35.He is by temperament an, and does not mix with people. ascetic introvert invertebrate expatriate
36.It is that Mahatma Gandhi who always stood for compromise should have been killed violently. absurd apathetic ridiculous anomalous

Directions for questions 37 to 42: For each question, select the word among the given choices which is closest in meaning to the given word.

37. OBELISK: Column asterisk bone
38. PERT : C curt C lively C intentional C calm
39. STAID: juicy C dull C oppressed C dirty
40. GIBBERISH : C precious C shining C nonsense C painful
41. FORAGE : ancient hunt marning 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 C tale C fault C incapability C illusion
46. BLITHE: Sacrosanct Cobscure Coheerful Coh
47.ABYSMAL bottomless ceternal cexternal 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: C demolish C sleep C reconstruct C agree



61. Spot the odd one in the given series 8,125,512,729 $$^{\rm C}$$ 125 ${}^{\rm C}$ 8 ${}^{\rm C}$ 512 ${}^{\rm C}$ 729
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 C 4 C 7 C 5
64. Find the odd one out CBA, GDE, KHI, OLM CBA CHI COLM GDE
65. Find the odd one out $\begin{array}{cccccccccccccccccccccccccccccccccccc$
66. Find the odd one out} (33) % of 14406 $65^2 + 2^2 3^2$ 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 $\begin{array}{cccccccccccccccccccccccccccccccccccc$
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 $\begin{array}{cccccccccccccccccccccccccccccccccccc$
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 $\begin{array}{cccccccccccccccccccccccccccccccccccc$
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

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

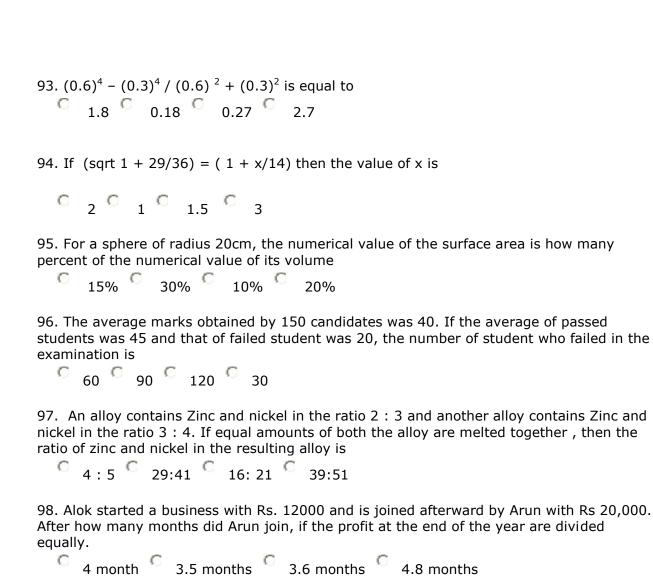
Rs. 4000 Rs.5000 Rs.4200 Rs.4100

C -4.6 % C - 2.3% C 2.5% C 4.6%

the II class were sold during that year

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 ? $ \begin{array}{ccccccccccccccccccccccccccccccccccc$
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 2^{nd} triangle is 162 cm. Find the length of the corresponding sides of the other triangle $\begin{array}{cccccccccccccccccccccccccccccccccccc$
75. A rainy day occurs once in every 20days. Half of the rainy days produce rainbows. What % of all the days have no rainbows $\begin{array}{cccccccccccccccccccccccccccccccccccc$
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. $\begin{array}{cccccccccccccccccccccccccccccccccccc$
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
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 $\begin{array}{cccccccccccccccccccccccccccccccccccc$
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.
$^{ extstyle C}$ T is a rectangle $^{ extstyle C}$ T is a square $^{ extstyle C}$ None of these
85. Find area of a triangle whose co-ordinates are (5,2), (-9,-3), and (-3, -5) 29 31 42 36
86. Find the equation of a line, whose slope is 0.5 and passes through a point (3,2). $2y = x+1 \qquad 2x = y-1 \qquad 2x = 2y+1 \qquad \text{None of these}$
87. Cost of painting 4 walls of a room 90meters x 40 meters at Rs. 10 per sq.m is RS.13000. Find the height of the room. 5 m $^{\rm C}$ 10 m $^{\rm C}$ 15 m $^{\rm C}$ 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. 3,78,400 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. $\begin{array}{cccccccccccccccccccccccccccccccccccc$
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 60° 60° 60° 60° 50°



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

C 25 days C 15 days C 30 days C 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 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.

