

Section 1 - Quantitative Ability – 40 qs

1. How many five-digit numbers can be formed with digits 1,2,3,4 and 5 which are divisible by 2?

- a) 24 **b) 48** c) 4^4
 d) 720 e) 96

1. (b). Last digit must be 2 or 4.
 \therefore Required ways = $2 \times |4| = 48$.

2. Find the quadratic equation, one of whose roots is $3 + \sqrt{5}$.

2. Since one of the roots is $3 + \sqrt{5}$, the other root must be $3 - \sqrt{5}$.

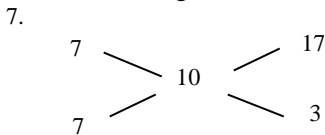
Sum of the roots = $3 + \sqrt{5} + 3 - \sqrt{5} = 6$

Product of the roots = $(3 + \sqrt{5})(3 - \sqrt{5})$
 $= 9 - 5 = 4$

Required equation = $x^2 - (\text{sum of roots})x + \text{product of roots} = 0$
 $\Rightarrow x^2 - 6x + 4 = 0$

3. A merchant has 100 kg of sugar, part of which he sells at a profit of 7% and the rest at a profit of 17%. He gains 10% on the whole. How much is sold at 7% profit?

- a) 30 kg **b) 70 kg** c) 55 kg d) 45 kg



\therefore The merchant sold $\left(\frac{7}{10} \times 100\right)$ kg
 $= 70$ kg at 7% profit. Hence, option (b).

4. If $2.713 = \frac{a}{495} = 2\frac{b}{495}$, then a and b are respectively:

- a) 1059, 343 b) 1386, 243
 c) **1343, 353** d) 1245, 931

9. $2.713 = \frac{2713 - 27}{99} = \frac{2686}{99} = \frac{1343}{495}$

$\therefore a = 1343$ $b = 353$. **Option (c).**

5. In how many ways can letters of the word KABIR be arranged if vowels are not together?

- a) 48 b) 120 **c) 72** d) 64

5. (c). Required arrangement = Total possible arrangement – together
 $= |5| - |4| \times |2| = 72$.

6. The average speed of a bus without stoppages is 45 km/hr and with stoppages it runs at 30 km/hr. for the same distance. How many minutes per hour does it stop?

- a) 30 minutes **b) 20 minutes**
 c) 40 minutes d) None of these

5. Stoppage time in minutes per hour

$= \frac{\text{higher speed} - \text{lower speed}}{\text{higher speed}} \times 60 = \frac{45 - 30}{45} \times 60 = 20$ minutes.

Hence, option (b).

7. How many numbers greater than 5000 can be formed with the digits 0,1,5,9 no digit being repeated?

- a) 12** b) 24 c) 36 d) 48

13. Had the number of hospitals grown at the same rate as in Year 1 to 2, then the number of hospitals in Year 3 would have been

- a) 625 b) 575 c) 550
d) 600 e) 650

10. Option (c); $345 - 90 = 355$. Hence, option (c)

11. By visual inspection; year I have the lowest number of birth as compared to the number of hospital. Hence, option (a).

12. No trans is follow between the hospital and birth. Hence, option (d)

13. $\frac{111}{345} \times 456 \approx 146 = 456 + 146 = 602 \sim 600$. Hence, option (d)

14. In how many ways can seven persons be seated around a round table so that two particular persons can be together?

- a) 180 b) 720 c) 120
d) 240 e) 360

15. (d). Let us club two particular persons as one.

So 6 persons can be arranged in $\frac{6!}{2!}$ ways i.e. 120 ways. Again the two particular persons can be arranged amongst themselves in 2 ways. So total no. of ways = $120 \times 2 = 240$ ways.

15. If $\frac{a}{b} = \frac{3}{2}$ and $\frac{a+2}{b-2} = \frac{2}{3}$, then $\frac{a-2}{b+2} = ?$

- a) $-\frac{4}{1}$ b) $\frac{4}{9}$
c) $\frac{8}{1}$ **d) $\frac{4}{1}$**

2. Let $a = 3k$ and $b = 2k$.

$$\therefore \frac{3k+2}{2k-2} = \frac{2}{3}$$

$$\therefore 9k + 6 = 4k - 4$$

$$\therefore k = -2$$

$$\therefore \frac{a-2}{b+2} = \frac{-6-2}{-4+2} = \frac{4}{1}. \text{ Hence, (d).}$$

16. The smallest number that leaves a remainder of 2 when divided by 4, 6 or 7 is

- a) 44 b) 62 c) 80 **d) 86**

3. The required number is the L.C.M. of (4, 6, 7) + 2 = $84 + 2 = 86$. **Option (d).**

17. A number, when successively divided by 3 and 5, leaves remainders of 2 and 1. When the same number is divided by 15, the remainder is

- a) 1 b) 2 **c) 5** d) 7

8. The number is $= 3(5x + 1) + 2$

$= 15x + 5$. When you divide this number by 15, the remainder is 5. **Option (c).**

18. A and B started a business with Rs. 7700 and 11,000 respectively. A stayed for the entire year. If at the end of the year they shared their profit in the ratio of 14 : 15, then for how many months was B's capital in the business?

- a) 7 months b) 6 months
c) 9 months d) None of these

18.

	A	B
Investment	7	10
Time	12	n
Profit	84	$10n$

$$\text{Now } \frac{84}{10n} = \frac{14}{15}$$

$$\therefore n = 9$$

\therefore B capital was in Business for 9 months.

Hence, option (c).

19. Find the day of the week on 4th January 2000, if 16th January 1997 was Thursday?

- a) Monday b) Wednesday
c) Saturday d) **Tuesday**

2. First we look for the leap years during this period–

1997, 1998 and 1999 are not leap years.

1998 and 1999 have 2 odd days

No. of day remaining in 1997

$$= 365 - 16 = 349 = 49 \text{ weeks } 6 \text{ odd days}$$

January 4, 2000 gives 4 odd days

$$\therefore \text{ total number of odd days } = 2 + 6 + 4 = 12 \text{ days } = 1 \text{ week } + 5 \text{ odd days}$$

Hence 4th January 2000 will be 5 days after Thursday, so it will be Tuesday. Hence, option (d).

Directions for questions 26 – 30: Based on the table given below answer the following questions.

