CAT 2007 Answer Key

1.	2	21.	3	41.	2	61.	1
2.	5	22.	3	42.	3	62.	2
3.	1	23.	2	43.	1	63.	1
4.	3	24.	1	44.	4	64.	3
5.	3	25.	4	45.	2	65.	5
6.	5	26.	1	46.	4	66.	4
7.	3	27.	4	47.	2	67.	5
8.	2	28.	5	48.	3	68.	2
9.	1	29.	5	49.	2	69.	1
10.	1	30.	1	50.	4	70.	5
11.	4	31.	4	51.	1	71.	2
12.	2	32.	3	52.	2	72.	4
13.	3	33.	5	53.	2	73.	1
14.	2	34.	2	54.	1	74.	5
15.	4	35.	3	55.	5	75.	3
16.	4	36.	5	56.	3		
17.	1	37.	1	57.	2		
18.	5	38.	1	58.	1		
19.	2	39.	5	59.	3		



CAT 2007 Solutions

1.	When every element	nt of even no.	set is 1 less than					
	the corresponding	element of od	d number set the					
•	difference of there	average is als	$\frac{0 \text{ equal to } 1}{221}$					
2.	10 year ago total ago of 8 people = 231 years 3 year later total age of 8 people = $231 + 8 \times 3 - 60 = 195$ years After mother 3 year total ago of 8 people							
	After another 3 yea	ir total age of	8 people					
	$= 193 + 8 \times 3 - 00$	= 139 years	150 1 9 4 4					
	Current total age of 8 member = $159 + 8 \times 4$ = 191 years							
	\therefore average age of 8 members = $\frac{191}{8}$ = 24 years							
3.	f(1) = 3600, f(1) +	$f(2) = n^2 f(n)$						
	3,600 + f(2) = 4(f2))						
	\Rightarrow 3(f2) = 3,600							
	f(2) = 1,200 similar	rly = f(3) = 60	0, f(4)					
	= 360 f(5) = 240, f(6) = 240	(6) = 170, f(7)	= 128, f(8)					
	= 100 and f(9) = 80)						
4.	In 18 ways we can	pay the bill th	ie ways are					
	50 Misos	10 Misos	1 Miso					
	2	0	7					
	1	5	7					
	1	4	17					
	1	3	27					
	1	2	37					
	1	1	47					
	1	0	57					
	0	1	97					
	0	2	87					
	0	3	77					
	0	4	67					
	0	5	57					
	0	6	47					
	0	7	37					
	0	8	27					
	0	9	17					
	0	10	7					
	0	0	107					
5.	The check was for	Rs. 18.56.	the chaque and					
	Let x be the number of Rupee in the cheque, and y be the number of Paise							
	Then $100v + r = 50$	The number of Paise. 100y + x = 50 = 3(100x + y)						
	Therefore $97y - 209r = 50$							
	There are many int	eger solutions	, but we need					
	one where $0 \le x \le $	<= 99 and 0 <=	= <i>y</i> <= 99.					
	One such pair of n	umbers is $y =$	56, $x = 18$.					
	So the cheque was	for Rs. 18.56.						
6.	1 4 1 $n+$	4 <i>m</i> 1						
	$m^+ n^= 12 \Rightarrow m$	$\frac{1}{n} = \frac{1}{12}$						
	$12n + 48m = mn \equiv$	> 12n = m (n - 1)	- 48)					
	12 <i>n</i>		, 					
	$m = \frac{1}{n-48} \Rightarrow \text{As } n$	<i>i</i> , <i>n</i> are positiv	ve integers and n					
-	satisfy the conditio	$\frac{1}{n}$ $\frac{1}{n}$	1.0 47, 31, 37					
7.	Let the average of 1 (from A)	class 2 be x a	nd Class 1 be $x -$					

	$\therefore 45 \times 100 = 50 \times x + 50 (x - 1)$
	$= 50 (x + x - 1] \Rightarrow 100x - 50 = 4,500$
	$100x = 4.550 \Rightarrow x = 45.5$
	: average of class 2 be 45.5 and class 1 be 44.5
	From 2 we can find out that weight of Doonak
	would be $45 - (-45) = 00$ be
	Would be $43 - (-43) = 90$ kg.
	Hence by combining 1 and 2 we can get this
	$\frac{44.5 \times 50 + D - P}{45.5 \times 50 - D + P} = \frac{45.5 \times 50 - D + P}{45.5 \times 50 - D + P} + 1$
	50 50
	Putting value of the D we can find the value of P.
8.	Taking the maximum value of diameter as 10 and
	radius as 5, the volume of the spherical tank
	4
	happens to be $- \times 3.14 \times 5^3$
	\Rightarrow it happens to be 523 Kilolitres.
	But the internal diameter is given to be at least 8.