О	0	2	0 3	3 C	4 ^C	5
I. Next	year sister	my is 4	gran	d fath	ner wi	rand mother is 60 years and my age is p. What is P? ill be 3 times as old as I would be than me and my grand mother is 3 years younger than my



- 104. What is the salary of Arjun?
- I. His salary at present is double Arun's Salary last year.
- II. Aruns salary at present is Rs. 1000



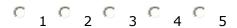
- 105. What is the digit in the ten's place of a number of 2 digits
- I. The sum of the digits of the number is 18
- II. It digits are interchanged the number remains the same.



- 106. How many boys can be manufacture at factory x on the average in a day?
- I. In factory y twice the number of workers make 1000 boys in a day
- II. The workers in factory x made 2000 boys in 10 days last month.



- 107. What is the price of an orange.
- I. 10 oranges and 5 apples cost Rs. 15.
- II. 10 apples cost Rs 10



- 108. How many lottery tickets did I sell, if the receipt was Rs 30, 000.
- I. 200 books were sold
- II. One book contains 25% one rupee tickets and 75% two rupee tickets.



- 109. What is the perimeter of a Rhombus PQRS
- I. Area of PQRS is 160 m²
- II. Diagonal QS is 40 metres



I. a + b + c is positive II. abc is positive
$\begin{smallmatrix} & & & & & & & & & & & & & & & & & & &$
112. How long will it take for the tank to get felled when taps p and q are opened together assuming that the tank is completely empty initially ? I. Tap P can fill the tank in 3 hours II. Tap Q can empty the tank in 4 hours.
$^{\circ}$ $_{1}$ $^{\circ}$ $_{2}$ $^{\circ}$ $_{3}$ $^{\circ}$ $_{4}$ $^{\circ}$ $_{5}$
113. Determine the rate of compound interest given by a bank if ? I. A deposit of Rs 600 becomes Rs 660 in 5 years. II. The bank compound interest Annually.
$^{\circ}$ $_{1}$ $^{\circ}$ $_{2}$ $^{\circ}$ $_{3}$ $^{\circ}$ $_{4}$ $^{\circ}$ $_{5}$
114. What is the average weight of workers in a factory. I. Their average weight 6 months back was 48 kgs II. 5 workers have additionally joined the factory last month.
$^{\circ}$ $_{1}$ $^{\circ}$ $_{2}$ $^{\circ}$ $_{3}$ $^{\circ}$ $_{4}$ $^{\circ}$ $_{5}$
115. What is the 10 th term of a given sequence? I. The first two terms are 1, 0 II. The third term and the 4 th term are -1, -2
$^{\circ}$ $_{1}$ $^{\circ}$ $_{2}$ $^{\circ}$ $_{3}$ $^{\circ}$ $_{4}$ $^{\circ}$ $_{5}$
116. Is the quadrilateral PQRS s square I. PQ and Rs are parallel and equal II. PR and QS are parallel and equal
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
117. Is PQ greater than 2 I. P is greater than 2/Q II. Q is positive

110. Find the number of books in a bookshop if? I. The average weight of the books is 1 kg.

111. Are a, b, c all positive

II. The weight of the books and the book shop is 90 kgs.

О	1	О	2	С	3	С	4	С	5
		at is							

118 cal 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



- 119. The ratio of the ages of a mother and a daughter is ?
- I. Three years ago the ratio was 4:1
- II. Four years hence, the ratio will be 3:1



- 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.



- 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.



- 122. What is the length of the shadow cost by a person 4 ft tall standing near a pole.
- I. The pole is 10 ft height
- II. The person is 5 ft from the pole.



123. Is a > bI. a / b = 6 / 5II. $a^2 > b^2$



- 124. There are 10 students in Beverly high school. The average height of 10 students is 170 cm. What is the height of the new student?
- I. The minimum height for admission in the school is 160 cm.
- II. After the new student joins the total height is 30 cm.