Brand Name	January		February		March	
	Units	Values (Rs.)	Units	Values (Rs.)	Units	Values (Rs.)
Anchor	32	480	40	600	48	720
GE	45	585	45	585	45	585
MK	12	240	14	280	18	340

The table above shows the sales figures for 3 different types of switches over 3 months. Use this information to answer the following questions.

20. What is the unit cost of switch type GE?

- a) `11 b) **`13** c) `12
d) `14 e) Can't be determined

21. How many Anchor units could be expected to be sold in April following the same increase?

- a) 45 b) 40 c) 48
d) **56** e) 64

22. What is the approximate ratio of unit sales of the GE and MK over the three month period?

- a) **3:1** b) 1:3 c) 2:3
d) 3:2 e) 1:1

23. What percentage of the total revenue was generated in February (approx.)?

- a) 28% b) 29% c) **33%**
d) 30% e) None of these

26. Since the sales units and value for GE is same for each of the three months we can find the per unit price by dividing the value by the number of units in any particular month = $\frac{585}{45} = 13$. Hence, option (b)

27. Following the given trend we can conclude that $(48+8) = 56$ Switches would be produced by anchor in April. Hence, option (d).

28. Total units sold by GE in the three months = 135

Total units sold by MK in the three months = 44

$$\therefore \text{ Ratio } = \frac{135}{44} = \frac{3}{1} = 3:1 \text{ (approx)}. \text{ Hence, option (a)}$$

29. Total Revenue earned =

$$\text{Jan} = 480 + 585 + 240 = 1305$$

$$\text{Feb} = 600 + 585 + 280 = 1465$$

$$\text{Mar} = 720 + 585 + 340 = \underline{1645}$$

\therefore % of Revenue earned in Feb = $\frac{1465}{4415} \times 100 = 33.33\%$ (approx). Hence, option (c).

24. The sum of an A.P. consisting of 18 terms is 729. The ratio of the sum of the odd terms to the sum of even terms is 11 : 16. Find the common difference.

- a) 12 b) 13
c) 14 d) **15**

24. Let sum of even terms be S_E

Sum of odd terms be S_o

Let terms be t_1, t_2, \dots, t_{18}

$$t_2 = t_1 + d, t_4 = t_3 + d \dots \dots \dots t_{18} = t_{17} + d$$

$$\therefore t_2 + t_4 + \dots + t_{18} = t_1 + t_3 + \dots + 9d$$

$$S_E = S_o + 9d \dots \dots \dots (i)$$

$$\frac{S_E}{S_o} = \frac{16}{11} \Rightarrow \frac{S_E + S_o}{S_o} = \frac{16 + 11}{11} \Rightarrow \frac{729}{S_o} = \frac{27}{11}$$

$$\Rightarrow S_o = 297 \quad S_E = 432$$

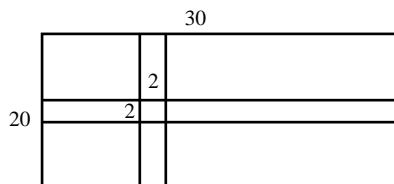
$$\text{By (i) } d = \frac{432 - 297}{9} = 15.$$

Hence, option (d).

25. What is the area of the land that is not ploughed in a rectangular field of side 30 m and 20 m if 2 tracks of 2 m width are ploughed along the length and the breadth?

- a) 120 m^2 b) 416 m^2 c) 400 m^2 d) **504 m^2**

8.



Area of field = 600 m^2

$$\text{Area ploughed} = 2(30) + 2(20) - 2(2) \text{ m}^2 = 96 \text{ m}^2$$

$$\therefore \text{Unploughed area} = 504 \text{ m}^2.$$

Hence, option (d).

26. A rectangular garden 100 meters long and 80 meters broad has two straight paths each 4 meters wide running through the middle of the opposite two sides. Find the cost of paving the path at Rs. 1 per square meter.

- a) Rs. 407 b) **Rs. 704**
c) Rs. 508 d) None of these

7.



$$\text{Area of path} = \left[\left\{ (100 \times 4) + (80 \times 4) - 4^2 \right\} \right] \text{m}^2$$

$$= [400 + 320 - 4^2] \text{m}^2 = 704 \text{m}^2$$

Hence required cost = Rs. 704 (b).

27. A can do a job in 3 days, B can do 3 times that job in 8 days and C can do 5 times that job in 12 days. If all of them work together, they will finish the job in

- a) $\frac{120}{47}$ days b) $\frac{8}{9}$ days c) $2\frac{1}{2}$ days d) 3 days

27. A, B and C can do the job in 3 days,

$\frac{8}{3}$ days and $\frac{12}{5}$ days respectively.

\therefore In 1 day, A, B and C can together do = $\left(\frac{1}{3} + \frac{3}{8} + \frac{5}{12}\right) = \frac{9}{8}$ work

\therefore Time taken to complete the work = $\frac{8}{9}$ days. Hence, option (b).

28. A golf ball has diameter equal to 4.2 cm. Its surface has 200 dimples each of radius 2 mm. Calculate the total surface area which is exposed to the surroundings assuming that the dimples are hemispherical.

- a) 78 cm^2 b) **80.58 cm^2**
c) 81.72 cm^2 d) None of these

10. Had there been no dimple, the exposed surface area would have been $4\pi\left(\frac{4.2}{2}\right)^2 \text{ cm}^2$. But in the case of each dimple, a surface area equal to

πr^2
($r = 0.2 \text{ cm}$) has been removed by the surface area of a hemisphere i.e., $2\pi r^2$ of same radius.

\therefore total surface area exposed to the surroundings

$$\begin{aligned} &= \{4\pi \cdot (2.1)^2 - 200 \cdot \pi(0.2)^2 + \\ &\quad 200 \cdot 2\pi(0.2)^2\} \text{ cm}^2 \\ &= 4\pi(4.41 - 50 \times .04 + 100 \times .04) \text{ cm}^2 \\ &= 4 \times \frac{22}{7} \times (4.41 - 2 + 4) \text{ cm}^2 = 4 \times \frac{22}{7} \times 6.41 \text{ cm}^2 = 80.58 \text{ cm}^2 \end{aligned}$$

29. If the points (1,1), (a,0) and (0,b) are collinear then, what is the value of $a + b$?

- a) 0 b) 1
c) **ab** d) None of these

2. $x_1(y_2 - y_3) + x_2(y_3 - y_1) + x_3(y_1 - y_2) = 0$

$$\Rightarrow 1(0 - b) + a(b - 1) + 0 = 0$$

$$\Rightarrow -b + ab - a = 0 \Rightarrow a + b = ab.$$

Hence, option (c).

