## 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.

1. Sudden changes in the genes of chromosomes may give rise to excellent new varieties of plant. Rewritten:
Excellent new varieties of plants $\qquad$ Next words in the rewritten sentence are
O may give rise
may change with genes or chromosomes may rise
2. Since prehistoric times most of the continent south of the Sahara Desert has been occupied by members of the Negro Race.

## Rewritten:

Negroes have $\qquad$ Somewhere in the part of the written sentence indicated by underline is the word

O occupied $\bigcirc$ being $\bigcirc$ race members
3. A good dictionary might be used as an ideal first aid for increasing your command of words. Rewritten:
An ideal way to $\qquad$ The next word in the rewritten sentence is
○use
increasing increase develop

## Directions for questions 4 to 0 : The sentences are divided into four parts. Select the part which has an error.

4. The number of people who own colour T.V. © are increasing every year.
5. Every year 〇 nearly 40,000 students 〇appear $\bigcirc$ in the IMS
6. 

Only after $\bigcirc$ waiting for
O one and half hour was I admitted into the great man's room.
7. $\bigcirc$ Her speech $\bigcirc$ neither brought credit to $\bigcirc$ nor prestige to their country.
8. Together $\bigcirc$ we went $\bigcirc$ to the canteen for having a drink.
9.

Never $\bigcirc$ I will understand his intentions.
10. By the by, © have you heard from your girl friend $\bigcirc$ 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 studentsare weak in Mathematics and therefore
the Principal has arranged for special tuitionin the evening after class-hours.
13.

I am very sure that if your were meand had been talked to in a similar manner.you would also have lost your temperand talked back as I did.
14.

Her Uncle advised her to forget the past,and stop crying on split milkand work hard in the futureavoiding the mistakes earlier committed.
15. He declined our offer of helpsaying that he is very proud to acceptmoney from neighbours like uswhom 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 $\mathbf{3}$ 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.
$\bigcirc 1 \bigcirc 2$
○ 3○
20. The journey by train is as quick and perhaps quicker than by car.
1

- 2
○ 3- 5

21. He told the members of his staff that every one of them should carry out his task oneself.
$\bigcirc 1$
$1 \bigcirc 2$
3
○ 4
○ 5
22.This year the monsoons failed which caused a terrible famine in the country.
○ 1
$1 \bigcirc 2$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 ：
$\bigcirc$ fat $\bigcirc$ intellectual $\bigcirc$ remorseful $\bigcirc$ recurring
24．SCANTY：
○ straying ○evil 〇 luxuriant ©cruel
25．SCION：
〇 ancestor 〇 scholar $\bigcirc$ simpleton $\bigcirc$ laggard
26．ADAMANT：
〇 stubborn $\bigcirc$ vague $\bigcirc$ harmful meek
27．JUDICIOUS：
$\bigcirc$ unjust $\bigcirc$ practical $\bigcirc$ imprudent $\bigcirc$ criminal
28．EGRESS：
Orejection $\bigcirc$ slander $\bigcirc$ 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
$\bigcirc$ house ：residents $\bigcirc$ paper ：printing $\bigcirc$ wood ：grain $\bigcirc$ story：theme
30．DEBILITY ：STRENGTH
modesty ：strength © cause ：purpose mountain：hill $\bigcirc$ see ：belief
31．SPEECH：ORATION
$\bigcirc$ music ：composition $\bigcirc$ novel ：plot $\bigcirc$ painting ：outline $\bigcirc$ 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 $\qquad$ face，she proved an ideal model for advertisements for cosmetics．
$\bigcirc$ cursory $\bigcirc$ photogenic $\bigcirc$ star like triangular
34．Credit must go to Indian $\qquad$ for developing hybrid varieties which have boosted up foodgrains production．

〇economists 〇agriculturists 〇agronomists 〇entomologists
35．He is by temperament an $\qquad$ and does not mix with people．ascetic $\bigcirc$ introvert O invertebrate
expatriate

36．It is $\qquad$ that Mahatma Gandhi who always stood for compromise should have been killed violently．
$\bigcirc$ absurd $\bigcirc$ apathetic $\bigcirc$ ridiculous $\bigcirc$ 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 :
ocolumnasterisktombbone
38. PERT :

Ocurtlivelyintentionalcalm
39. STAID :

○ juicy Odu $\bigcirc$ oppressed © dirty
40. GIBBERISH :shiningnonsense painful
41. FORAGE :

○ancient $\bigcirc$ hunt $\bigcirc$ warning $\bigcirc$ 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:awkwardgreedyundisciplined
44.ESPOUSE:

○ intensifyadvocatedescribemarry
45. FOIBLE
faultincapabilityillusion
46. BLITHE:

○ sacrosanctobscurecheerfultransparent.

