# Quantitative Aptitude

	a) 35 years d) Data inadequate	was 20 years. The present a b) 40 years e) None of these	c) 50 years
2.			metres wide is to be paved exactly with squ of the tile which could be used for the purpos
	a) 14 cms	b) 21 cms	c) 42 cms
	d) Data inadequate	e) None of these	17-2012/01/
3.		onths. If after eight months	Rs.4000 and Rs.8000 respectively in a busine, there was a gain of Rs.4005, then what will
	a) Rs.890 d) Rs.1780	b) Rs.1335 e) None of these	c) Rs.1602
4.	In how many ways a and 10 women?	committee, consisting of	5 men and 6 women can be formed from 8 m
	a) 266	b) 5040	c) 1176
	d) 86400	e) None of these	0 × 10 7 0.2010
5.	In a lottery, there a probability of getting		ss. A lottery is drawn at random. What is
	a) 1/10	b) 2/5	c) 2/7
	d) 5/7	e) None of these	
6.	A man is 24 years of present age of the son		ars, his age will be twice the age of his son.
	a) 14 years	b) 18 years	c) 20 years
	d) 22 years	e) None of these	76.70.4
7.	A shopkeeper expect what was his profit?	s a gain of 22-1/2% on his	cost price. If in a week, his sale was of Rs.3
	a) Rs.18.20	b) Rs.70	c) Rs.72
	d) Rs.88.25	e) None of these	
8.		f the series $1 + (1 + 3) + (1 + 3)$	+ 3 + 5) + is:
	a) $\frac{n n+1}{2}$	b) n <sup>2</sup>	c) $\frac{n + 1(2n + 1)}{5}$
	d) Data inadequate	e) None of these	~
9.	.081 × .484 /.00	64 × 6.25 is equal to	
	a) 0.9	b) 0.99	c) 9
	d) 99	e) None of these	
10			ed of 3 km./hr and return at a speed of 2 km.
			nce between his house and school is
	a) 5 km	b) 5.5 km	c) 6 km

d) 6.5	km	e) Non	e of	these
as one	KIII	C) I voni	C til	HILLS

11. A can do a certain work in the same time in which B and C together can do it. If A and B together could do it in 10 days and C alone in 50 days, then B alone could do it in:

- b) 20 days

- d) 30 days
- e) None of these

12. If the circumradius of an isoceless triangle ABC is equal to AB (= AC), then angle A is equal to

- a)  $\frac{\pi}{2}$

- e) None of these

13. If 10, 12 and 'x' are sides of an acute angled triangle, how many integer values of 'x' are possible?

a) 7

b) 12

c) 9

- d) 13
- c) 11

14. A man can row upstream at 7 kmph and downstream at 10 kmph. Find man's rate in still water and the rate of current?

- a) 6.5, 1.2 km/hr
- b) 8.5, 1.5 km/hr
- c) 1.5, 1.6 km/hr

d) 7.5, 1.8 km/hr

e) None of these

Study the following table and answer the questions based on it.

Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of	Expenditure			
rear	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

- 15. What is the average amount of interest per year which the company had to pay during this period?
  - a) Rs.32.43 lakhs
- b) Rs.33.72 lakhs
- c) Rs.34.18 lakhs

- d) Rs.36,66 lakhs
- e) None of these

16. The total amount of bonus paid by the company during the given period is approximately what percent of the total amount of salary paid during this period?

a) 0.1%

b) 0.5%

c) 1%

d) 1.25%

e) None of these

17. Total expenditure on all these items in 1998 was approximately what percent of the total expenditure in 2002?

a) 62%

c) 69%

d) 71%

e) None of these

18. The total expenditure of the company over these items during the year 2000 is?

	a) Rs.544.44 lakhs d) Rs.478.87 lakhs	b) Rs.501.11 la e) None of thes	\$ 50 PM TUT BUT SUBSECTION STORES TO SUBSECTION STORES TO SUBSECTION SUBSECTION STORES TO SUBSECTION STORES TO SUBSECTION SUBSECTION STORES TO SUBSECTION STORES TO SUBSECTION SUBSECTION STORES TO SUBSECTION SU
19.		total expenditure on taxes	s for all the years and the total expenditure on fuel proximately?
	a) 4:7	b) 10:13	c) 15:18
	d) 5:8	e) None of thes	e e
20.	On 6th March 2005 M	onday falls. What was the	day of the week on 6th March 2004?
	a) Sunday	b) Saturday	c) Tuesday
	d) Wednesday	e) None of thes	se
		ds of a clock are inclined	at 15 minutes past 5?
	a) 58 ½°	b) 64°	c) 67 ½°
	a) 58 ½° d) 72 ½°	e) None of thes	
22.	Two pipes A and B c	an fill a tank in 20 and 3	0 minutes respectively. If both the pipes are used
	TO THE PARTY OF TH	ng will it take to fill the tar	
	a) 12 min	b) 15 min	c) 25 min
	d) 50 min	e) None of these	
23.	A lent Rs. 5000 to B	for 2 years and Rs. 3000 t	o C for 4 years on simple interest at the same rate
		ed Rs. 2200 in all from	both of them as interest. The rate of interest per
	annum is: a) 5%	b) 7%	-) 7 1/99/
	A STATE OF THE STA		c) 7 1/8%
	d) 10%	e) None of these	
24.			es of cloth. If on a certain day, he gets Rs.12.50 as
		sold through him on that	
	a) Rs.250	b) Rs.500	c) Rs.750
	d) Rs.1250	e) None of these	
25.			carpet 75 cm wide at Rs.4.50 per metre is Rs.810.
	The breadth of the roo		
	a) 7 m	b) 7.5 m	c) 8 m
	d) 8.5 m	e) None of these	
26.	Which one of the follo	owing is the common factor	or of (47 <sup>43</sup> + 43 <sup>43</sup> ) and (47 <sup>47</sup> + 43 <sup>47</sup> )? c) (47 <sup>43</sup> + 43 <sup>43</sup> )
	a) (47 🖾 43)		c) $(47^{43} + 43^{43})$
	d) Data inadequate	e) None of these	
27.	A Students was aske	d to find the arithmetic m	nean of the numbers 3, 11, 7, 9, 15, 13, 8, 19, 17,
	21, 14 and x. He foun	d the mean to be 12. What	should be the number in place of x?
	a) 3	b) 7	c) 17
	d) 31	e) None of these	
28.	Which of the followin	g is a pair of co-primes?	
	a) (16, 62)	b) (18, 25)	c) (21, 35)
	d) (23, 92)	e) None of these	55027702911-57