30. The compound interest on a certain sum for two years is Rs.2200 and the simple interest is Rs. 2000. If this sum is invested such that the simple interest is Rs. 800 and the number of years is now equal to the rate per cent per annum, find the new rate per cent.

- a) 2% b) **4%** c) 8% d) 6%

30. SI for one year = $\frac{2000}{2} = \text{Rs. } 1000$

CI for two years = SI for two years + SI on simple interest of 1st year
 $= 1000 \times 2 + 200$

$$\therefore \text{Rate of interest for SI on SI of 1st year} = 100 \times \frac{100}{1000} = 10\%$$

$$\text{Hence, original principal} = \frac{SI \times 100}{\text{Rate} \times 1} = 1000 \times \frac{100}{20} = \text{Rs. } 5000$$

Let n be the new number of years and rate of interest.

$$\therefore 800 = \frac{5000 \times n^2}{100}$$

$$\therefore n = 4 \quad \text{Hence option (d).}$$

31. How many even integers n , between 100 and 200 are divisible neither by seven nor by nine?[CAT 2003]

- a) 40 b) 37 c) **39** d) 38

4. Even integers between 100 & 200 = 100, 102, 104, 106,200 = 51

Numbers between 100 & 200 divisible by 7 = 105, 112, 119, 126, 133, 140, 147, 154,196 = 14

Even numbers among the above numbers = 112, 126, 140,196 = 7

Even numbers between 100 & 200 divisible by 9 = 108, 126,198 = 6

Even numbers divisible by both 7 & 9 = 126

Even Numbers which are divisible neither by 7 nor by 9 = $51 - 7 - 6 + 1 = 39$. **Option (c).**

32. "I am three times as old as you were when I was as old as you are now", said a mother to her son. If the sum of the present ages of the mother and the son is 120 years, then what is the present age (in years) of the mother?

4. Present age : Mother x and Son y

When mother was y years old

i.e. $(x - y)$ years before, at that time son's age was

$$y - (x - y) = (2y - x) \text{ years}$$

$$\therefore x = 3(2y - x) \Rightarrow \frac{x}{y} = \frac{3}{2}$$

$$\text{If } x = 3k, y = 2k$$

$$\therefore 3k + 2k = 120 \Rightarrow k = 24$$

$$\Rightarrow \text{Present age of mother is } 3 \times 24 = 72 \text{ years.}$$

33. The smallest value of $x^2 + 3x + 1$, where $-2 < x < -1$ is:

a) -1 b) $-5/4$ c) 5 d) $-3/2$

9. The smallest value of $ax^2 + bx + c$ if $a > 0$

$$\text{is at } x = \frac{-b}{2a}, \frac{-b}{2a} = \frac{-3}{2}$$

$$\therefore \text{Smallest value } \left(\frac{-3}{2}\right)^2 + 3\left(\frac{-3}{2}\right) + 1 = \frac{-5}{4}$$

(N.B) For the expression $ax^2 + bx + c$

$$\text{If } a > 0 \text{ has minimum value at } x = \frac{-b}{2a}$$

$$\text{If } a < 0 \text{ has maximum value at } x = \frac{-b}{2a}$$

34. 20% of water is evaporated from an urn with 10 kgs of water containing 800 gms of consumer salt. Find the percentage of salt in the remaining solution.

a) $5\frac{9}{11}\%$ b) $8\frac{2}{11}\%$ c) $10\frac{10}{11}\%$ d) $9\frac{1}{11}\%$

$$5. \text{ Water remaining} = \left(\frac{80}{100} \times 10\right) \text{ kg}$$

$$= 8 \text{ kg}$$

$$\text{Salt remaining} = 800 \text{ gm.}$$

$$\text{Total weight of solution} = 8800 \text{ gm}$$

$$\therefore \text{Percentage of salt in the solution} = \frac{800}{8800} \times 100\% = 9\frac{1}{11}\%$$

Hence, option (d).

35. Each time a bar of soap was used, its volume decreased by 10%. What is the minimum number of times a new bar would have to be used so that less than one-half its volume remains?

a) 5 b) 6 c) 7 d) 8

8. Number of Times Approx. Volume

Soap used **Remaining (as %)**

1 0.9%

2 $(0.9)^2$ or 81%

3 $(0.9)^3$ or 72.9%

4 $(0.9)^4$ or 65.61%

5 $(0.9)^5$ or 59.1%

6 $(0.9)^6$ or 53.1%

7 $(0.9)^7$ or 47.8%

So if the soap is used 7 times the volume will be less than $\frac{1}{2}$ of the original value. Hence option (c).

36. Two clocks begin to strike 11 together. The first clock takes 30 seconds while the second takes 20 seconds. What is the interval between the first clock's fifth stroke and the second clock's seventh stroke?

a) 3 seconds b) 2 seconds c) 1 seconds d) 0 seconds

2. In 11 strikes there are 10 time periods.

\therefore 1 time period of the first clock and second clock is 3 seconds and 2 seconds respectively.

The first clock will have 4 time periods in 5 strikes which is equivalent to $4 \times 3 = 12$ seconds

The second clock will have 6 time periods in 7 strikes which is equivalent to $6 \times 2 = 12$ seconds

Hence option (d).

37. Find the smallest ratio among 7 : 15, 15 : 23, 17 : 25, 21 : 29.

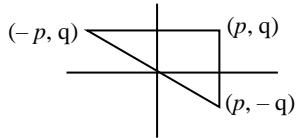
- a) **7 : 15** b) 15 : 25
 c) 17 : 25 d) 21 : 29

2. Here every ratio is greater than 50% except 7 : 15. Hence, option (a).

38. If (p, q) , $(-p, q)$ and $(p, -q)$ are the vertices of a triangle, then its area is

- a) 0 b) pq c) $4pq$ d) **$2pq$**

3. $\Delta = \frac{1}{2} \times 2p \times 2q = 2pq$



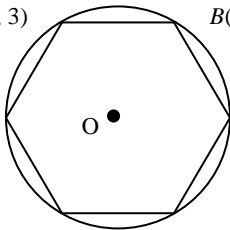
Hence, option (d).