## 47.ABYSMAL

- bottomleseternalexternalsweet

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 $\bigcirc$ reconstruct $\bigcirc$ agree
49. TRUNCATE:

- lengthentrespass agreestammer.
50.IMPECCABLE
$\bigcirc$ faulty unfriendlyvulnerable $\bigcirc$ irritating.

51. Find the $75^{\text {th }}$ term of the series $2,6,10,14 \ldots$.
○ 3022296299

- 300

52. Find the sum of series $2,4,6,8 \ldots \ldots$ up to 40 terms
53. In how many ways can the face words be equally divided into two groups

- 482 ways
○
350 ways450 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
492486
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
○ 11 912
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.0.428
0.3500.4880.398
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.
126 ways150 ways 160 ways
190 ways
60. In the given series select the item that does not fit in the series OMN, RPQ, UTS, YWX
OMN
UTS
RPQ
YWX
61. Spot the odd one in the given series $8,125,512,729$
$125 \bigcirc 8$
512
729
62. Find the odd one out from $36,1,81,27,64,125$
81
36125
63. Find the odd one $4,1,5,4,7,10$
○ 410
○ 7 5
64. Find the odd one out CBA, GDE, KHI, OLM

- CBAKHI OLM GDE

65. Find the odd one out
$\bigcirc 5$
$5800 \times 15 \%$$17400 \times 5 \%$
$174 \times 5$$870 \times 1 \%$
$\left(435 \times 2^{3}\right) / 2^{2}$
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
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
$\bigcirc 5625$
$\bigcirc$
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 visited150 \%

- $160 \%$
$175 \%$
- $155 \%$

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 \%$-2.3 \%$
$2.5 \%$
4.6\%

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
$\bigcirc$
Rs. 5000
$\bigcirc$ 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.
$\bigcirc 37$ 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 ?
$\bigcirc 8$
84
110
112 100
74. There are 2 similar triangles. The lengths of the sides of one of them are $4 \mathrm{~cm}, 6 \mathrm{~cm}$ and 8 cm . If perimeter of the $2^{\text {nd }}$ triangle is 162 cm . Find the length of the corresponding sides of the other triangle
○ $36,54 \& 75 \bigcirc 25,50 \& 80 \bigcirc 35,20 \& 30 \bigcirc$ 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
$\bigcirc 97.5 \% \bigcirc 95 \% \bigcirc 100 \% \bigcirc 25 \%$
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.
$\bigcirc 280 \mathrm{~m} \bigcirc 360 \mathrm{~m} \bigcirc 140 \mathrm{~m} \bigcirc 120 \mathrm{~m}$
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

○ay/bx $\bigcirc a b / x y \bigcirc a x / b y \bigcirc$ 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
○ 2 3 1 4
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

- $221 / 2$ 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 $D X Y Z, X A=A B=B Z$. If the area of $D Y A Z$ is 96 , what is the area of $D X Y Z$
144
169
136
125
84. Triangle $P, Q, R \& S$ are congruent equilateral triangles what can be said about quadrilateral $T$. $\bigcirc T$ is a rhombus $\bigcirc T$ is a rectangle $\bigcirc T$ is a square $\bigcirc$ 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 $(3,2)$.
$\bigcirc 2 y=x+1 \quad 2 x=y-1 \quad 2 x=2 y+1 \quad$ None of these
87. Cost of painting 4 walls of a room 90 meters $\times 40$ meters at Rs. 10 per sq.m is RS.13000. Find the height of the room.
$\bigcirc 5 \mathrm{~m} \bigcirc 10 \mathrm{~m} \bigcirc 15 \mathrm{~m} \bigcirc 12 \mathrm{~m}$
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 30 m 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 20 cm 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.
$\bigcirc 2 \mathrm{~m} \bigcirc 3 \mathrm{~m} \bigcirc 4 \mathrm{~m} \bigcirc 5 \mathrm{~m}$
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
95. For a sphere of radius 20 cm , the numerical value of the surface area is how many percent of the numerical value of its volume
$\bigcirc 15 \% \bigcirc 30 \% \bigcirc 10 \% \bigcirc 20 \%$
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.
$\bigcirc 4$ month $\bigcirc 3.5$ months $\bigcirc 3.6$ months $\bigcirc .8$ months
99. A can do a piece of work in 36 days if $B$ is $20 \%$ more effieicent than $A$ then the number of days required by B to do the work is
O 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
$\bigcirc 7$ years12 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
```