	Now because the exact value is not given, it
	cannot be determined whether it can be done or
	not by the 1 st statement
	From 2^{nd} statement we can find out the volume in
	cubic cm of the material of tank that is we will
	get the value of \mathbb{R}^3 , r^3 as the external diameter is
	given in the question itself so therefore we can
	find the value of small <i>n</i> is intermal radius and
	has the value of small <i>r</i> i.e. internal radius and
	by this we can find out the internal volume and
	will be able to confirmed whether or not tank
0	capacity is adequate to meet ABC s requirement.
9.	The minimum possible value of $x^2 + y^2 + z^2$ is at
10	(29, 30, 30)
10.	It is not possible with this condition
	As if $OM = 2 OL$, square would not be possible.
11.	The question should be started from the total time
	taken to travel both ways as 11 hours (it started
	from B at 8.00 am and reached back at 8.00 pm
	with a break of one hour in between from 3.00
	pm to 4.00 pm at LOCAL time A).
	Now the equation becomes
	3000 3000 11
	$as \frac{1}{x-50} + \frac{1}{x+50} = 11$.
	Fither the equation can be solved or going to the
	next question it can be seen that the only possible
	setisfying this could be 550 lymph
	It hains given that while going it was in the
	It being given that while going it was in the
	here is to be 500 hereb
	nappens to be 500 kmpn.
	The time will be $\frac{3000}{50} = 6$ hrs.
	From 8.00 it should have reached at 2.00 n m
	Given is 3.00 nm at Δ hence there is a
	difference of 1 hr
12	As calculated above it happens to be 550
12.	Option B is having the maximum positive and
15.	option B is having the maximum positive and
	Legalive return.
	So it we combine this Question & next question
	we will find that investing 36 % in option B and
	64 % in option C would give guaranteed return of
	0.2 % in either situation of rise in the stock
	market or fall in the stock market.
	Other Answer choices give less guaranteed return
	than 0.2 %.
14.	Same explanation as above.
15.	Put the value of n and check from the options.
	It we put <i>n</i> as 6, each pair in set would be having



	6 enemies i.e. if the sets are $(1, 2)$, $(1, 3)$, $(1, 4)$, (1, 5), $(1, 6)$, $(2, 3)$, $(2, 4)$, $(2, 5)$, $(2, 6)$, $(3, 4)$, $(3, 5)$, $(2, 6)$, $(4, 5)$, $(4, 6)$, $(4, 5)$, $(4, 6)$, $(4, 5)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4, 6)$, $(4,$
	5), $(3, 6)$, $(4, 5)$, $(4, 6)$, and $(5, 6)$. Enemies of $(1, 2)$ would be $(3, 4)$, $(3, 5)$, $(3, 6)$, (4, 5), $(4, 6)$, and $(5, 6)$, i.e. 6 enemies
16	(4, 5), (4, 0), and $(5, 0)$. I.e. o chemics.
10.	take $(1, 2)$ & $(1, 3)$ as 2 sets
	Their common friends would be $(1, 4)$ $(1, 5)$
	(1, 6) and $(2, 3)$ i.e. their common element with
	(1, 0), and (2, 3) i.e. then common element with the missing element and are set of their non
	and one set of their non
	Common element.
	So total of 4 pairs.
	Put the value of h as 6.
17.	Put the value of n as 6 and K as 4, the total no. of
	players would be 18.
	So I option is satisfy.
	Alternatively since every time is having one
	player common with two other teams.
	Total no. of players would be always No. of
	teams X (No of players in each time -1)
18.	Only one case is possible i.e. is 7,744.
19.	Put in value of x as 20 & 40 make an equation
	with the given information it would be 5 (240 +
	20B + 400C) = 3(240 + 40B + 1600C).
	Now putting the value of x as 40 & 60 make an
	equation with the given it would be $3(240 + 40B)$
	+1.600C) = 2(240 + 60B + 3.600C).
	Solving the two equations simultaneously, we get
	1
	the value of B & C as $10 \& \frac{1}{10}$ respectively.
	Now the number of units of that would maximize
	the profits would be multiple of 10.
	Arbitrarily putting the value as 100 we get the
	profit as 760 putting the value as 99 and 101
	decreases the profits.
	So the maximum profit is achieved at 100 units
	and hence it should be produced.