39. A regular hexagon with the points having co-ordinates $(2, 3)$ & $(4, 3)$ on one of its sides, is inscribed in a circle. Find the co-ordinates of the centre of a circle?

- a) $(3, \pm 3\sqrt{3})$ b) $(3, -1 \pm \sqrt{3})$
 c) **$(3, 3 \pm \sqrt{3})$** d) $(3, 2 \pm \sqrt{3})$

39. 5.

A(2, 3) B(4, 3)



Length of AB = $\sqrt{(4-2)^2 + (3-3)^2} = \sqrt{2^2} = 2$ units.

\therefore the radius of the circle = 2 units.

Let the centre O be (α, β)

" $(\alpha - 2)^2 + (\beta - 3)^2 = 4$ and $(\alpha - 4)^2 + (\beta - 3)^2 = 4$

" Either $\alpha - 2 = \alpha - 4$ (which is impossible)

Or, $\alpha - 2 = 4 - \alpha$

" $\alpha = 3$ " $(1 - 2)^2 + (\beta - 3)^2 = 4$

" $(\beta - 3)^2 = 3$ " $\beta = 3 \pm \sqrt{3}$

\therefore Co-ordinates of the centre are $(3, 3 \pm \sqrt{3})$.

Hence option (c).

40. Which term of the G.P., series $\frac{1}{4}, -\frac{1}{2}, 1, \dots$ is -128 ?

- a) None b) 64 c) 32 d) **10**

4. In this case, $a = \frac{1}{4}$; $r = -2$; $T_n = -128$

$T_n = a \cdot r^{n-1}$

$-128 = \frac{1}{4} \cdot (-2)^{n-1}$

or, $-128 \times 4 = (-2)^{n-1}$ or, $-512 = (-2)^{n-1}$

or, $(-2)^9 = (-2)^{n-1}$

or, $9 = n - 1$ or, $n = 10$. Hence, option (d).

Section II – Logical Reasoning – 40 qs

Directions for questions 41 – 45: In each problem, out of the five figures marked a, b, c, d and e, four are similar in a certain manner. However, one figure is not like the other four. Choose the figure which is different from the rest.

41.

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41. (b). All others contain only one 'x' in each row and one 'x' in each column.

Directions for questions 42 and 43: Read the following information carefully and answer the questions that follow: blood relation

P – Q means P is husband of Q.

P + Q means P is daughter of Q.

P × Q means P is brother of Q.

42. If A + B × C, then which of the following is true? Medium

- a) A is the daughter-in-law of C.
- b) A is the aunt of C.
- c) A is the niece of C.
- d) A is the daughter of C.
- e) None of these

43. If A + B – C, then which of the following is true? Medium

- a) C is the mother-in-law of A.
- b) C is the aunt of A.
- c) C is the mother of A.
- d) C is sister-in-law of A.
- e) None of these

42. A + B × C

A is daughter of B

B is brother of C

So, A is the niece of C.

Ans: (c)

43. A + B – C

A is daughter of B.

B is husband of C.

So, C is the mother of A.

Ans : (c)

44. How many 8s are there in the following number series which are either preceded by 6 or followed by 9?

9 8 6 4 5 6 8 9 1 5 6 5 9 4 6 8 9 2 6 8 9 5 8 9

- a) Two
- b) One
- c) Three
- d) **Four**
- e) None of these

43. (d). 9 8 6 4 5 6 **8** 9 1 5 6 5 9 4 6 **8** 9 2 6 **8** 9 5 **8** 9

Directions for questions 18 to 20: In each question below, a statement is given, followed by two conclusions numbered I & II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

Give answer:

- (a) If only conclusion I follows.
- (b) If only conclusion II follows.
- (c) If either I or II follows.
- (d) If neither I nor II follows, and
- (e) If both I & II follow.

45. Statement: Water supply in wards X and Y of the city will be affected by about 60% on Sunday because repairing work of the main lines is to be carried out.

Conclusion:

- I. The residents in these wards should economize on water on Sunday.
- II. The residents in these wards should store some water on the previous day.

Ans: - (e)

46. Statement: People who speak too much against dowry are those who had taken it before

Conclusions: Medium

- I. It is easier to have said than done
- II. People have double standards.

Ans: - (e)

47. Statement: The national norm is 100 beds per thousand of population but in this state, 200 beds per thousand are available in the hospitals. Medium

Conclusion:

- I. Our national norm is appropriate
- II. The state's health system is taking adequate care in this regard

Ans:- (b)

45. (e). the information has been given before hand, so that the residents can collect water on the previous day and use less water on Friday. So, both I & II follow.

46. (e). The statement clearly implies that it is easier to say than to do something and what people say, is different from what they do. So, both I & II follow.

47. (b). II follows. Whether the national norm is appropriate or not cannot be said) So I does not follow. But, more number of beds per thousand of population are available in the state)

Directions for questions 37 to 40: Read the following information carefully and answer the questions given below them:

Six books P, Q, R, S, T and U are placed side by side Q, R and T have blue covers and other books have red covers. Only S and U are new books and rest are old P, R and S are all Science subjects and others are manuals.

48. Which book is a new Science book with a red cover?

- a) P
- b) R
- c) S
- d) T
- e) Q

49. Which of the following pairs of books are old manuals with blue cover?

- a) Q and U
- b) T and U
- c) S and U
- d) Q and T
- e) None of these

50. Which red-covered book is a new manual?

- a) P
- b) Q
- c) U
- d) S
- e) R

51. Which one is an old blue-covered Science book?

- a) P
- b) Q
- c) S
- d) R
- e) U

48.

Books	Colour of cover	Old or New	subject
P	Red	Old	Science
Q	Blue	Old	Manuals
R	Blue	Old	Science
S	Red	New	Science
T	Blue	Old	Manuals
U	Red	New	Manuals

Hence, option (c)

49.

Books	Colour of cover	Old or New	subject
P	Red	Old	Science
Q	Blue	Old	Manuals
R	Blue	Old	Science
S	Red	New	Science
T	Blue	Old	Manuals
U	Red	New	Manuals

Hence, option (d)

50.

Books	Colour of cover	Old or New	subject
P	Red	Old	Science
Q	Blue	Old	Manuals
R	Blue	Old	Science
S	Red	New	Science
T	Blue	Old	Manuals
U	Red	New	Manuals

Hence, option (c)

51.