29. A camel pursue an elephant and takes 5 leaps for every 7 leaps of the elephant, but 5 leaps of elephant are equal to 3 leaps of camel. What is the ratio of speeds of camel and elephant?

a) 21:25

b) 24:23

c) 25:21

d) 23:24

e) None of these

30. A, B and C jointly thought of engaging themselves in a business venture. It was agreed that A would invest Rs. 6500 for 6 months, B, Rs. 8400 for 5 months and C, Rs. 10,000 for 3 months. A wants to be the working member for which, he was to receive 5% of the profits. The profit earned was Rs. 7400. Calculate the share of B in the profit.

a) Rs. 1900

b) Rs. 2660

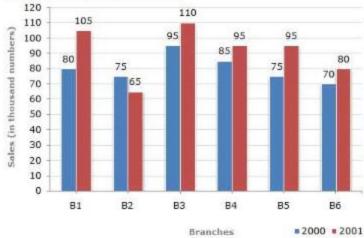
c) Rs. 2800

d) Rs. 2840

e) None of these

Directions (Q. 31-35) The bar graph given below shows the sales of books (in thousand number) from six branches of a publishing company during two consecutive years 2000 and 2001.

Sales of Books (in thousand numbers) from Six Branches - B1, B2, B3, B4, B5 and B6 of a publishing Company in 2000 and 2001.



31. What is the ratio of the total sales of branch B2 for both years to the total sales of branch B4 for both years?

a) 2:3

b) 3:5

c) 4:5

d) 7:9

- e) None of these
- 32. Total sales of branch B6 for both the years is what percent of the total sales of branches B3 for both the years?

a) 68.54%

b) 71.11%

c) 73.17%

- d) 75.55% e) None of these
- 33. What percent of the average sales of branches B1, B2 and B3 in 2001 is the average sales of branches B1, B3 and B6 in 2000?

a) 75%

b) 77.5%

c) 82.5%

	d) 87.5%	e) None of these	
34.	What is the average sales of	all the branches (in thous	sand numbers) for the year 2000?
	a) 73	b) 80	c) 83
	d) 88	e) None of these	
35.	Total sales of branches B1, 1	B3 and B5 together for bo	oth the years (in thousand numbers) is?
	a) 250	b) 310	c) 435
	d) 560	e) None of these	
		Reasoning Abil	lity
36.	is M's position from the left		here are 15 children between R and M. Wha
	a) 14 <sup>th</sup>	b) 15 <sup>th</sup>	c) 13 <sup>th</sup>
	d) Can't be determined	e) None of these	
37.	In a certain code language	'how many are there'	is written as 'ka na ta da' and 'many are
	welcome here' is written as	'na pa ni ka'. How is 'ho	w' written in that code language?
	a) ta	b) da	c) ta or da
	d) Data inadequate	e) None of these	
38.	If the positions of the 1 <sup>st</sup> and positions of the 2 <sup>nd</sup> and the be the 2 <sup>nd</sup> digit from the righ	6th digits are interchanged	ber 83591427 are interchanged, similarly the d and so on then which of the following will nent?
	a) 5	b) 3	c) 9
	d) 2	e) None of these	
39.	How many such pairs of let	ters are there in the work	ds ADJUSTING each of which has as many
	letters between them in the	word as in the English alp	
	a) None	b) One	c) Two
	d) Three	e) More than three	
40.	How many meaningful Eng once in each word?	lish words can be formed	with the letters LBAE using each letter only
	a) None	b) One	c) Two
	d) Three	e) More than three	
41.	In a certain code BUILDER	is written as JVCKSFE.	How is SEALING written in that code?
	a) BTFKHOJ	b) JOHKBFT	c) TFBKHOJ
	d) BFTKJOH	e) None of these	
42.	If 'R' denotes '+', 'T' denot		
	27 T 15 R	3 W 4	M 6 = ?
	a) 7	b) 13	c) 🛮 23
	d) 1	e) None of these	
		The same of	