- 126. Who receives the maximum if Rs 300 are divided among x, y, & z. I. x receives 1 $/5^{th}$ of what Y & Z receive together.
- II. Y receives 2 / 3 of what x and z receive together.
 - \circ $_1$ \circ $_2$ \circ $_3$ \circ $_4$ \circ $_5$
- 1 2 3 4 5
- I. x is a number such that $x^2 + 6x + 5 = 0$
- II. x is a number such that $2x^2 + 3x x = 0$
 - 0 1 0 2 0 3 0 4 0 5
- 128. If a is a positive is a prime number
- I. a lies between 15 and 20.

127. Is x = 3

- II. A is odd number, not divisible by 5
 - \circ $_{1}$ \circ $_{2}$ \circ $_{3}$ \circ $_{4}$ \circ $_{5}$
- 129. How long did the minister's speech last?
- I. He spoke at an average of 40 words for every 50 seconds
- II. He would have spoken for 5 more minutes his speech rate would be 5 words less per minute
- 130. What is the percentage of post graduate employees in a company.
- I. The ratio of post graduates to non post graduates is 2:3.
- II. The number of non post graduates in 81.
 - 1 2 3 4 5

The table below gives the number of days worked by employees of five grades A B C D & E in the different departments.

(No. Of days worked in a Year)

Grade	Finance	Marketing	Production	Personnel
Α	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 $\ ^{\text{C}}\ _{\text{B}}\ ^{\text{C}}\ _{\text{E}}\ ^{\text{C}}\ _{\text{D}}\ ^{\text{C}}\ _{\text{C}}$
132. The grade which worked least in all the departments is Grade A in Personnel Grade E in Finance Grade C in Finance Grade B in Marketing
133. Can we infer that production was throughout the year Yes No 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
137. Across various departments the number of days put was most by grade $^{\hbox{\scriptsize C}}$ A $^{\hbox{\scriptsize C}}$ B $^{\hbox{\scriptsize C}}$ C D
138. Across various departments the average number of days put was least by D $^{\rm C}$ C $^{\rm C}$ A $^{\rm C}$ E
139. The average number of days worked by Grade D is 299.25 G 318.25 G 320 G 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 Marketing Production Finance Personnel
143. The average number of days people across a;; grades worked in Personnel is 301° 302° 299° 300°
144. The average number of days people across all grades worked in Production is $333 \times 329 \times 331 \times 332$
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.
C A C B C 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 $\begin{array}{c ccccccccccccccccccccccccccccccccccc$
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 $\begin{array}{c ccccccccccccccccccccccccccccccccccc$
151. In case of college D which of the following is possibly the number of boys. $\begin{array}{cccccccccccccccccccccccccccccccccccc$

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
C 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
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 sentence. 158 arose within the government when it was found that one of the leader was joydead grief guilty troubleguilty celebrationill
joydead griei guilty troubleguilty celebrationiii

superio	he says she is being because she did not act according to the of her or.
0	victimizedwishes
O	wishedbirthday
C	accusedcrimes
O	noticedcommands
\circ	eing the editor of such a good newspaper has many, but it has one jobsholiday downsidesjoy friendsenemiesdownside
O	arenathought fieldagenda backwoodsvengeance backwoodsvengeance
162. I'v	ve been of all sorts of things,, some not.
O	thinkingperhaps
О	certainmaybe
О	something newsome hot
О	accusedsome true
	ions for questions 163 to 165:Read the following carefully and answer the ons that follow.
	village of Shantinagar, all inhabitants always answer any question with two ces, one of which is always true and the other always false.
them is owners Shyam Sunder	visiting the village, you find Shyam, Sunder, Mani near the village court. One of s wearing a dhoti. Knowing that they were there to resolve a dispute over the ship of some property, you ask them, "who got the land?". They answer as follows: i: "I got the chair. Mani is wearing a dhoti". i: "I am wearing a dhoti. I got the land". ii got the land. I am not wearing a dhoti".
	/ho is wearing a dhoti? Mani ^C Sunder ^C Shyam ^C None of them.
164. W	/ho got the land? Shyam Can't say Mani Sunder

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 two arguments, one beginning with ' yes ' and the other with ' no '. Mark:				
(a), if only argument 1 is forceful (b), if only argument 2 is forceful (c), if both 1 and 2 are forceful				
(d), if neither 1 nor 2 is forceful.				

faith in it.