Books	Colour of cover	Old or New	subject
P	Red	Old	Science
Q	Blue	Old	Manuals
R	Blue	Old	Science
S	Red	New	Science
T	Blue	Old	Manuals
U	Red	New	Manuals

Hence, option (d)

Directions for questions 1 to 7: Read the following information carefully and answer the questions given below: Puzzle

In a building with six floor – six persons i.e. Jagadish, Rushi, Pradeep, Manohar, Bharat and Amar are staying in different floors from Ground floor to 5th floor not in the same order. Ground floor is numbered as one, first floor is numbered as two and so on. Bharat stays below Jagadish and Rushi stays above Monohar. Rushi does not stay on the top most floor. Two persons are staying between Monohar and Rushi. Amar is not staying on a odd numbered floor. Pradeep's floor is immediately above the Amar's floor.

52. On which floor Pradeep is staying? **Medium**

- a) One b) Two c) Three d) Four e) None

53. How many floors are there between the floors if Bharat and Rushi? **Medium**

- a) Nil b) One c) Two d) Three e) Four

54. Which of the following is the correct statement? **Medium**

- a) Jagadish stays on the floor number Five.
b) Pradeep stays immediately below Rushi.
c) Jagadish stays below Rushi.
d) Amar stays in floor number three.
e) None of these

55. Who is staying in the floor number one? **Medium**

- a) Bharat b) Rushi c) Pradeep d) Manohar e) None

52 to 54:

Floor Numbers	Persons
6	Jagadish
5	Bharat
4	Rushi
3	Pradeep
2	Amar
1	Manohar

As Amar is not staying on a odd number floor and Pradeeps floor is immediately above Amar's floor, so Amar has to be stayed on floor number two.

52. (c) Three

53. (a) Nil

- (c) If either I or II is implicit. (d) If neither I nor II is implicit.
 (e) If both I and II are implicit.

61. Statement: "A Honda city is required on rent" – a display on a bill board medium Ans :- (b)
Assumptions:

- I. All types of vehicles are available on hire
 II. People will respond to the advertisement.

61. (a). Obviously, the comparison could not be made without knowing the sale of all the radio sets. So, assumption I is implicit.

62. Statement: Of all the radio sets manufactured in India, the "Y" brand has the largest sale medium
Assumptions:

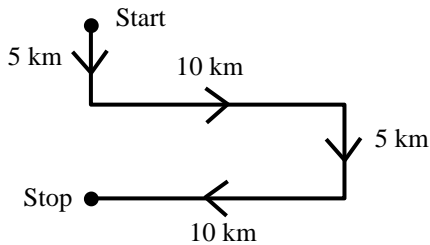
- I. The sale of all the radio sets manufactured in India is known.
 II. The manufacturing of no other radio set in India is as large as "Y" brand radio.

Ans :- (a)

62. (e). The performance of the individual has to be tested over a span of time – so I holds true; it has also been stated that the individual's worth shall be reviewed before confirmation – so II also holds true)

63. Facing South Amit walks 5 km straight and then turns left and walks 10 km and turns right and walks 5 km and turns right and walks 10 km and stops. What directions is Amit facing and how far is he from his starting point? direction test – medium
 a) South, 5 km b) North, 10 km c) East, 10 km d) West, 10 km e) None of these

63.



Therefore Ans : (d) West, 10 km

Directions for questions 26 – 30: In each question below are given three statements followed by four conclusions numbered (I), (II), (III) and (IV). You have to take the given statements to be true even if they seem to be at variance with the commonly known facts and judge the conclusions on the basis of it. Choose the options based on the conclusions chosen.

64. **Statements :**

- (i) Some giraffes are tigers
 (ii) Some tigers are birds
 (iii) Some birds are not penguins

Conclusions :

- (i) Some giraffes are birds (ii) Some giraffes are not tigers
 (iii) All giraffes are tigers (iv) Some tigers are not penguins

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

65. **Statements :**

- (i) No statements are phones
 (ii) Some phones are machines.
 (iii) All machines are nuts.

Conclusions :

- (i) Some phones are not statements. (ii) Some statements are not machines.

- (iii) Some nuts are phones. (iv) Some nuts are not statements.
 a) Only I and III follow b) **Only I, III and IV follow**
 c) Only I, II and III follow d) Only IV follows e) None of these

66. Statements :

- (i) All books are copies
 (ii) Some pens are copies
 (iii) All men are pens.

Conclusions :

- (i) All copies are men (ii) Some books are pens
 (iii) Some men are books (iv) Only men are pens
 a) Only I, II and IV follow b) Only I, III and IV follow
 c) Only II and III follows d) Only IV follows e) **None follows**

67. Statements :

- (i) Some mountains are valleys
 (ii) All valleys are toys
 (iii) Some toys are pods

Conclusions :

- (i) Some pods are valleys. (ii) Some mountains are pods.
 (iii) Some toys are mountains. (iv) Some pods are mountains.
 a) None follows b) Only II follows c) **Only III follows**
 d) Only IV follows e) None of these

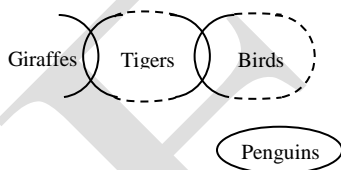
68. Statements :

- (i) Some cars are dogs. (ii) Some dogs are bats. (iii) Some bats are shirts.

Conclusions:

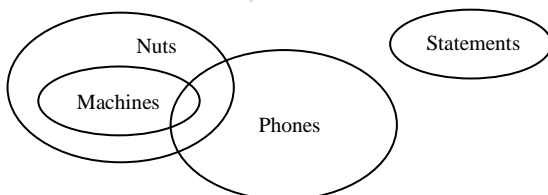
- (i) Some shirts are cars. (ii) Some dogs are shirts.
 (iii) Some shirts are bats. (iv) All cars are shirts.
 a) Only I follows b) Only I and II follow c) Only I, II and III follow
 d) Only II and III follow e) **None of these**

26. (e). Using Venn Diagrams,



Penguins may or may not overlap with giraffes and/or tigers. All the conclusions may or may not follow, so nothing definite can be said.