43.	In a certain co		VE is w	ritten as '5%3*' and	WINS is written as '59@0'. How is SANE
	a) 09@*			b) *%©@	c) D@%*
	d) 0%@*			e) None of these	7,-2
	200				
44.	Which of the given below?	followin	g is the	middle digit of the 3"	highest among the five three digit numbers
	368 931	472	715	647	
	a) 6			b) 3	c) 7
	d) 1			e) 4	20.3
45.				having a different hei m is the shortest?	ght, Q is shorter than only T and S is shorter
	a) R			b) S	c) P
	d) Data inadeo	quate		e) None of these	
				ving arrangement care EP2\$AY5IQZ#	fully and answer the questions given below. 7 U G
46.	Which of the	following	is the	6th to the left of the 20th	from the left end of the above arrangement?
	a) J		**********	b) O	c) W
	d) E			e) None of these	7. 11
47.				are there in the above nediately followed by a b) One e) More than three	arrangement, each of which is immediately a number? c) Two
48.				e vowels are dropped the right end?	from the above arrangement, which of the
	a) 9			b) 6	c) P
	d) Y			e) None of these	
49.				there in the above a mediately followed by b) One e) More than three	arrangement, each of which is immediately a letter?  c) Two
50.	What should arrangement? MRJ OF9		ing.	ee of question mark (?	) in the following series based on the above
	a) Y5I	*E2	?	LI VIO	a) 450
				b) YIQ	c) A5Q
	d) YIZ			e) None of these	
conclus to be a	sions numbered it variance from	I, II, III n commo	and IV	You have to take the own facts. Read all th	re given four statements followed by four given statements to be true even if they seem the conclusions and then decide which of the statement disregarding commonly known facts.
51.	Statements:	Some	pencils	are windows.	

NOTE: The information provided here is for Reference. It may vary Original

All windows are roads.

Some roads are cups. All cups are chains.

Conclusions: I. Some chains are pencils.

II. Some cups are pencils.III. Some chains are windows.

IV. Some roads are pencils.

a) None follows

b) Only II follows

c) Only IV follows

d) Only III and IV follow

e) Only III follows

52. Statements: Some beds are mirrors.

Some mirrors are dolls. Some dolls are cheques. Some cheques are pins.

Conclusions:

Some pins are dolls.

II. Some cheques are beds.

III. Some cheques are mirrors.

IV. Some dolls are beds.

a) None follows

b) Only I follows

c) Only II follows

d) Only III follows

e) Only IV follows

Statements: All chocolates are holders.

No holder is lamp. Some lamps are desks. All desks are pens.

Conclusions:

Some pens are holders.
 Some desks are lamps.
 No pen is holder.

IV. Some pens are chocolates.

a) Only I follows

b) Only II follows

c) Only III follows

d) Only either I or III follows

e) Only either I or III and II follow

54. Statements: All glasses are rooms.

Some rooms are planes. All planes are ducks. Some ducks are lanterns.

Conclusions:

I. Some lanterns are planes.

Some ducks are rooms.
 Some rooms are glasses.
 Some ducks are glasses.

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a) Only I and II follow
 b) Only II and III follow

c) Only I, II and III follow

- d) All I, II, III and IV follow
- e) None of these

55. Statement: Some chairs are tents.

Some tents are jugs. All jugs are glasses. All glasses are pots.

Conclusions: I. Some pots are tents.

II. Some pots are chairs.

III. Some glasses are chairs.

IV. Some glasses are tents.

- a) Only I and II follow
- b) Only II and III follow
- c) Only I and III follow
- d) Only I and IV follow
- e) None of these

Directions (Q. 56-60) In each question below is given a group of letters followed by four combinations of digits/symbols numbered (a), (b), (c) and (d). You have to find out which of the combinations correctly represents the group of letters based on the following coding system and the conditions that follow and mark the number of that combination as your answer. If none of combinations correctly represents the group of letter, mark (e) i.e., 'None of these' as your answer.

Letter W P J Q E T I A U F D B V M H Digit/Symbol 5 6 9 1 2 3 @ 4 © 8 % \* 7 # \$ code

#### Conditions:

 If the 1<sup>st</sup> letter is a consonant and the 4<sup>th</sup> letter is a vowel both are to be coded as the code for the vowel.

c) #2@47\$

(ii) If the 2<sup>nt</sup> letter is a vowel and the last letter is a consonant both are to be coded as !.

e) None of these

(iii) If both the 1st and the last letters are consonants both their codes are to be interchanged.

56. MBUVWE		
a) #*©#52	b) 7*©#52	c) #©*752
d) #!©75!	e) None of these	
57. AJBMFU		
a) 49*48©	b) #9*#8©	c) 49*#8©

58. AEIMVH

d) 09\*#84

a) 42@#7\$ b) 42@47\$

d) 4!@#7! e) None of these

59. THAFIQ

a) 3\$48@3 b) 1\$48@3 c) 1\$48@1

d) 3\$48@1 e) None of these

60. WMEDU

a) @#2@90 b) 5#2@90 c) @#2590

d) 5#259©

e) None of these

**Directions (Q. 61-65)** A word and number arrangement machine, when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of an input and rearrangement.

Input: 17 put show on 39 27 85 gold show 17 put on 39 27 85 gold Step I: show 85 17 put on 39 27 gold Step II: Step III: show 85 put 17 on 39 27 gold show 85 put 39 17 on 27 gold Step IV: Step V: show 85 put 39 on 17 27 gold show 85 put 39 on 27 17 gold Step VI: Step VII: show 85 put 39 on 27 gold 17

And step VII is the last step of the rearrangement of the above input.

As per the rules followed in the above steps, find out in each of the following questions the appropirate step for the given input.

61. Input: glass full 15 37 water now 85 67

Which of the following will be Step VI of the above input?