	C	1 "	2	3	4
--	---	-----	---	---	---

167. Is mixed economy the best type of economy for India?

1.Yes, because people in India are democratic in outlook.

1.Yes, because the competition between the public sector and private sector will benefit the public in many ways.

2. No, because corruption in the working of the government has made the people lose

2. No, because public sector is a losing proposition, so it is a drain on the state exchequer.



168. Is it possible to make adult education movement in India a success?

1. Yes, because majority of the people in India are illiterate.

2.No, because people in India are so busy in earning their bread that they cannot spare time for education.



169. Should the post of governors be abolished in India?

1. Yes, because governors look to the interest of the central government only.

2.No, because Chief Ministers of Indian states come and go but the governor of the state remains a vital link with the centre.



170. Should all the colleges be taken over by the government?

- 1. Yes, because private organizations run the college with motive earn profits.
- 2. No, because government undertakings become inefficient.



Directions for questions 171 to 175: Find the odd one out from the group of four words.
171. C Binoculars C Mirrors C Scissors C Spectacles
172 Sonnet C Haiku C Limerick C Epilogue
173. Skin Nails Eyes Nose
174. C Mediocre C Terrible C Average C Medium
175. C Transmission C Osmosis C Transgression C Infiltration
Directions for questions 176 to 180: Fill in the blanks with the word or phrase that completes the sentence in a logical manner:
176. When I come face to face with you, we in a very special manner. pass C collide C communicate Stand
177.Some guidelines to manage implementation get the managers to in developing strategic communication. participate understand hand grow
178. While opportunities in finance stay the same, those in marketing, making it the hot choice.
go a step ahead also do the same have evolved further are attractive
179.Time flies when you are Time drags when you have insomnia. fat and heavy fast asleep happy on the move
180.A quiet note of amidst the cacophony in consumer banking. spirit noise dignity revelry
Directions for Os 181-185

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. T	he writer's view that man did not find but his made his home means that
O	other animals has no choice but to live wherever they got protection.
C	man's dominance of nature was so complete that he could decide where to build his
home.	
C	man has learnt to co-exist with other animals.
C	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.	t.
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 us. We do not realize that progress is a matter of continuity, so we view every past achievement in isolation from our own. 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.	

CAT FULL LENGTH TEST 7: EXPLANATORY ANSWERS

```
1.[4] 2.[1]
              3.[3] 4.[3] 5.[4] 6.[3] 7.[2] 8.[4]
                                                         9.[2]
                                                               10.[1]
                              15.[b] 16.[b] 17.[c]
                                                        18. [c] 19. [1] 20.[2]
11.[a] 12. [a] 13.[a] 14.[b]
21.[4]
       22.[2] 23.[b] 24.[c]
                               25.[a] 26.[d] 27.[c]
                                                       28.[d] 29.[c] 30.[a]
31.[d]
                                      36.[d] 37.[a]
       32.[b]
               33.[b] 34.[c]
                               35.[b]
                                                        38.[b]
                                                               39.[b] 40.[c]
               43. [b] 44.[b] 45.[b] 46.[c] 47.[a] 48.[c] 49.[a]
41.[b]
       42.[b]
                                                                      50.[a]
51.75^{th} = a + (n-1)d
= 3+74x4
= 3+296 = 299
Hence [3]
52. d=2, n = 40, a = 2
Sn = 40/2 (2x2 + 39x2)
= 40/2 [ 4 + 78 ]
= 40 \times 41 = 1640
Hence [3].
```

```
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 8c<sub>5</sub>
= 56 \text{ ways}
Choosing the last two rows 5 balls can be places in 8c5 = 56 ways
Total number of unfavorable ways = 56 + 56
= 112 wavs
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<sup>3</sup>,5<sup>3</sup>,8<sup>3</sup> the next should be 11<sup>3</sup>
Hence [4].
62. The order of the series is
6^2, 1^3, 7^2, 3^3, 8^2, 5^3
81 is the odd one
Hence [1]
63. The order of the series is
4_{9}1_{9}^{2}4+1_{9}2_{9}^{2}5+2,3^{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].
67. Year
                               III
                                      ΙV
              Ι
                       II
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 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
```