20.	Same explanation as above
21	
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 8 16 16 16 32 16 32 2187 '2187 '6561 '19683 '19683 respectively. As a gives a value which is less that 1									
As a_0 gives a value which is less frame $\frac{1}{100}$. Thus it is the smallest odd value that gives you the answer.33.At a_0 gives a could bay be been the masswer.26.We have to mix O & Q. This is the only case possible. Come by options, P & S is not possible because none of them has fat in it. The ratio in which we should mix P and Q to get 10% fat is 4:1. So it is also not possible.27.Coing by options, P & S is not possible because none of them has fat in it. So it is also not possible. So it is also not possible.28.Coing by options, 2:13. gives carbohydrate content is 51 % gives carbohydrate content as 50.6 %. 3:1:2 gives carbohydrate. So also not possible.20.Coing by options, 2.5 % proteins content as 50.6 %. 3:1:2 gives carbohydrate. So also not possible. A 4 (1) 1 gives carbohydrate. So also not possible. 3.1.1 Given D > E, B > C. There is also not possible. 3.1.1 Given D > E, B > C. There is also not possible. 3.1.1 Given D > E, B > C. There is also not possible. 3.1.1 Given D > E, B > C. There is also not possible. 3.1.1 Given D > E, B > C. There is also not possible. 3.1.2.2 % which we alter alter of 3 is also not possible. 3.1.1 Given D > E, B > C. There is also not possible. 3.2.1.2 five atthe total congroves a 10.0. Hen males = 70		$\frac{8}{2187}, \frac{16}{2187}, \frac{16}{6561}, \frac{32}{6561}, \frac{16}{19683}, \frac{32}{19683}$ respectively.			So % age can a Since both the sufficient to an	again be stateme iswer th	e calculate ents are ind e given qu	d. dividually lestion, so ansy	ver
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 27. Going by options, P & S is not possible because more of them has fain it. The ratio in which we should mix P and Q to get 10 % fat is 4 : 1. 28. Of the should mix P and Q to get 10 % fat is 4 : 1. 29. So it is also not possible. 28. For P & R, we get protein as 27.5 %. 29. Going by options, 2 : 15.3 gives carbohydrate content as 50 %. 21. 12 gives carbohydrate content as 60 %. 22. 13. Going by options, 2 : 13.3 gives carbohydrate content as 60.4 %. 23. Going by options, 2 : 15.3 gives carbohydrate. 24. Given be should be content as 60.5 %. 25. Going by options, 2 & P gives us only 25 % protein content as 83.3. 26. Going by options, 2 & P gives us only 25 % protein content as 60.7 %. 27. Going by options, 2 & P gives us only 25 % protein served. 28. Going by options, 2 & P gives us only 25 % protein served. 29. Going by options, 2 & P gives us only 25 % protein served. 20. And with 4 : 1: 1, we get costs as 83.33. 20. Going by options, 2 & P gives us only 25 % protein served. 20. Ling statement A, if 60 % of top performers are and lated on the performers are 40.0 % of top performers are adhletes which comprise 10 students. 20. The rule is a fibre at 0 %. For performers are adhletes which comprise 10 students. 21. The value total employees as 100, then males at 0 % of top performers are adhletes which comprise 10 students. 21. The value total employees as 100, then males at 0 fibre are 17.0 mits. 22. If we take total employees as 100, then males at 0.5 erabohydrate. 23. Form 1° statement, we cannot inflicient. 24. If we take total employees as 100, then males at 0.5 erabohydrate raw of fibre at or 5.5	20.	This is the only case possible \mathbf{U}			goals scored by	y the op	ponent.	not sufficient	
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The ratio in which we should mix P and Q to get 10% fait 4:1: So vir is 4:1 + 1: So vir is 4:1 + 1: So vir is also nuclease the protein as 22.5 %. So it is also nuclease to 0.0 to 7 Q & S and R & S, protein content is at least 30 % but considering the cost factor. it is less for Q and S. So it is not possible. 34. 35. (Find the ST for the ST for the year 2006 was Rs. 125 and maximum production capacity is 2000 units. 36. (Critical expenses are fixed. 37. If we analyse the year 2006 was Rs. 125 and maximum production capacity is 2000 units. 38. (Cost is also not possible. 39. (Cost is 2 we sarobydytate content as 50 %. 31. (Sives arobydytate content as 50 %. 32. (Soing by options, 0 & P gives us only 25 % protein. So not possible. 34. (Sives 10 + 1): 1, we get cost as 83.33. 35. (Find the statement is a sufficient. 36. (Sives 10 + 2): 5% carbohydrate. So this is also not possible. 37. If we taket solut and the sufficient. 38. (The Cost as 83.71. 39. (Soing by options, 0 & P gives us only 25 % protein. So not possible. 30. (Sives 10 + 2): 5% carbohydrate. So to this advention performers a - 40. 31. (Sives 10 + 2): 5% carbohydrate. So to this a also not possible. 