```\(\bigcirc 3\) \(\bigcirc\) \(4 \bigcirc 5\)
```

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.

$$
\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5
$$

103. If the present age of my grand mother is 60 years and my age is $p$. What is $P$ ?
I. Next year my grand father will be 3 times as old as I would be
II. My sister is 4 years younger than me and my grand mother is 3 years younger than my grand father.

$$
\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5
$$

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
$\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5$
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.

2
○
○ 4 5
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.$1 \bigcirc 2$ ○ 3 ○ 4 5
107. What is the price of an orange.
I. 10 oranges and 5 apples cost Rs. 15.
II. 10 apples cost Rs 101
$\bigcirc 2$
3
○ 4
5
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.
1
○
○ 3
4
5
109. What is the perimeter of a Rhombus PQRS
I. Area of PQRS is $160 \mathrm{~m}^{2}$
II. Diagonal QS is 40 metres
1
2
3 4 ○ 5
110. Find the number of books in a bookshop if?
I. The average weight of the books is 1 kg .
II. The weight of the books and the book shop is 90 kgs .$\bigcirc 2$ $\square$
$\square$ 4 5
111. Are $a, b, c$ all positive
I. $a+b+c$ is positive
II. $a b c$ is positive
$\bigcirc 1 \bigcirc 2$
3 4 5
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.
○ 1
○
$\bigcirc 3$
○ 4 $\bigcirc 5$
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.$1 \bigcirc 2$
3 $\square$ 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.

1
2
3
○ 4 5
115. What is the $10^{\text {th }}$ term of a given sequence?
I. The first two terms are 1,0
II. The third term and the $4^{\text {th }}$ term are $-1,-2$
○ 1
$\bigcirc 2$
○ 3
$\bigcirc 4$
○ 5
116. Is the quadrilateral PQRS s square
I. PQ and Rs are parallel and equal
II. PR and QS are parallel and equal
1
2
○ 3 $\square$ 4 5
117. Is $P Q$ greater than 2
I. $P$ is greater than $2 / Q$
II. Q is positive2 ○ 3 ○ 4 ○
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 $1 / 4$ the volume of a cylinder with twice the height and the same base$1 \bigcirc 2$ ○ 3 ○ 4 ○ 5
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$1 $\square$ 2 ○ 3 $\square$ 4 $\square$
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 .$1 \bigcirc 2$ ○ 3 $\square$ 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.
1 $\square$ ○ 34
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.
$\bigcirc 1$
○ 2
○ 3
○ 4
○ 5
123. Is $\mathrm{a}>\mathrm{b}$
I. $a / b=6 / 5$
II. $a^{2}>b^{2}$
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 .
1
○
○
○ 4
○ 5
125. A box contains one rupee coins and 2 rupee coins. What is the total amount in the box if I. The total number of coins is 100
II. If one rupee coins are replace by equal number of two rupee coins the amount will increase by Rs. 10
$\bigcirc 1$
$\bigcirc 2$
○ 3
4
5
126. Who receives the maximum if Rs 300 are divided among $x, y, \& z$.
I. $x$ receives $1 / 5^{\text {th }}$ of what $Y \& Z$ receive together.
II. $Y$ receives $2 / 3$ of what $x$ and $z$ receive together.$1 \bigcirc 2$
○
$\bigcirc 4$
5
127. Is $x=3$
I. $x$ is a number such that $x 2+6 x+5=0$
II. $x$ is a number such that $2 x 2+3 x-x=0$1 $\square$ ○ $\square$ 4 5
128. If a is a positive is a prime number
I. a lies between 15 and 20.
II. $A$ is odd number, not divisible by 52
○ 3
4
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$1 \bigcirc 2$
3 ○ 4 5
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
○ $\bigcirc$
○ 4
4 5

The table below gives the number of days worked by employees of five grades A B C \& E in the different departments.
(No. Of days worked in a Year)

| Grade | Finance | Marketing | Production | Personnel |
| :--- | :--- | :--- | :--- | :--- |
| A | 300 | 307 | 300 | 290 |
| B | 320 | 314 | 315 | 300 |
| C | 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