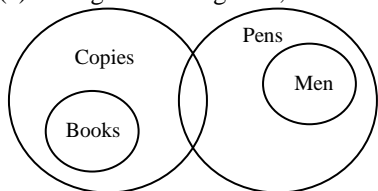
27. (b).
 Using Venn Diagrams,



- (I) Holds from the statements given
 (II) May or may not hold.
 (III) Holds as some nuts, which are phones are not statements.

(IV) Evident from Statement (iii)

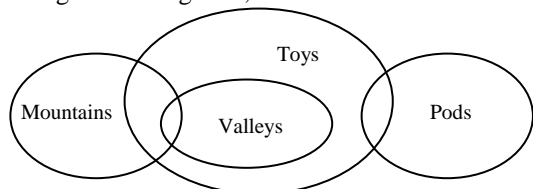
28. (e). Using Venn Diagrams,



None of the conclusions holds.

29. (c).

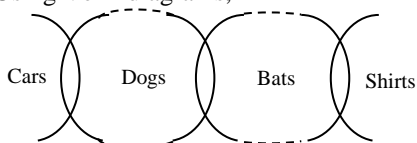
Using Venn Diagrams,



Only (III) follows as is evident from the figure.

30. (e).

Using Venn diagrams,



Only conclusion III follows. Hence option (e)

Directions for questions 32 – 37: A number sorting machine when given an input of numbers, rearranges the numbers in a particular manner step by step as indicated below till all the numbers are arranged in a particular order. Given below is an illustration of this arrangement. Input – output

Input : 199 34 68 122 90 288 372 178 409 211

Step I: 90 199 34 68 122 288 372 178 409 211

Step II: 90 409 199 34 68 122 288 372 178 211

Step III: 90 409 211 199 34 68 122 288 372 178

Step IV: 90 409 211 122 199 34 68 288 372 178

Step V: 90 409 211 122 34 199 68 288 372 178

Step VI: 90 409 211 122 34 372 199 68 288 178

Step VII: 90 409 211 122 34 372 68 199 288 178

Step VIII: 90 409 211 122 34 372 68 178 199 288

(This is the final arrangement and Step VIII is the last step for this input)

69. How many steps will be required to get the final output for the following input? Medium

Input : 54 78 12 17 183 29 40 71 22 182

a) 6

b) 7

c) 8

d) 9

e) None of these

70. If the second step of an input is 11 12 87 54 61 89 56 84 295 299 then which of the following steps will be 11 12 61 54 56 87 89 84 295 299 for the same input? Hard

a) 5

b) 6

c) 7

d) 8

e) None of these

71. What will be the last step for the following input? Medium

Input: 12 65 34 67 201 23 81 64 55 79

a) 201 12 23 81 34 64 55 65 67 79

b)

12 23 34 55 64 65 67 79 81 201

c) 201 12 23 81 34 64 65 67 55 79

d)

201 81 79 67 65 64 55 34 23 12

e) None of these

72. If following is the fourth step of an input, what will be the second step? Easy
 Step IV: 102 201 111 151 253 64 72 88 159 489
- 102 201 111 253 151 64 72 88 159 489
 - 102 201 253 111 151 64 72 88 159 489
 - 102 201 151 253 111 64 72 88 159 489
 - 102 201 151 111 253 64 72 88 159 489
 - Can't be determined**
69. The rule followed is:
 Assign each number a separate number value which is the product of the digits of each number. The number, which has been assigned smallest value is placed at first position in step I; and the remaining numbers shift one position rightwards.(In case the first number has already been the smallest assigned value than the number which has been assigned the next value(just larger than it) will become second and rest will shift one position rightward and so on.)
 If two or more numbers have been assigned equal values (product of digits) then priority is given to the number which is smaller/smallest in nature.
- (c). Input : 54 78 12 17 183 29 40 71 22 182
 Step I : 40 54 78 12 17 183 29 71 22 182
 Step II : 40 12 54 78 17 183 29 71 22 182
 Step III : 40 12 22 54 78 17 183 29 71 182
 Step IV : 40 12 22 17 54 78 183 29 71 182
 Step V : 40 12 22 17 71 54 78 183 29 182
 Step VI : 40 12 22 17 71 182 54 78 183 29
 Step VII : 40 12 22 17 71 182 29 54 78 183
 Step VIII : 40 12 22 17 71 182 29 54 183 78
70. The rule followed is:
 Assign each number a separate number value which is the product of the digits of each number. The number, which has been assigned smallest value is placed at first position in step I; and the remaining numbers shift one position rightwards.(In case the first number has already been the smallest assigned value than the number which has been assigned the next value(just larger than it) will become second and rest will shift one position rightward and so on.)
 If two or more numbers have been assigned equal values (product of digits) then priority is given to the number which is smaller/smallest in nature.
- (b). Step II : 11 12 87 54 61 89 56 84 295 299
 Step III: 11 12 61 87 54 89 56 84 295 299
 Step IV : 11 12 61 54 87 89 56 84 295 299
 Step V : 11 12 61 54 56 87 89 84 295 299
 Step VI : 11 12 61 54 56 84 87 89 84 295 299
71. The rule followed is:
 Assign each number a separate number value which is the product of the digits of each number. The number, which has been assigned smallest value is placed at first position in step I; and the remaining numbers shift one position rightwards.(In case the first number has already been the smallest assigned value than the number which has been assigned the next value(just larger than it) will become second and rest will shift one position rightward and so on.)
 If two or more numbers have been assigned equal values (product of digits) then priority is given to the number which is smaller/smallest in nature.
- (a). Input: 12 65 34 67 201 23 81 64 55 79
 Step I: 201 12 65 34 67 23 81 64 55 79
 Step II: 201 12 23 65 34 67 81 64 55 79
 Step III: 201 12 23 81 65 34 67 64 55 79
 Step IV: 201 12 23 81 34 65 67 64 55 79
 Step V: 201 12 23 81 34 64 65 67 55 79
 Step VI: 201 12 23 81 34 64 55 65 67 79
72. The rule followed is:
 Assign each number a separate number value which is the product of the digits of each number. The number, which has been assigned smallest value is placed at first position in step I; and the remaining numbers shift one position rightwards.(In case the first number has already been the smallest assigned value than the number which has been assigned the next value(just larger than it) will become second and rest will shift one position rightward and so on.)
 If two or more numbers have been assigned equal values (product of digits) then priority is given to the number which is smaller/smallest in nature.
- (e). The previous steps cannot be determined from the next step.