32. (Sives 10 + 0): 2.5 % minerals. So to this advention performers a - 40. Hence statement A life 0 % of top performers are not athiteles which comprise 10 students. So to the B or D got the highest rank. So this statement is also not sufficient. 32. If we take total employees as 100, then makes = 30, females = 70. So cither B or D got the highest rank. So this statement is also not sufficient. 33. If we take total employees as 100, then makes = 30, females = 70. So cither B or D got the highest rank. So this statement is us officient. 34. If we take total employees as 100, then makes = 30, females = 70. So cither B or D got the highest rank. So this statement is use contention a sufficient. 35. Maximum profit would be obtained at 1700 unitis. So find a conginen		none of them has fat in it.			the opponent b	out not o	of M & M.		at
10 % fails 4: 1.Solving if further for protein, we get protein as 22Solving if further for protein, we get protein as 22.So it is also not possible.28. Going by options, 2: 1: 3 gives carbohydrate content as 60 %.4: 1: 2 gives carbohydrate content as 50 %.3: 1: 1 Given D so the costible.A d with 4: 1: 1: we get tost as 83.32.Coing by options, 0 & P gives us only 25 % carbohydrate.So this also not possible.All conditions are satisfied for 0 & S.30. Using statement A info % of top performers are ont abletes which comprise 10 students.31. Given D > E, B > C.Jimater M and ther rank of A is 5, hence rank of C is 4.But we do not get any information about the ranks of any other person.32. If we take total employees as 100, then males = 30, for males = 70.33. If we take total employees as 100, then males = 30, for males = 70.34. If we take total employees as 100, t		The ratio in which we should mix P and Q to get			So on combini	ng the t	wo statem	ents, we get the	e
Solving if further for protein, we get protein as 22 w. So it is also not possible. So it is also ruled out. Out of Q & S and R & S, protein content is at least 30 % but considering the cost factor, it is less for Q and S. So it is also ruled out. Out of Q & S and R & S, protein content is at least 30 % but considering the cost factor, it is less for Q and S. So it is not possible. 4 : 11: 2 gives carbohydrate content as 60 %. 2 : 11: 4 gives carbohydrate content as 60 %. 2 : 11: 4 gives carbohydrate content as 60 %. 2 : 11: 4 gives carbohydrate content as 60 %. 2 : 11: 4 gives carbohydrate content as 60 %. 2 : 11: 4 gives carbohydrate content as 60 %. 2 : 11: 4 gives carbohydrate content as 60 %. 2 : 11: 4 gives carbohydrate content as 60 %. 2 : 11: 4 gives carbohydrate content as 60 %. 3 : 11: 2 gives carbohydrate content as 60 %. 3 : 11: 2 gives carbohydrate content as 60 %. 3 : 11: 2 gives carbohydrate content as 60 %. 3 : 11: 2 gives carbohydrate content as 60 %. 3 : 11: 3 gives carbohydrate content as 60 %. 3 : 11: 1 gives carbohydrate content as 62.5 %. Now considering the cost with 4: 1: 1: 2, we get the cost as 85.71. And with 4: 1: 1: 1, we get cost as 83.33. 3 : Going by options, O & P gives us only 25 % carbohydrate. So also not possible. All conditions are astatificient. 3 : Gives us only 2.5 % carbohydrates. So this is also not possible. All conditions are astatificient. 3 : Gives us only 2.5 % carbohydrates. So this is also not possible. 3 : Gives us only 2.5 % carbohydrates. So this is also not possible. 3 : Gives us only 2.5 % carbohydrates. So this is also not possible. 3 : Gives us only 2.5 % carbohydrates. So this is also not possible. 3 : Gives us only 2.5 % carbohydrates. So this is also not possible. 3 : Gives us only 2.5 % carbohydrates. So this is also not sufficient. 3 : Gives us only 2.5 % carbohydrates. So this is also not sufficient. 3 : Gives us only 2.5 % carbohydrates. So this a get any information about the trank of A is 5, hence		10 % fat is 4 : 1.			final scoreline	as 4-4 c	or 5-4.	-	
So it is also not possible. For P& R, we get protein as 27.5 %. So it is also ruled out 00 ut of Q & S and R & S. protein content is at least 30 % but considering the cost factor, it is less for Q and S.28.Going by options, 2: 1: 3, gives carbohydrate content is 51 %. So it is not possible. 4: 1: 12 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. A: 1: 1 gives carbohydrate content as 50.7 %. A: 1: 1 gives carbohydrate content as 50.6 %. A: 1: 1 gives carbohydrate. So and possible. R & S gives us only 25 % carbohydrate. So to ita cadaetic performers are not athletes implies that 40 % of top performers are not athletes implies that 40 % of top performers are not athletes implies that 40 % of top performers are not athletes inplies that 40 % of top performers are not athletes inplies that 40 % of top performers are are alhetes which comprise 10 students. So to the cost of 1400 units, we get the profit as Rs. 1.49,400 approximately.31.Given the yet maternet, we get that the fore to say any formation about the ranks of any other person. So either B or D got the highest rank. So this statement A lance may information about the ranks of any other person. So either B or D got the highest rank. So this statement, we canditient as form this 		Solving it further for protein, we get protein as 22			So we are not	sure wh	ether M &	M won or not	•