B E D ○
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
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 $\bigcirc$ it is a leap year $\bigcirc$ cannot say for sure $\bigcirc$ 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 $\bigcirc 100$ days $\bigcirc 115$ days $\bigcirc 15$ days
137. Across various departments the number of days put was most by grade
AC
D
138. Across various departments the average number of days put was least by
D
C
A
E
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 327341

141. The department which had the most in terms of employee attendance isFinance Personnel Marketing Production
142. The department which had the most in terms of absenteeism is
○ Marketing ProductionFinance - 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

- 329331 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.
○ AB
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
$\bigcirc 280 \bigcirc 420 \bigcirc 70 \bigcirc 90$
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
$\bigcirc 75 \bigcirc 70 \bigcirc 80 \bigcirc 160$
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
$\bigcirc 80 \bigcirc 160 \bigcirc 40 \bigcirc 20$
151. In case of college $D$ which of the following is possibly the number of boys.
$\bigcirc 58 \bigcirc 59 \bigcirc 60 \bigcirc 61$
152. If in college $B$ the number of absentees were 20 boys then out of the 200 boys how many failed.
50
$60 \bigcirc 120$
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

O the same as those of $B$
O is more by 20 than $B$
O 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
$\bigcirc$ caterpillar: pupa $\bigcirc$ larva : cocoon $\bigcirc$ kernel: shell $\bigcirc$ passenger: car
157. PARENT : OFFSPRING
mother: spring $\bigcirc$ sororal : fraternal $\bigcirc$ father : son $\bigcirc$ paternal: daughterly

## Directions for questions 158 to 162: Fill in the blanks with the pair of words that best completes the sentence.

158. $\qquad$ arose within the government when it was found that one of the leader was $\qquad$ .
joy.....dead $\bigcirc$ grief..... guilty $\bigcirc$ trouble.....guilty $\bigcirc$ celebration.....ill
159. She says she is being $\qquad$ because she did not act according to the $\qquad$ of her superior.
victimized.....wishes

- wished.....birthday

○ accused.....crimes

- noticed.....commands

160. Being the editor of such a good newspaper has many $\qquad$ but it has one $\qquad$ .
jobs.....holiday 〇 downsides.....joy friends.... enemies joys downside
161. After nearly three decades in the industrial $\qquad$ , Karnataka is back with a $\qquad$ .
$\bigcirc$ arena.....thought $\bigcirc$ field......agenda $\bigcirc$ backwoods.....vengeance party.....bang.
162. I've been $\qquad$ of all sorts of things, $\qquad$ 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".
mani : "I got the land. I am not wearing a dhoti".
163. Who is wearing a dhoti?
$\bigcirc$ Mani $\bigcirc$ Sunder $\bigcirc$ Shyam $\bigcirc$ None of them.
164. Who got the land?
$\bigcirc$ Shyam $\bigcirc$ Can't say $\bigcirc$ Mani $\bigcirc$ 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 $\mathbf{2}$ is forceful
(c), if both 1 and 2 are forceful
(d), if neither 1 nor 2 is forceful.
166. Will democracy survive in India?
1.Yes, because people in India are democratic in outlook.
2. No, because corruption in the working of the government has made the people lose faith in it.
○ 1
$\bigcirc 2$

- 3
○ 4
167.Is mixed economy the best type of economy for India ?
1.Yes, because the competition between the public sector and private sector will benefit the public in many ways.

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

- 1
2
3
4
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.

- 1
2
3

169. Should the post of governors be abolished in India?
170. Yes, because governors look to the interest of the central government only.