- a) water 85 now 67 full glass 15 37
- b) water 85 now 67 glass full 15 37
- c) water 85 now 67 glass full 15 37
- d) There will be no such step
- e) None of these
- 62. Step II of an input is: ultra 73 12 16 mail sort 39 kite Which of the following steps will be the last but one?
  - a) VIII
- b) IX

c) VII

- d) VI
- e) None of these
- 63. Step III of an input is: win 75 voice 15 39 store gap 26

Which of the following is definitely the input?

- a) voice 15 win 75 39 store gap 26
- b) voice win 75 15 39 store gap 26
- c) 15 75 win voice store gap 26
- d) Can't be determined
- e) None of these
- 64. Step II of an input is: tube 83 49 34 garden flower rat 56

How many steps will be required to complete the rearrangement?

- a) Four
- b) Five
- c) Six

- d) Three
- e) None of these
- 65. Input: hunt for 94 37 good 29 48 book

How many steps will be required to complete the rearrangement?

- a) Four
- b) Five
- el Siv

d) Seven

e) None of these

Directions (Q. 66-70) Study the following information carefully and answer the question given below.

A, B, C, D, E, F, G and H are sitting around a circle facing the centre. B is 2<sup>nd</sup> to the right of D who is 3<sup>nd</sup> to the right of F. C is 2<sup>nd</sup> to the left of A who is 2<sup>nd</sup> to the left of F. G is 3<sup>nd</sup> to the right of E.

66. In which of the following combinations is the 1st person sitting between the 2st and the 3st persons? a) GCD b) FGH c) EFH d) ABE e) None of these 67. Who is 3rd to the right of H? a) G b) D c) C d) Data inadequate e) None of these 68. Who is to the immediate right of A? e) None of these d) Data inadequate 69. What is H's position with respect to B? a) 5th to the right b) 3nd to the left c) 5th to the left d) 3rd to the right e) 4th to the left 70. Who is to the immediate left of G? c) D d) Data inadequate e) None of these

#### **English Language**

Directions (Q. 71-80) Read the following passage carefully and answer the questions given below it.

A long time ago, on a big tree in the lap of the mountain, lived a bird named Sindhuka. It was a rather special bird because its droppings turned into gold as soon as they hit the ground.

One day, a hunter came to the tree in search of prey and he saw Sindhuka's droppings hit the ground and turn into gold. The hunter was struck with wonder. He though, "I have been hunting birds and small animals since I was a boy, but in all my 80 years, I have never seen such a miraculous creature. He decided that he had to catch the bird somehow. He climbed the tree and skillfully set a trap for the bird. The bird, quite unaware of the danger it was in, stayed on the tree and sang merrily. But it was soon caught in the hunter's trap. The hunter immediately seized it and shoved it into a cage.

The hunter took the bird home joyfully. But as he had time to think over his good fortune later, he suddenly realised, "If the king comes to know of this wonder, he will certainly take away the bird from me and he might even punish me for keeping such a rare treasure all to myself. So it would be safer and more honourable if I were to go to the king and present the unique bird to him," The next day, the hunter took the bird to the king and presented it to him in court with great **reverence**. The king was delighted to receive such an unusual and rare gift. He told his courtiers to keep the bird safe and feed it with the best bird food available.

The king's prime minister though, was **reluctant** to accept the bird. He said "O Rajah, how can you believe the word of a foolish hunter accept this bird? Has anyone in our kingdom ever seen abird dropping gold? The hunter must be either crazy or telling lies. I think it is best that you **release** the bird from the cage." After a little thought, the king felt that his prime minister's words were correct. So he

ordered the bird to be released. But as soon as the door of the cage was thrown open, the bird flew out, perched itself on a nearby doorway and defecated. To everyone's surprise, the dropping immediately turned into gold. The king mourned his loss.

71	Which of the	following is a	possible the most	appropriate title	for the story?

- a) The Skilled Hunter
- b) The King's Prime Minister
- c) The King's Defeat
- d) The Bird with the Gold Dropping
- e) The Trials and Tribulations of the Foolish Bird Sindhuka
- 72. Which of the following emotions made the hunter gift the bird to the king?
  - a) Respect
- b) Joy
- c) Pride

- d) Fear
- e) Awc
- 73. Which of the following is true according to the story?
  - a) Birds like Sindhuka were very common in the area near the mountain
  - b) Sindhuka remained caged for the rest of its life
  - c) Sindhuka was unaware of the trap laid by the hunter
  - d) The King, when told to not accept the bird, did not listen to his Prime Minister
  - e) All are true
- 74. Why was the king's Prime Minister reluctant to accept the bird?
  - a) He believed that the bird would die if caged
  - b) He know about the hunter's habit of lying
  - c) He believed that the bird would bring bad luck to the king
  - d) His sources had informed him that the hunter was crazy
  - e) None of these

d) Hope

- 75. How did the hunter find Sindhuka?
  - a) He had read stories about the bird and had set traps at various locations in the city
  - b) He followed the bird's droppings
  - c) He was on the lookout for a prey when he chanced upon it
  - d) People from the city had informed him about the bird's whereabouts
  - e) He was attracted by the birds calls

Directions (Q. 76-78) Choose the word which is most similar in meaning to the word/group of words printed in bold as used in the passage.

76	Rather		
	a) Regular	b) Quite	c) Instead
	d) But	e) Known	
77.	Release		
	a) Free	b) Vacate	c) Vent
	d) Let expire	e) Make public	
78.	Reverence		
	a) Respect	b) Detail	c) Astonishment

e) Remembrance

Directions (Q. 79-80) Choose the word which is most opposite in meaning to the word printed in bold as used in the passage.