34.Given the SP for the year 2000 was Ks. 123 and maximum production capacity is 2000 units. So it is also ruled out. Out of Q & S and R & S, protein content is at 183 0% but considering the cost factor, it is less for Q and S.28.Going by options, 2 1: 3, gives carbohydrate content is 51 %. So it is not possible. 4: 1: 1: 2 gives carbohydrate content as 60 %. 2: 1: 4 gives carbohydrate content as 50 %. Now considering the cost, with 4: 1: 2, we get the cost as 85.7.1. And with 4: 1: 1, we get costs as 83.3.3.29.Going by options, O & P gives us only 25 % protein. So not possible. R & S gives us only 25 % carbohydrate. So also not possible. R & S gives us only 25 % carbohydrate. So also not possible. P & S gives us only 25 % carbohydrate. So total academic performers are are athletes which comprise 10 students. So to tal academic performers are are athletes which comprise 10 students. So total academic performers at 40. Hence contining the two statements, so to sufficient. 2" statement, we cannot infer rank of A is 5, hence rank of C is 4. But we do not gat any information about the ranks of any other person. Hence combining the two statements, so to sufficient. 2" statement, we cannot infer rank of any person. Hence combining the two statements, so to sufficient. 2" statement, is as 100, then males = 30, females = 70 $\times 0.1 = 7$. Using " statement, there are 25 engineers. So co there are 7 female engineers, so there are 18 male engineers. So So wage can be calculated. So this statement is sufficient. Using statement is sufficient. Using statement is sufficient. Using statement is sufficient. Using statement is we get male engineers as 84.4.31.Given D > E, B > C. Hence combining the two statements, we get that rank of any person. Hence com		%. So it is also not possible		24	So answer is 5	th option	1. 2 006	D 105	1
So it is also ruled out. Out of Q & S and R & S, protein content is at least 30 % but considering the cost factor, it is less for Q and S.28.Going by options, 2: 1: 3, gives carbohydrate content is 51 %. So it is not possible. 4: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. A: 1: 1 gives carbohydrate content as 50 mot possible. R & S gives us only 25 % carbohydrate. So othis also not possible. P & S gives us only 25 % carbohydrate. So othis is also not possible. P & S gives us only 25 % carbohydrate. So total academic performers a endot. E and f is 40 % of top performers are nor athetes implies that 40 % of top performers are nor athetes implies that 40 % of top performers are nor athetes implies that 40 % of top performers are nor athetes anylic statement is also not sufficient. So total academic performers are 400. Hence statement is also not sufficient. So this statement is so to sufficient. So this statement is not sufficient. So this statement is not sufficient. So this s		For $P \& R$ we get protein as 27.5 %		34.	Given the SP f	or the y	ear 2006 v	was Rs. 125 and 2000 units	d
 a for the cost active is at least 30 % but considering the cost factor, it is less for Q and S. 28. Going by options, 2: 1: 3, gives carbohydrate content as 60 %. 4: 1: 2 gives carbohydrate content as 60 %. 4: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 50 %. 3: 1: 2 gives us only 25 % carbohydrate. So to not possible. A d with 4: 1: 1, we get cost as 83.33. 29. Going by options, 0. & P gives us only 25 % protein. So not possible. A d so fixed costs are Agracial, 12, 000 + 400 + 800 + 5.800 = 8.8, 200. A distributions are satisfied for 0 & 8. 30. Using statement A, if 60 % of top performers are not athletes implies that 40 % of top performers are athletes which comprise 10 students. So to tal academic performers are athletes which comprise 10 students. So to tal academic performers a +40. 31. Given D > E, B > C. Also Ci's rank would be either 4 or 5. From 1⁴ statement, we get that rank. of A is 5, hence rank of C is 4. But we do not gat any information about the ranks of any other person. So cites and sufficient. as from this statement is and there are 25. Readifies and there are 26. 33. If we take total employees as 100, then males =30, females = 70 × 0.1 = 7. Using 1* statement, here are 2. Temple engineers. Since there are 7 female engineers, so there are 1 female engineers, so there are 1 female engineers as 8.4. 34. The take total conducted. So this statement is subtrict. 35. If we candohydrate and thendition as a statiste		So it is also ruled out. Out of O & S and R & S.		- 37	If we analyse t	he give	capacity is	s 2000 units.	