171. No, because Chief Ministers of Indian states come and go but the governor of the state remains a vital link with the centre.
$\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$
170.Should all the colleges be taken over by the government ?
172. Yes, because private organizations run the college with motive earn profits.
173. No, because government undertakings become inefficient.
○ 1
2
3
4

Directions for questions 171 to 175 : Find the odd one out from the group of four words.


## 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 $\qquad$ in a very special manner. pass $\bigcirc$ collide $\bigcirc$ communicate $\square$ stand
177. Some guidelines to manage implementation get the managers to $\qquad$ in developing strategic communication.
$\bigcirc$ participate $\bigcirc$ understand $\bigcirc$ hand $\bigcirc$ grow
178. While opportunities in finance stay the same, those in marketing $\qquad$ making it the hot choice.

○ go a step ahead $\bigcirc$ also do the same $\bigcirc$ have evolved further $\bigcirc$ are attractive
179. Time flies when you are $\qquad$ . Time drags when you have insomnia.
fat and heavy $\bigcirc$ fast asleep $\bigcirc$ happy $\bigcirc$ on the move
180.A quiet note of $\qquad$ amidst the cacophony in consumer banking.
$\bigcirc$ spirit $\bigcirc$ noise $\bigcirc$ dignity $\bigcirc$ revelry

## Directions for Qs 181-185 <br> 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.
O 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

O 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 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.


## Explanatory answers to CAT Exam Paper VII


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

Sn $=40 / 2(2 \times 2+39 \times 2)$
$=40 / 2$ [ $4+78$ ]
$=40 \times 41=1640$
Hence [3].
53. Total face cards are 12, can be divided into two groups in (12c $\left.66 c_{6}\right) / 2$ $=462$ 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 $8 \mathrm{c}_{5}$
$=56$ ways
Choosing the last two rows 5 balls can be places in $8 \mathrm{c} 5=56$ 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. $P(A) \times P\left(B^{1}\right) \times P\left(C^{1}\right)+P(A) \times P(B) \times P\left(C^{1}\right)+P\left(A^{1}\right) \times P\left(B^{1}\right) \times P(C)$
$=0.6 \times 0.8 \times 0.7+0.4 \times 0.2 \times 0.7+0.4 \times 0.8 \times 0.3$
$=0.488$
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 9 c 5 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
$6^{2}, 1^{3}, 7^{2}, 3^{3}, 8^{2}, 5^{3}$
81 is the odd one
Hence [1]
63. The order of the series is

10 is the odd one
Hence [2].
64. The order of the series is

412
Hence [1].
65. Since $870 \times 1 \% 87$ it is the odd one

Hence [4]
66. Since all the others equate to 4754
$C$ is incorrect
Hence [3].
67. Year I II III IV V

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 $30 x / 100$
Candidate 2 secure 70x/100
$70 x-30 x / 100=2100$
$40 x=2100 \times 100$
$x=5250$ votes
Hence [3].
69. Earlier Entry =Rs. 2

Earlier Number of visitor $=Y$
Earlier Sale = Rs. $2 y$
New Entry fee = Re. 1
New Number of Visitors $=\mathrm{x}$
New sale $=$ RS. $X$
$X=125 / 100 \times 2 y$
$X=250 / 100 y$
Increase $=150 \%$
Hence [1].
70. $x=\%$ charge in one side $=+4$
$y=\%$ charge in other side $=-10$
$\%$ error in area $=(a+b)+(a b / 100)$
(6-10) - (60/100)
-4.6 \%
Hence [1].
71. Let the fares be $10 y, 5 y, 2 y$. The ratio of passengers is $3: 4: 5$. The collection from the three classes is Rs. 30x, Rs. 20x, Rs.10x
$30 x+20 x+10 x=12000$
$60 x=12000$
$x=200$
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 $=11 \times 100=1100$

The total of the first six-6 $\times 98=588$
The total pf the last six - $6 \times 104-624$
$\backslash$ sixth number is $624+588-1100=112$
Hence [3]
74. Let the corresponding side of the other triangle be $x, y$, and $z$
$\backslash x / 4=y / 6=x / 8=x+y+z / 18=162 / 18=9$