	Reluctant a) True	b) Clever	c) Averse
	d) Hesitant	e) Keen	(4)
80.	Skilfully		
	a) Angrily	b) Haphazardly	c) Highly
	d) Cheaply	e) Deftly	

Directions (Q. 81-85): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

- A. The researchers in these companies claim that they could do better by allowing their employees to doze off at work place.
- B. The dreams, while at work, are thus helpful to solve crucial problems.
- C. Would you believe that some UK based companies are arranging for bed at the work place?
- D. The reason, they claim, could be that dreams produce creative solutions.
- E. We only hope that these crucial problems in UK are different from those of ours.
- F. But it is true and is considered as a step to improve quality of their products.
- 81. Which of the following should be the First sentence after rearrangement?
  - a) A d) D
    - e) None of these
- 82. Which of the following should be the Third sentence after rearrangement?
  - a) A
- b) B
- c) C
- d) D e) None of these
- 83. Which of the following should be the Fourth sentence after rearrangement?
  - a) A

- b) R
- c) C

- d) D
- e) None of these
- 84. Which of the following should be the Fifth sentence after rearrangement?
  - a) A

- b) B
- c) C

- d) D
- e) None of these
- 85. Which of the following should be the Sixth sentence after rearrangement?
  - a) A

b) B

c) C

- d) E
- e) None of these

Directions (Q. 86-90) Read this sentence to find out whether there is any grammatical mistake/error in it. The error, if any, will be in one part of the sentence. Mark the part with the error as your answer. If there is no error, mark 'No error' as your answer. (Ignore the errors of punctuation if any).

- 86. Attributing rise in inflation partly for withholding of food stocks by traders/the minister said that/he was committed/to easing this supply side bottleneck.
  - a) Attributing rise in inflation partly for withholding of food stocks by traders
  - b) The minister said that

- c) He was committed
- d) To easing this supply side bottleneck.
- e) No error
- India's largest utility vehicle and tractor maker/is again in the race to acquire/for stake in Swedish company/which is a premium car maker.
  - a) India's largest utility vehicle and tractor maker
  - b) Is again in the race to acquire
  - c) For stake in Swedish company
  - d) Which a premium car maker
  - e) No error
- 88. With sale of branded or premium petrol becoming almost nil/due to high duties, a government appointed panel has recommended/slashing excise duty to make them at par with regular fuel.
  - a) With sale of branded or premium petrol becoming almost nil
  - b) Due to high duties
  - c) A government appointed panel has recommended
  - d) Slashing excise duty to make them at par with regular fuel
  - e) No error
- 89. Keeping in mind/that power cuts are on different days in different areas/the change in the factory law would enable individual factories within an area/to determining their own weekly holidays.
  - a) Keeping in mind
  - b) That power cuts are on different days in different areas
  - c) The change in the factory law would enable individual factories within an area
  - d) To determining their own weekly holidays
  - e) No error
- 90. Police officers have refused on identify the bystander/who is the only eyewitness to the crime/but have said that the investigating team would explore/if he could be a witness in the case.
  - a) Police officers have refused on identify the bystander
  - b) Who is the only eyewitness to the crime
  - c) But have said that the investigating team would explore
  - d) If he could be a witness in the case
  - e) No error

**Directions (Q. 91-95):** Below the four words are given. One of these four words may be wrongly spelt. Find out the word which is wrongly spelt, if there is any. The number of that word is your answer. If all the words are correctly spelt mark All correct as the answer.

- 91. Below the four words are given. One of these four words may be wrongly spelt. Find out the word which is wrongly spelt, if there is any. The number of that word is your answer. If all the words are correctly spelt mark All correct as the answer.
  - a) Adventure

- b) Demonstration
- c) Environment

d) Innosent

- e) All Correct
- 92. Below the four words are given. One of these four words may be wrongly spelt. Find out the word which is wrongly spelt, if there is any. The number of that word is your answer. If all the words are correctly spelt mark All correct as the answer.
  - a) Limitasion

- b) Dependable
- c) Miniature

	d) Qualitative	e) All Correct	
93.	word which is wron	igly spelt, if there is any. Th	four words may be wrongly spelt. Find out the e number of that word is your answer. If all the
		spelt mark All correct as the	
	a) Lucrative d) Incidentally	b) Ancestral e) All Correct	c) Performanse
94.	word which is wron		four words may be wrongly spelt. Find out the e number of that word is your answer. If all the answer.
	a) Futility d) Positively	b) Separasion e) All Correct	c) Embarrassment
95.	word which is wron words are correctly	igly spelt, if there is any. The spelt mark All correct as the	
	a) Tournament d) Continuation	b) Enhancement e) All Correct	c) Amazingly
Directi	ons (O. 96-100): R	earrange the following six	sentences (A), (B), (C), (D) and (E) in the
			then answer the questions given below.
A.	agricultural activitie	es and in productive expans	of economic growth in agriculture, in rural non- ion of the informal sector which all have high trategy based on labour intensive exports.
B.		use it creates more resources	and has the potential of creating more space for
C.	If the growth is sou	reed upon those sectors of th	e economy or those activities that have a natural such growth helps poverty eradication.
D.	Economic growth is		
			rowth and the nature of growth.
96.	Which of the follow	ing should be the First senter	nce after rearrangement?
	a) A d) D	b) B c) E	c) C
97.		ing should be the Second sen	07/3
	a) E d) B	b) D c) A	c) C
0.0	***** *** ***		
98.		ing should be the Third sente	
	a) A	2 6 1 2 1	c) C
	d) D	e) E	
99.	Which of the follow	ing should be the Fourth sent	ence after rearrangement?
	a) E	b) D	c) C
	d) B	c) A	
100	). Which of th	e following should be the Fit	th sentence after rearrangement?

d) D e) E

#### Solutions:

- Sum of the present ages of husband, wife and child = (27 x 3 + 3 x 3) years = 90 years.
   Sum of the present ages of wife and child = (20 x 2 + 5 x 2) years = 50 years.
   Husband's present age = (90 50) years = 40 years.
- Largest size of the tile.HCF of 378 cm and 525 cm = 21 cms.