Directions for questions 13 to 15: A certain code language consisting of certain words, is as follows:

- (i) 'Man to la' means 'you are beautiful'
- (ii) 'to ho ba ka' means 'they are very nice'
- (iii) 'sa da ka' means 'who is nice'
- (iv) 'od ho man ka' means 'they beautiful nice people'.

73. Which of the following means 'people' in that code language?
 a) od b) ho c) man d) ka e) data inadequate

73. to – are
 ka – nice
 ho – they
 man – beautiful
 la – you
 ba – very
 od – people
 Hence, option (a)

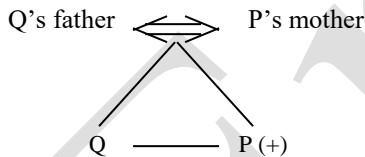
Directions for questions 27 to 31: Each of the questions below consists of a question and 2 statements numbered I and II given below it. Give answer

- (f) If data in statement I alone is sufficient to answer
- (g) If data in statement II alone is sufficient to answer
- (h) If data in either statement I or II alone are sufficient to answer
- (i) If the data even in both the statements I or II together are not sufficient to answer.
- (j) If data in both the statements I or II are necessary to answer the question.

74. Who is brother of Q? medium
 I. Q's father is the husband of P's mother.
 II. P is an intelligent boy.
 Ans:- (e)

75. Is Kapil wearing a red shirt? Medium
 I. Kapil is wearing either a red or a black shirt.
 II. No, Kapil is not wearing a black shirt.
 Ans: - (b)

74. (e). From I and II :



Hence P is brother of Q.

75. (b). The first statement does not give a definite answer. The second statement tells us he is not wearing a red shirt. Hence (b)

Directions for questions 1 to 4 : Read the instructions and answer accordingly.

- A \$ B means A is greater than B.
- A @ B means A is either greater than or equal to B.
- A % B means A is equal to B.
- A © B means A is smaller than B.
- A * B means A is smaller than or equal to B.

Now each of the following questions assuming the given statements to be true, find which of the two conclusions I & II given below is/are definitely true? Give answer as :

- 1) If only conclusion I is true.
- 2) If only conclusion II is true.
- 3) If either I or II is true.

4) If neither I nor II is true.

5) If both I & II are true.

76. Statement: $N \odot W, L \$ N, K \% L, W \% D.$
Conclusions: I. $L \% W$ II. $D \$ N$

Ans: 2

77. (b) Statement: $L @ A, S \odot E, A \% S, G \$ L.$
Conclusions: I. $A \odot E$ II. $G \$ A$

Ans; 5

78. (c) Statement: $M \% I, A \$ M, T * I, T \% K.$
Conclusions: I. $M \% K.$ II. $K \odot M.$

Ans; 3

79. (d) Statement: $I * R, D \odot I, E \% C, R \$ E.$
Conclusions: I. $R \$ C.$ II. $I \% R.$

Ans: 1

76 – 79:

The symbol represents as follows:

\$	\leftrightarrow	$>$
@	\leftrightarrow	\geq
%	\leftrightarrow	$=$
<	\leftrightarrow	\odot
\leq	\leftrightarrow	$*$

76. Statement: $N < W, L > N, K = L, W = D.$
Conclusions: I. $L = W$ II. $D > N$
Ans. (2).

77. Statement: $L \geq A, S < E, A = S, G > L.$
Conclusions: I. $A < E$ II. $G > A$
Ans. (5).

78. Statement: $M = I, A > M, T \leq I, T = K.$
Conclusions: I. $M = K.$ II. $K < M.$
Ans : (3).

79. Statement: $I \leq R, D < I, E = C, R > E.$
Conclusions: I. $R > C.$ II. $I = R.$
Ans : (1).

Directions for questions 13 to 15: A certain code language consisting of certain words, is as follows:

- (i) 'Man to la' means 'you are beautiful'
- (ii) 'to ho ba ka' means 'they are very nice'
- (iii) 'sa da ka' means 'who is nice'
- (iv) 'od ho man ka' means 'they beautiful nice people'.

80. Which of the following means 'very' in that code language?

- a) ka b) to c) ho d) ba e) data inadequate

80. to – are

ka – nice

ho – they

man – beautiful

la – you

ba – very

od – people

Hence, option (d)

ERUDITE

Section III – Verbal Ability – 40 qs

Directions for questions 60 – 62: Choose the word which is opposite in meaning to the word given in bold as used in the passage:-

81. **STOCK**

- a) Inventory b) Progenitor c) Trunk d) Handle e) **Banality**

82. **VENTURE**

- a) to take the risk of b) jeopardize c) speculation
d) Imperil e) **easy-going**

83. **FLOAT**

- a) To launch b) To issue c) To pursue d) To glide e) **To collapse**

81. The goods or merchandise kept on the premise of a shop or warehouse. Hence option (e).

82. A risky or daring journey or undertaking. Hence option (e).

83. The rest or move on or near the surface of a liquid without sinking. Hence option (e).

Directions for questions 57 to 60: Choose the word which is same in meaning as the word given in bold as used in the passage:

84. CALIBRATE

- a) Graduate b) fine tune c) **to devise carefully so as to have precise application**
d) to mark e) to determine the accuracy

85. MAULED

- a) To injure by a rough beating, shoving b) a heavy hammer c) to lacerate
d) **to batter** e) to handle clumsily

86. COAX

- a) To fool b) to deceive c) **to persuade gently** d) flattery e) to fondle

84. (c). (c). In the passage, "calibrate" is used to give a sense that Buffett makes annual installments instead of one time donations because he intends to carefully alter the accepted system to make it have more precise implications with respect to his wishes.

85. (d). In the passage it is clearly given that the world economy was "Mauled" (Battered) by the slowdown of 2009.

86. (c). To convince the captains of industry to give away all their wealth, in their lifetime, as Buffett and Gates intend to do would require gentle persuasion.

Many people may have thought, "What in the world was that?" after waking up from a strange dream. Dreams may be very interesting, but they have more to them, such as the sleep cycle, **insomnia**, and many others people are not aware of. Nightmares and night terrors are also more than what most people think. Dreams are very **fascinating** and there is much more to them than people realize, but that also means it takes more to understand them.