$\backslash$ Required sides are $36 \mathrm{~cm}, 54 \mathrm{~cm} \& 72 \mathrm{~cm}$.
Hence [1].
75. Only one day per 40 days produce the rainbow.
\out of 40 days, 39 days cannot produce the rainbow.
$\backslash$ 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.
$\backslash$ By generalization of the fundamental principle required no.of ways $=31 \times 5 \times 8=\underline{3720}$ Hence [1].
78. Let $x$ meters be sold at 90 ps
$\backslash 90 x+(448-x) 66=36288$
$90 x+29568-66 x=36288$
$24 x=6720$
$\backslash x=280$.
Hence [1].
79. A. Required ratio $=a / b / x / y=a / b x y / x=a y / b x$

Hence [1].
80. Let the other no. be $x$
$12+x=3(x-1)$
$1+x=3 x-3$.
$4=2 x$
\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.
$\backslash$ They complete entire work in $5 / 3 \times 9=15$ days
$\backslash B$ alone completes $1 / 15-1 / 45=3-1 / 45=2 / 45$ work in a day
$\backslash B$ takes $45 / 2$ days $=221 / 2$ days to complete the work
Hence [1].
82. Let $C, B, \& A$ take $2 x, 3 x \& 6 x$ days rly.

Together they complete the work in 1 day
$\backslash 1 / 2 x+1 / 3 x+1 / 6 x=1$
$3+2+1 / 6 x=6 / 6 x$
$1 / x=1$
$\backslash x=1$
$\backslash \mathrm{A}, \mathrm{B}$ \& C take 6,3 \& 2 days respectively
Hence [1].
83. $D$ XYZ \& $D$ YAZ share altitudes to side $x z \& a z=2 / 3 x z$

Area of $D Y A Z=(2 / 3)$ (Area of $D X Y Z)$
$96=2 / 3 \mathrm{DXYZ}$
$\backslash \mathrm{D} X Y \mathrm{X}=93 \times 3 / 2=144$
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 $=1 / 2[(5) \times(-3+5)+(-9) \times(-5-2)+(-3) \times(2+3)$
$=1 / 2(10+63-15)=1 / 2 \times 58=\underline{29}$
Hence [1].
86. $y-y 1=m(x-x 1)$
$Y-2=1 / 2(x-3)$
$2 y-4=x-3$
$-x=2 y=1$
$2 y=x+1$
Hence[1]
87. Total area to be painted $=13000 / 10=1300$ sq.m

If the height is $h$, the area of the walls
$2 \times(90 \times h+40 \times h)=1300$
$2(130 \mathrm{~h})=1300$
$130 \mathrm{~h}=650$
$\backslash \mathrm{h}=5 \mathrm{~m}$
Hence [1].
88. Area of material $=$ Curved surface + Curved surface

Required are of cone area of cylinder
$=\mathrm{Prl}+2 \mathrm{Prh}\left(\mathrm{I}=0 \ddot{0} 70^{2}+24^{2}\right)$
$=\mathrm{P} \times 70 \times 74+2 \times \mathrm{P} \times 70 \times 6$
$=22 / 7 \times 70 \times 74+2 \times 22 / 7 \times 70 \times 6=18920 \mathrm{sq} . \mathrm{m}$
$\backslash$ Cost $=18920 \times 20=$ Rs. $3,78,400$ Hence [1].
89. Volume of cylinder $=P \times 12 \times 12 \times 20=2880 \mathrm{P}$

Volume of cone $=1 / 3 \times P \times 12 \times 12 \times 20=960 \mathrm{P}$
$\backslash$ Volume of rem. Solid $=1920 \mathrm{P}$
Hence [1].
90. H.C.F $=2 \times 2 \times 3=12$

Are of bed $=12 \mathrm{sq} . \mathrm{m}$
Length of bed $=12 / 6=2 \mathrm{~m}$
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 $b=0.3$
$=\left(a^{2}-b^{2}\right)=(a-b)(a+b)$
$=(0.6-0.3)(0.6+0.3)$
$=0.3 \times 0.9$
$=0.27$
Hence [3]
94. $(1+x / 14)=($ sqrt196 $+29 / 196)$
$(1+x / 14)=15 / 14$
$14+x=15$
$\backslash x=1$
Hence [2].
95. Require $\%=$ Area $/$ Volume $\times 100$
$=4 \mathrm{Pr}^{2} / 4 / 3 \mathrm{Pr} \mathrm{r}^{3} \times 100$
$=3 / r \times 100=3 / 20 \times 100=15 \%$
Hence [1].
96. Suppose x student passed

Then (150-x) failed
X x $45+(150-x) \times 20=150 \times 40$
$45 \mathrm{x}+3000-20 \mathrm{x}=6000$
$25 x=3000$
$\backslash x=120$
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 $1 / 36=120 / 100 \times 1 / 36=1 / 30$
Number of days taken by B to finish the work $=30$ days
Hence [3].
100. Let their ages 1 year ago be $3 x$ and $4 x$
$3 x+2 / 4 x+2=4 / 5$
$15 x+10=16 x+8$
$x=2$
Jai present age $=3 x+1=7$ 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 [3]
121. Statement I alone is not sufficient Statement II gives $500 * 2 p r=2000$ 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
154. B
155. D
156.(c) 157.(b) 158.(c) 159.(a) 160.(d)
161.(c) 162.(d) 163.(b) 164.(a) 165.(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].