3. Murugan : Prasanna : Arun 
$$= (8000 \times 6) : (4000 \times 8) : (8000 \times 8)$$
$$= 48 : 32 : 64$$
$$= 3 : 2 : 4$$
Kamal's share 
$$= Rs.4005 \times \frac{2}{9}$$
$$= Rs.890$$

- 4. Required number of ways  $= \binom{6}{10} \cdot C_{6} \times \binom{10}{10} \binom{1$
- 5. P (getting a prize) =  $\frac{10}{(10+25)} = \frac{10}{35} = \frac{2}{7}$
- 6. Let the son's present age be x years.

  Then, man's present age
  = (x + 24) years
  = (x + 24) + 2 = x (x + 2)
  = x + 26 = 2x + 4
  = 22 years

7. C.P. = Rs.
$$\left[\frac{100}{122.50} \times 392\right]$$
  
= Rs. $\left[\frac{1000}{1225} \times 392\right]$   
= Rs.320  
Therefore, profit = Rs.(392 🖺 320)  
= Rs.72

8. 
$$1+4+9+16+....+n^2$$
  
=  $1^2+2^2+3^2+4^2+....+n^2=\frac{n-n+1-2n+1}{6}$ 

Sum of decimal places in the numerator and denominator under the radical sign being the same, we remove the decimal.

Given exp. 
$$= \frac{81 \times 484 / 64 \times 625}{8 \times 25}$$
$$= 9 \times \frac{22}{8} \times 25$$
$$= 0.99$$

10. Average speed 
$$= [2 \times 3 \times \frac{2}{3} + 2) \text{ km./hr.}$$

$$= \frac{12}{5} \text{ km./hr.}$$

$$= [\frac{12}{5} \times 5] \text{ km.}$$

$$= 12 \text{ km.}$$

Distance between house and school =  $\left[\frac{12}{2}\right]$  km

11. 
$$(A + B)$$
's 1 day's work  $= \frac{1}{10}$   
C's 1 day's work  $= \frac{1}{50}$   
 $(A + B + C)$ 's 1 day's work  $= [\frac{1}{10} + \frac{1}{50}] = \frac{6}{50} = \frac{3}{25}$ ......(i)  
A's 1 day's work  $= (B + C)$ 's 1 day's work ......(ii)

From (i) and (ii), we get  $2 \times (A's \ 1 \ day's \ work) = \frac{3}{2\pi}$ 

A's day's work 
$$= \frac{3}{50}$$
  
B's 1 day's work  $= [\frac{1}{10} \boxtimes \frac{3}{50}] = \frac{2}{50} = \frac{1}{25}$   
So, B alone could do the work in 25 days.

12. Sin B = 
$$\frac{b}{2R}$$
  
=  $\frac{AC}{2}$   
=  $\frac{R}{3R}$  [Given AB = AC = R]  
=  $\frac{1}{2}$   
B =  $\frac{\pi}{6}$  or  $\frac{5\pi}{6}$   
But, when B =  $\frac{5\pi}{6}$ , C =  $\frac{5\pi}{6}$  [AB = AC  $\Rightarrow$  B = C]  
 $\Rightarrow$  B + C >  $\pi$   
So, B =  $\frac{5\pi}{6}$  not possible  
 $\therefore$  B =  $\frac{\pi}{6}$   
C =  $\frac{\pi}{6}$  [AB = AC  $\Rightarrow$  B = C]  
A =  $\pi$   $\boxtimes$  [ $\frac{\pi}{6}$  +  $\frac{\pi}{6}$ ]  
A =  $\frac{2\pi}{3}$ 

13. For any triangle sum of any two sides must be greater than the third side.

The sides are 10, 12 and 'x'.

From Rule 2, x can take the following values: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 - A total of 19 values.

When x = 3 or x = 4 or x = 5 or x = 6, the triangle is an OBTUSE angled triangle.

The smallest value of x that satisfies both conditions is 7.  $(10^2 + 7^2 > 12^2)$ 

The highest value of x that satisfies both conditions is 15.  $(10^2 + 12^2 + 15^2)$ 

When x = 16 or x = 17 or x = 18 or x = 19 or x = 20 or x = 21, the triangle is an OBTUSE angled

Hence, the values of x that satisfy both the rules are x = 7, 8, 9, 10, 11, 12, 13, 14, 15. A total of 9 values.

14. Rate in still water 
$$= \frac{1}{2} (10 + 7) \text{ km./hr.}$$
= 8.5 km./hr.
$$= \frac{1}{2} (10 - 7) \text{ km./hr.}$$
= 1.5 km./hr.