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 30 It is not possible. 4: 1: 1: gives carbohydrate content as 50 %. 3: 1: 2 gives carbohydrate content as 56.6 %. 4: 1: 1: gives carbohydrate content as 52.5 %. Now considering the cost; with 4: 1: 2, we get the cost as 85.7.1. 29. Going by options, O & P gives us only 25 % protein. So not possible. 70. Be & S gives us only 25 % carbohydrate. 70. So not possible. 71. Be & S gives us only 2.5 % minerals. 72. Be & S gives us only 2.5 % minerals. 73. Using statement A, if 60 % of top performers are not athletes which comprise 10 students. 73. Given D > E, B > C. 74. Given D > E, B > C. 75. From I''s statement is also not sufficient. 76. From I''s statement is also not sufficient. 76. So this is also not get any information about the ranks of any other person. 76. From I''s statement is not sufficient. 77. Male No. of C is 4. 76. Male No. of C is 4. 77. Male No. of V egetarian of the profit as Rs. 24,150 and for 2000 units, we get the profit as Rs. 24,150 and for 2000 units, we get the profit as Rs. 24,150 and for 2000 units, we get the profit as Rs. 24,150 and for 2000 units, we get the profit as Rs. 25,400 approximately. 76. Male No. of V egetarian of A is 5, hence rank of C is 4. 76. From I''s statement is not sufficient. 77. Male No. of V egetarian of A is 5, hence rank of any person. Hence combining the two statements, we get rank of A is 9, female engineers. 70. Watte that engineers as 100, then males = 30, female engineers. 71. Using It''s statement is allow inferent. 72. If' we take total employees as 100, then males = 30, female engineers. 73. So ''' watte enset, there are 25 engineers. 74. So '''' as statement is allow inferent. 75. So ''''' age a calculated. 76. Male No. of V egetarian V and P any Person. 77. Male No. of V egeta		content is 51 %.			Repair and ma	intenan	ce expense	es and Selling	
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hence rank of C is 4. But we do not get any information about the ranks of any other person. So either B or D got the highest rank. So this statement is not sufficient. 2^{nd} statement is also not sufficient as from this statement; we cannot infer rank of any person. Hence combining the two statements, we get rank of A \rightarrow 5, C \rightarrow 4, B \rightarrow 3, E \rightarrow 2, D \rightarrow 1. 32. If we take total employees as 100, then males = 30, females = 70. Female engineers = 70 \times 0.1 = 7. Using 1 st statement, there are 25 engineers. Since there are 7 female engineers, so there are 18 male engineers. So % age can be calculated. So this statement B, we get male engineers as 8.4.		From 1 st statement, we get that rank of A is 5,			For 1800 units	, we get	the profit	t as Rs. 24.150	
But we do not get any mormation about the ranks of any other person. So either B or D got the highest rank. So this statement is not sufficient. 2^{nd} statement is also not sufficient as from this statement; we cannot infer rank of any person. Hence combining the two statements, we get rank of $A \rightarrow 5$, $C \rightarrow 4$, $B \rightarrow 3$, $E \rightarrow 2$, $D \rightarrow 1$.37.Maximum profit would be obtained at 1700 units. On calculation, we get the profit as Rs. 25,400 approximately.32.If we take total employees as 100, then males = 30, females = 70. Female engineers = $70 \times 0.1 = 7$. Using 1st statement, there are 25 engineers. Since there are 7 female engineers, so there are 18 male engineers. So % age can be calculated. So this statement is sufficient. Using statement B, we get male engineers as 8.4.Rs. 27,900.		hence rank of C is 4.			and for 2000 u	nits, we	get the pi	rofit as	
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Gl $A \rightarrow 3, C \rightarrow 4, B \rightarrow 3, E \rightarrow 2, D \rightarrow 1.$ 32. If we take total employees as 100, then males = 30, females = 70. Female engineers = 70 × 0.1 = 7. Using 1 st statement, there are 25 engineers. Since there are 7 female engineers, so there are 18 male engineers. So % age can be calculated. So this statement is sufficient. Using statement B, we get male engineers as 8.4.Class 12 0.60 48 0.40 Class 12 0.60 48 0.40 Class 11 0.55 44 0.50 Secondary SectionTotal 0.47 380 0.53 Total 0.47 380 0.53 So this statement is sufficient. Using statement B, we get male engineers as 8.4.		Hence combining the two statements, we get rank of $A \rightarrow 5$ C $\rightarrow 4$ P $\rightarrow 3$ E $\rightarrow 2$ D $\rightarrow 1$		41.		(M)	Males	(V)	
$ \begin{array}{c c} Class 11 & 0.55 & 44 & 0.50 \\ \hline Secondary & 0.45 & 288 & 0.55 \\ \hline Section & & & & \\ \hline Section & & \\ $	32	If we take total employees as 100, then males			Class 12	0.60	48	0.40	
Female engineers = $70 \times 0.1 = 7$. Using 1st statement, there are 25 engineers. Since there are 7 female engineers, so there are 18 male engineers. So % age can be calculated. So this statement is sufficient. Using statement B, we get male engineers as 8.4.Section 0.45 288 0.55 Section 0.47 380 0.53	52.	= 30, females = 70.			Class 11	0.55	44	0.50	1
Using 1 st statement, there are 25 engineers. Since there are 7 female engineers, so there are 18 male engineers. So % age can be calculated. So this statement is sufficient. Using statement B, we get male engineers as 8.4.		Female engineers = $70 \times 0.1 = 7$.			Secondary	0.45	288	0.55	1
Since there are 7 female engineers, so there are 18 male engineers. So % age can be calculated. So this statement is sufficient. Using statement B, we get male engineers as 8.4.		Using 1 st statement, there are 25 engineers.			Section Total	0.47	200	0.52	-
18 male engineers. So % age can be calculated. So this statement is sufficient. Using statement B, we get male engineers as 8.4.		Since there are 7 female engineers, so there are			Total	0.47 5	380	0.55	1
So he age can be calculated. So this statement is sufficient. Using statement B, we get male engineers as 8.4.		18 male engineers.				5			1
Using statement B, we get male engineers as 8.4.		So this statement is sufficient			L I		1	I	ı
		Using statement B, we get male engineers as 8.4.							