73. The total of 11 numbers = $11 \times 100 = 1100$ The total of the first six - 6 x 98 = 588 The total pf the last six - 6 x 104 - 624 \ sixth number is 624 + 588 - 1100 = 112 Hence [3]

74. Let the corresponding side of the other triangle be x,y, and z $\ x/4 = y/6 = x/8 = x+y+z/18 = 162/18 = 9$ 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. \ Their $\% = 100 \times 39 / 40 = 97.5 \%$ 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 $\ 90 \ x + (448 - x) \ 66 = 36288$ $90 \ x + 29568 - 66 \ x = 36288$ 24x = 6720 $\ x = 280.$ Hence [1].

79. A. Required ratio = a/b/x/y = a/bxy/x = ay/bxHence [1].

80. Let the other no. be x 12 + x = 3 (x-1) 1+x = 3x -3. 4 = 2x $\ x = 2$ Hence [1].

81. A complete 2/5 work in 18 days \ He complete the entire work in $5/2 \times 18 = 45$ days A+B together complete 3/5 work in 9 days. \ They complete entire work in $5/3 \times 9 = 15$ days

```
\ B alone completes 1/15 - 1/45 = 3-1/45 = 2/45 work in a day
\ B takes 45/2 days = 22 \frac{1}{2} days to complete the work
Hence [1].
82. Let C,B, & A take 2x,3x & 6x days rly.
Together they complete the work in 1 day
1/2x + 1/3x + 1/6x = 1
3 + 2 + 1 / 6x = 6 / 6x
1/x = 1
\ A,B & C take 6,3 & 2 days respectively
Hence [1].
83. D XYZ & D YAZ share altitudes to side xz & az = 2/3 \times z
Area of D YAZ = (2/3) (Area of D XYZ)
96 = 2/3 D XYZ
Hence [1].
84. The sides of T are the bases of cengruent triangle they must all be equal. T is a
rhombus
Hence [1].
85. Area = \frac{1}{2} [(5)x (-3+5) + (-9) x (-5-2)+(-3)x(2+3)
= \frac{1}{2} (10+63-15) = \frac{1}{2} \times 58 = 29
Hence [1].
86. y - y1 = m (x - x1)
Y - 2 = \frac{1}{2}(x - 3)
2y - 4 = x-3
-x = 2y = 1
2v=x+1
Hence[1]
87. Total area to be painted = 13000/10 = 1300 \text{ sg.m}
If the height is h, the area of the walls
2 \times (90 \times h + 40 \times h) = 1300
2(130 h) = 1300
130 h = 650
\ h = 5 m
Hence [1].
88. Area of material = Curved surface + Curved surface
Required are of cone area of cylinder
= P rl + 2 P rh ( I = Ö 70<sup>2</sup> + 24<sup>2</sup>)
= P \times 70 \times 74 + 2 \times P \times 70 \times 6
= 22/7 \times 70 \times 74 + 2 \times 22/7 \times 70 \times 6 = 18920 \text{ sg.m}
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
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 \times 20000 \times = 96000 \times = 96000 \times = 4.8 \text{ months}
Hence [4].

99. A's 1 day work = 3/36 B's 1 day work = 120% of 1/36 = 120/100 \times 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 \times 10 = 16x + 8 \times 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 pq > 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 $\lceil 3 \rceil$
- 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 \text{ 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

```
154. B
155. D
156.(c)
         157.(b)
                   158.(c)
                            159.(a)
                                       160.(d)
         162.(d)
                   163.(b)
                             164.(a)
                                       165.(c)
161.(c)
166.[d]
         167.[d]
                   168.[b]
                             169.[b]
                                       170.[b]
171.[b]
         172.[d]
                   173.[b]
                             174.[b]
                                       175.[c]
176.[c]
         177.[a]
                   178.[c]
                             179.[b]
                                       180.[c]
```

- 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].