15. Average amount of interest paid by the company during the given period

16. Required percentage = 
$$\left[\frac{3.00 + 2.52 + 3.84 + 3.68 + 3.96}{288 + 342 + 324 + 336 + 420} \times 100\right]\%$$
  
=  $\left[\frac{17}{1710} \times 100\right]\%$   
=  $1\%$ 

19. Required ratio 
$$= \frac{83 + 108 + 74 + 88 + 98}{98 + 112 + 191 + 133 + 142}$$
$$= \frac{451}{886}$$
$$= \frac{1}{1.3}$$
$$= \frac{10}{12}$$

20. The year 2004 is a leap year. So, it has 2 odd days. So, the day on 6<sup>th</sup> March 2005 will be 2 days beyond the day on 6<sup>th</sup> March 2004. But 6<sup>th</sup> March 2005 is Monday So, 6<sup>th</sup> March 2004 is Saturday.

21. Angle traced by hour hand in 
$$\frac{21}{4}$$
 hours =  $[\frac{360}{12} \times \frac{21}{4}]^{\circ} = 157 \frac{1}{2}^{\circ}$   
Angle traced by minute hand in 15 min. =  $[\frac{360}{12} \times 15]^{\circ} = 90^{\circ}$   
So, required angle =  $[157 \frac{1}{2}]^{\circ} \boxtimes 90^{\circ} = 67 \frac{1}{2}^{\circ}$ 

22. Part filled by A in 1 min. 
$$= \frac{1}{20}$$
Part filled by B in 1 min. 
$$= \frac{1}{30}$$
Part filled by (A + B) in 1 min. 
$$= \left[\frac{1}{20} + \frac{1}{30}\right]$$

$$= \frac{1}{12}$$

Both the pipes can fill the tank in 12 minutes.

23. Let the rate be R% p.a.

Then, 
$$\left[\frac{5000 \times R \times 2}{100}\right] + \left[\frac{3000 \times R \times 4}{100}\right] = 2200$$
  
 $100R + 120R = 2200$   
 $R = \left[\frac{2200}{220}\right] = 10$   
So, rate = 10%

24. Let the total sale be Rs. x

Then, 2.5% of x = 12.50  

$$\begin{bmatrix} \frac{25}{100} \times \frac{1}{100} \times x \end{bmatrix} = \frac{125}{10}$$
  
 $x = \begin{bmatrix} \frac{125}{10} \times \frac{100 \times 10}{25} \end{bmatrix} = 500$ 

25. Length of the carpet =  $\left[\frac{\text{total cost}}{\text{Rate/m}}\right] = \left[\frac{8100}{45}\right] \text{ m} = 180 \text{ m}.$ 

Area of the room = Area of the carpet = 
$$[180 \times \frac{75}{100}] m^2 = 135 m^2$$
  
So, breadth of the room =  $[\frac{Area}{length}] = [\frac{135}{18}] m = 7.5 m$ 

- 26. When n is odd,  $(x^n + a^n)$  is always divisible by (x + a)So, each one of 4743 + 4343 and 4747 + 4343 is divisible by 47 + 43
- 27. Clearly, we have (3+11+7+9+15+13+8+19+17+21+14+x/12) Number in place x is 137 + x = 144x = 144 @ 137 x = 7

28. HCF of 18 and 25 is 1. So, they are co-primes.

29. Ratio of speed of camel and elephant = 
$$\frac{5}{3}$$
 :  $\frac{7}{5}$  =  $\frac{5}{3}$  × 15 :  $\frac{7}{5}$  × 15 = 25 : 21

 For managing, A received = 5% of Rs. 7400 = Rs. 370. Balance = Rs. (7400 - 370) = Rs. 7030. Ratio of their investments =  $(6500 \times 6) : (8400 \times 5) : (10000 \times 3)$ = 39000 : 42000 : 30000 = 13:14:10 B's share = Rs.  $[7030 \times \frac{14}{27}]$  = Rs.2660

31. Required ratio = 
$$\frac{75 + 65}{85 + 95} = \frac{140}{180} = \frac{7}{9}$$
32. Required percentage =  $\left[\frac{70 + 80}{95 + 110} \times 100\right]\%$ 
=  $\left[\frac{150}{205} \times 100\right]\%$ 
= 73.17%

33. Average sales (in thousand number) of branches B1, B3 and B6 in 2000  $=\frac{1}{2}\times 80 + 95 + 70 = \frac{245}{2}$ 

Average sales (in thousand number) of branches B1, B2 and B3 in 2001  $= \frac{1}{3} \times 105 + 65 + 110 = \frac{280}{3}$   $\therefore \text{ required percentage} = \left[\frac{245/3}{280/3} \times 100\right]\% = \left[\frac{245}{280} \times 100\right]\% = 87.5\%$ 

34. Average sales of all the six branches (in thousand numbers) for the year 2000

 $= \frac{1}{6} \times 80 + 75 + 95 + 85 + 75 + 70$ = 80

- 35. Total sales of branches B1, B3 and B5 for both the years (in thousand numbers) = 80 + 105 + 95 + 110 + 75 + 95 = 56
- 36. Option A
- 37. Option C

How many are there → ka na ta da (i)

Many are welcome here → na pi ni ka (ii)

From equations (i) and (ii), many are → na ka

how → ta or da

38. Option A

Given number = 8 3 5 9 1 4 2 7

According to question, after rearrangement, new number = 1 4 2 7 8 3 5 9

2<sup>nd</sup> digit from right = 5

39. Option D

A D J U S T I N C

So, the pairs are AI and GI

- 40. Option B
- 41. Option E
- 42. Option B

Given arrangement = 27 T 15 R 3 W 4 M 6

According to question, letters converted into mathematical symbols

- = 27 M 20 + 6 = 33 M 20 = 13
- 43. Option D

W A V E 5 % 3 \*

and

W I N

Similarly,

S A N

44. Option E

3rd highest number = 647

Middle digit = 4

45. Option D

According to height T > (P, O) > (S, R)

So from question, it is not clear that which one is shorter S or R. So the given data is insuficient.