			No	of T	lotal No		
			NO.		f Students		
			tori	se 0	1 Students		
	Class 12		22	a11 0	0		
			32	0	0		
	Class 11	a	40	8	0		
	Secondar	y Section	352	6	40		
	Total		424	. 8	00		
38.	% of vegeta	rian stude	ents in cl	ass 12 =	=		
	32 100	10.01					
	$\frac{1}{80} \times 100 =$	= 40%					
20	00	0					
39.	25 % 01 32	= 8		40	0 40 0		
	\therefore No. of male non-vegetarian = $48 - 8 = 40$ &						
	No. of temale vegetarian = $32 - 8 = 24$						
	: Difference	ce = 40 - 1	24 = 16				
40.	% of male s	tudents in	second	ary sect	ion =		
	$\frac{288}{100}$ × 100	- 15%					
	$\frac{1}{640}$ ^100	- 45 /0					
41.	Secondary S	Section:					
		VEG	NON	VEG	TOTAL		
	Males	176	112	120.	288		
	Females	176	176		352		
	Total	352	288		640		
42	Cost of Mal	$\frac{332}{0000} = (1)$	1 000 +	6.000)			
42.		aysia = (1)	(1,000 + 00) = 47	0,000)	+ (10,000 +		
	(0,000) + (0,000)	000 + 4,0	(00) = 47	,000			
42	Is lowest of	all	. 0.000	17.50	0:-		
43.	Cost in Indi	a = 8,500	+ 9,000	= 17,50	JU 1S		
	expensive o	f all.					
44.		India		T	hailand		
	Cost in	3,000 +	5,000 =	4	,500 +		
	Dollars	8,000\$		6,	= 000		
				1	0,500\$		
	Cost in	8,000 ×	40.928	1	$0,500 \times$		
	Bahts	×		3.	2.89 =		
		32.89	26212	3	,45,345		
		40.928	= 20312	.0			
	Cost in Indi	Cost in India = 2 63 120 + 15 000 - 2 78 120					
	bahts.	u <u>2</u> ,00,1	20 . 10	,000 -	,, 0,120		
	Cost in Tha	iland = 3	45 345 F	ahts			
	· Differenc	e = 67.22	5 hahts	, and s			
45	Initial cost y	was 5 500	$\times 40.92$	= 2.25	104 this		
40.	cost remain	s the same	e now 1	USD is	35 INR		
	So the no. o	f USD is	this divi	ded by '	35		
	Which equa	ls 6.431.5	54.	aca cy .			
	So the diffe	rence is 9	.000 - 6	.431 = 2	2.500 USD		
	and thus it i	s answer.	,000 0	,	,000 002		
46.	The shortes	t route oc	curs to h	e A-C-I	₹-T		
101	Route	Kms		Price	7		
	A	700		1350	-		
	A-C	410		1330	-		
		410		430	-		
	F - J	970		2020	-		
		2170	<u> </u>	2930	L		
	So, the price	e for trave	elling is	Ks.2930). T		
47.	The lowest	price occu	irs at rou	ite A-H	-J.		
	Path	Dis	stance	Pr	ice		
	A - H	195	50	18	50		
	H - J	400)	42	5		
	TOTAL	235	50	22	75		
	Now if the	company	charges	5% bel	ow the		
	minimum p	rice of Rs	.2275 th	en it sho	ould charge		
	0.95 × 2275	= Rs.216	51.		U		
	If C. D. H are not available then from the table it						

	can be seen that the minimum price is from the route $A - F - J$ i.e. is 2.850.
49.	Since the margin is 10 % and the minimum cost
	from A to J is on the route $A - H - J$ i.e. 2,275.
	The cost would be $2275 \times \frac{100}{110}$ which comes out to
	be 2,068.5 and the distance traveled is 2,350 so
	cost per km would be $\frac{2,008.5}{2,350} = 0.88$
50.	Since the minimum cost has to be taken the same
	route as above i.e. $A - H - J$ has to be taken so
	km.
51.	A clear hint is given in the first line of the
	passage 'Human biology does nothing to
	structure human society'. The next para carries the idea forward and talks
	about reciprocal roles and their role in co
	coordinating human behavior.
	Therefore this is the thematic highlight of this
52	passage.