46. Option C

20 ff 6 = 14th from left = W

47. Option B

Symbol Consonant Number % R

48. Option D

After eliminating all vowels and symbols the arrangement will be BMR3JKDF69W4NP2Y5QZ7G 12<sup>th</sup> from right end = y

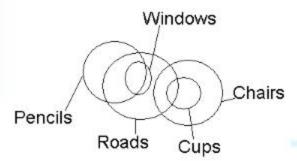
49. Option D

Letters Number F 6 9, W 4 \*, P 2 \$

Number/Symbol

50. Option D

51. Option C



Conclusions: I. False

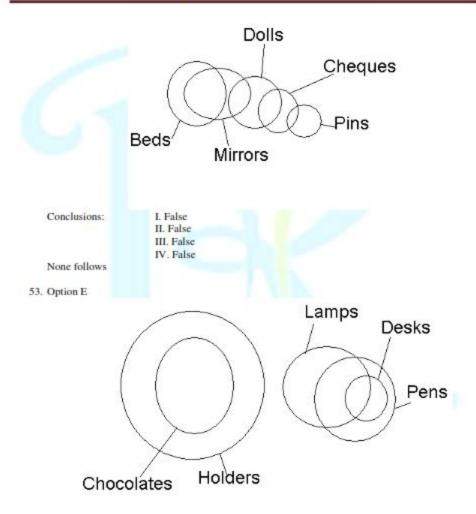
II. False

III. False

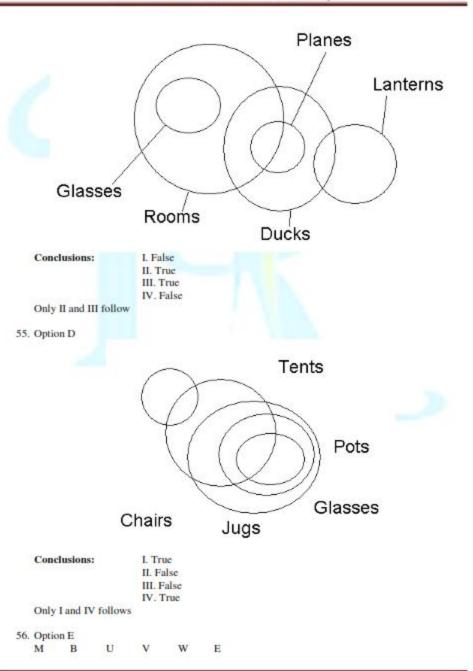
IV. True

Only IV follows

52. Option A



54. Option B



	#	*	0	7	5	2			
	Conti								
21	. Optio								
	A 4	O I	B	M #	F 8	U			
	+	9		#	0	0			
58	. Optio	on D							
	Acco	rding to	conditio	on (ii)					
	A	E	1	M	V	H			
	4	1	@	#	7	1			
		D							
39	. Optio			w com					
	T	raing to	conditio	on (iii) F		0			
	1	S	A 4	57.7	I	Q			
		3	125	8	@	3			
60	. Optio	on A							
	Acco	rding to	conditio	on (i)					
	W	M	E	I	J	U			
	@	#	2	@	9	0			
61	. Optio	on D							
01	Input		olass	full 15	37 water	r now 85 67			
	Step					7 now 85 67			
	Step					37 now 67			
	Step					II 15 37 67			
	Step				-	ss full 15 37			
	Step					ss 37 full 15			
	Step	V is the	last step	and ste	p VI is r	ot possible.			
02	. Optio		7.1	72 12 1		4.70 1.4			
	Step					ort 39 kite ail 39 kite			
	Step					mail kite			
	Step					2 16 kite			
	Step				-	16 12 kite			
	Step					16 kite 12			
						p is step VI.			
60	0	17							
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04	. Optio		technol	92 10 2	Lande	flower we se			
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195							-		
65	. Optio	on B			_	an ent. I			

hunt for 94 37 good 29 48 book hunt 94 for 37 good 29 48 book

hunt 94 good for 37 29 48 book

Input:

Step II:

Step III: hunt 94 good 48 for 37 29 book Step IV: hunt 94 good 48 for 37 29 book Step V: hunt 94 good 48 for 37 book 29

Hence five steps will be required to complete the arrangement.

- 66. Option D
- 67. Option C
- 68. Option B
- 69. Option E
- 70. Option A
- 71. Option D
- 72. Option D
- 73. Option C
- 74. Option E
- 75. Option C
- 76. Option B
- 77. Option A
- 78. Option A
- 79. Option E
- 79. Option L
- 80. Option E
- 81. Option C
- 82. Option A
- 83. Option D
- 84. Option B
- 85. Option D
- 86. Option A
- 87. Option B
- 88. Option A
- 89. Option E
- 90. Option A
- 91. Option D
- 92. Option A
- 93. Option C 94. Option B
- 95. Option E
- 96. Option D
- 97. Option C
- yr. Option C
- 98. Option E
- 99. Option D
- 100. Option A