54.	This clearly shows that a father playing his role
	"tongue in cheek" would have been acceptable if
= 2	biological linkages structured human society.
53.	absorbing or interesting that the distinction
	between the role being played and the underlying
	self gets blurred.
54	Refer to the first line of the fifth para.
54.	B - It should be 'lay my hands upon'.
	D – It should be 'a Shaliach, a sort of
	C and E – The right answer.
55.	A – 'In recession' is a wrong usage. B – The right answer
	C - Usage of words assuming and hypothetically
	amounts to redundancy.
	D – It should be 'a temporary stimulus'.
	of noun, 'effect'.
56.	A – instead of 'told'. It should be 'it is sometimes
	said.'
	B & D – The right answers. C – The phrase is 'handed down to us '
	D - After 'hence' the subject is missing.
57.	Refer to the end of the first paragraph. The writer
	uses the expression "like a Madonna from a
	not create anything new but deepens and purifies
	the old, so the difference in two artistic creations
	is due to the difference in artistic interpretation.
58.	The sea and 'other creation' help Rilke to
	"understand the situation of the poet, his place
	and function in this age".
59.	Refer to the beginning of the 2^{10} paragraph.
	The writer goes on to discuss how the poets and
	artists of this period could break away from the
	old order and explore the new.
60.	The author looks at an organization as a person and takes the example of acquisitions and
	mergers to explain the importance of characters
	in an organization.



	The personification of the organization is thus
	used as a textual device so that macro level
	theories are better understood.
61.	As the concluding sentence, it talks about what
	has been said in the whole paragraph.
	It reiterates what has been stated in the first
	line 'photographs still retain' and
	also talks about the 'technical development'
	referred to in the rest of the lines.'
62.	The writer gives the details of Mma Ramotswe's
	inventory, her few possessions, and then goes on
	to add that she had 'human intuition and
	intelligence' which were sufficient to run a
	detective agency.
	These two things are obviously never included in
	an inventory.
63.	The attempt to describe a relationship among
	rules, paradigms and normal science begins from
	the very first sentence itself and finds
	manifestation in the second and third paragraphs
	as well.
64.	The term refers to a sense of inherent loyalty -
	not to something as narrow as a laboratory but to
	a certain form of scientific inquiry.
	We also lack information on the trends / patterns.
65.	Please refer to the penultimate line of the second
	paragraph which says if the coherence is to be
	understood some specification of common
	ground
	Besides, also refer to the succeeding line to get
	the complete answer.
	The answer gets more support from these lines in
	the first paragraph <i>quasi-standard illustrations</i>
	of a given speciality.
	The rest of the choices are not supportable in the
	context of the passage.
66.	<i>Council</i> is a collective noun and will take a
	singular verb.
	The critics can only criticize and not <i>censor</i>
	anything.
67.	<i>Farther</i> is used for distance while further means
	to a greater degree.
	The appropriate word in the second sentence is
	<i>historic</i> , meaning – of great importance.
	Mistrust means ill placed trust whereas the old
	man does not seem to believe much in new
	technology.
	Films are based on <i>true</i> stories.
	Compliment means to praise while complement
	means to complete.
68.	<i>Regretfully</i> is the best option.
	It is an expression of disappointment.
	Sensuous is the appropriate usage.
	It relates to the pleasure of senses.
	Besides is the correct word. beside is a
	preposition.
	Stationary means immobile. hence the correct
	······································

	option.
	Water rises <i>above</i> the danger mark and not <i>over</i>
	the danger mark.
69.	The fourth line of paragraph 3 talks about the "confounding effects of natural variation in additional variables besides the one of interest", thus conveying the differences in the evolution of isolated islands and the potential inherent in studying such differences.
70.	Please refer to these lines from the second and third paragraphs, <i>Prediction in history, as in</i> other historical sciences, and While neither astronomers studying galaxy formation nor human historians
71.	Please refer to the second line of the third paragraph which explicitly talks about this fact.
72.	<i>It</i> of line C refers to the <i>validity</i> being discussed in E. Thus EC is a good combination. BD is also a great combination as D tends to support B.
73.	Line A talks of two types of experiences, medical and natural, an idea which is further built on by the last line E which refers to the third discourse. Note the word these in line D which refers to the three frameworks. B gels very well with D, which should lead us to option 1.
74.	In a logically sequenced paragraph we should first talk of the overall changes brought about in the political dispensation followed by the changes in mass media. This gives us BC. Note carefully <i>such developments</i> which alludes to B and C and also <i>a different group of analysts</i> in <i>E</i> , which is linked very well with <i>external</i> <i>analysts in</i> D. Hence BCDE.
75.	C makes the strongest link with A as it elaborates upon the squatters mentioned in A. C also begins to speak about the squatters at the authors farm and this thought is carried forward by B. The "maize" clue then leads us to E. Hence A-C-B-E-D is the answer.
	Hence A-C-B-E-D is the answer.