Scientists have been studying the phenomenon for many years. During sleep many things happen, such as the blood pressure and heart rate drop. The longer a person stays awake, the longer he will sleep. The Circadian system, the body's internal clock, is what determines how long people will sleep. People normally sleep between six and a half and nine hours a day, which equals one third of our lives. Sleep also has four stages. During stage 1 the person's eyes roll slowly back and forth and the brain works less efficiently than when awake. Stage 2 starts after a few minutes with slow brain waves interrupted by sudden bursts. Stage 3 lasts about ten minutes and is filled with high amplitude brain waves called delta waves; and it is difficult to wake the sleeper in this stage. Stage 4 is where dreaming, sleepwalking, and night terrors occur. Delta waves also occur in stage 4 more than half the time.

87. Which of the following is not true?

- a) Dreams can be really fascinating
b) **Dreams can be quite interesting** but they don't have anything more to them
c) It takes more to understand fascinating dreams.
d) Nightmares have also something more to them than what people think.

88. During sleep
- a) the internal clock records the heart rate **b) the heart rate drops**
 c) blood pressure increases d) none of the above
89. The blood pressure during sleep is measured by
- a) The internal clock b) The Cicardian system
 c) heart rate d) **None of the above**
90. All of the following statements are true except
- a) **The human brain works more efficiently when one sleeps.**
 b) High amplitude brain waves are caused in the third stage of sleep
 c) Delta waves occur both in the third and fourth stage.
 d) At the very first stage of sleep a person's eyes roll back and forth.
87. (b)(All the other options are true acc. to the passage)
 88. (b) (This is clearly mentioned in the passage)
 89. (d). (a, b and c are all false statements)
 90. (a) (All of other options are absolutely true as mentioned by the author)

Directions for questions 62 – 66: Each of the following questions has a paragraph from which one sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.

91. What a marvelous thing a sailing ship is as she bowls gracefully along, curved sails pulling like winged horses. (.....)How had man found the way to harness so fickle a power as the wind? How had he learned to balance the sails, to design rigging, part of it to give strength, part to control the spars and sails. To fashion a ruder that would turn a ship?
- a) To find his way across trackless ocean?
 b) The stout ketch took the seas bravely, a bone in her teeth, as we headed down the historic sea road between England and France.
 c) With me was my eight-year old son Edwin. Eyes wide and tongue full of questions, he joined the crew to set and furl sail, watched the skipper take sights with his sextant and learned from the bos'n to splice, whip and tie sailor's knots.
 d) **No wonder the questions poured from Eddie** like raindrop in a squall.
92. Flowering plants are adapted to produce seeds. In this highly specialized form of reproduction the flower is the important part if the plant. Within the separate parts of the same flower or within two separate flowers, male and female elements are developed. (.....) A seed contains the embryo (the infant plant) which, when conditions are favorable, will develop into the new plant.
- a) The female reproduction cell is referred to as the ovum or egg cell, while the male reproductive cell is referred to as the sperm cell.
 b) The nucleus of the reproductive cells contain chromosomes which carry these hereditary characteristics.
 c) **The combination of male and female** cells (fertilization) results in the formation of seeds.
 d) Seeds have special adaptations fir carrying out pollination.

Directions for questions 66 to 72: In each of the following sentences there are two blank spaces. Below each sentence there are five pair of words denoted by letters a), b), c), d), e).Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make it meaningfully complete.

93. Senior officials in the state panchayatiraj department said NREG played a..... role in.... the broken bridges between Dalits and tribals.
- a) principal, refurbishing b) decisive, overhauling
 c) momentous, building d) essential, fixing e) **pivotal, rebuilding**
93. (e). the meanings are: pivotal –vital or critical importance; Rebuilding-- repairing, revising, or reorganizing

Directions for questions 3 to 7 : In each of the following questions, six statements are provided. These statements form a coherent paragraph when properly arranged. Input the order representing the proper and logical sequencing of these statements:

94. A. A man may be conscious of being heroic or conscious of being divine, but he cannot be conscious of being unconscious.
 B. A Frenchman can be boastful of being bold and logical, and still remain bold and logical.
 C. But an Englishman cannot be proud of being simple and direct, and still remain simple and direct.

- D. The great misfortune of the modern English is not at all that they are more boastful than other people, it is that they are boastful about those particular things which nobody can boast of without losing them.
 E. A German can be proud of being reflective and orderly, and still remain reflective and orderly.
 F. In the matter of these strange virtues, to know them is to kill them.
 a) **DBECFA** b) DECFA c) DBFCAE d) DBCFEA

95. A. The best whisper campaigns are conducted by people who genuinely have their fellow Cybernaut's best interests at heart.
 B. What caught our attention was the presence in this forum of a former veterinarian who now works for the company that makes the product in question.
 C. A new flea control product had recently been introduced, and many of the visitors to the board were searching for information regarding the product's safety and effectiveness.
 D. By way of example, when we were conducting some background research for a client in the animal health care field we visited a forum on AOL for pet lovers.
 E. Some participants were also relating rumors they had heard about various negative side effects associated with the product.
 F. One of the message boards was devoted to the topic of coat and skin problems common to household pets.
 a) CBDEAF b) **ADFCEB** c) CEBADF d) BCDEAF

94. The required sequence is DBECFA. D opens the argument by introducing "the modern English". It also introduces being "boastful" about certain qualities. B and D present examples of these. B follows D with "boastful". E follows B with "proud". C presents the desired counter argument, driving the point home. F draws upon an explanation for the given examples. A concludes this by universalizing the argument.

95. The correct sequence is ADFCEB. Statement B, C, E, F all relate to the example mentioned in D. Thus A opens the passage by making a general introduction to "Cybernaut's". Then D presents the premise of the example. F comes to a specific board from among the forum. C introduces the product mentioned in the following statements. E refers to "side effects" of the product. B concludes by mentioning the presents of the veterinarian on the board.

96. A The father of the constitution
 B Where Baba Saheb Bhimrao Ambedkar died in 1956
 C The Alipur Road house in Delhi
 D To be converted into a memorial for
 E Has been recently taken over
 1. CEDAB 2. **CBEDA** 3. AECBD 4. DCEAB

16. (2) The word 'where' in sentence 'B' refers to a place and the only place mentioned is 'The Alipur House' in sentence 'c'. So we have 'CB' as a link. Again the phrase 'memorial for' relates to a person but the presence of 'where' in option B makes it an unlikely continuation, leaving us with the only sentence 'A' which has a name mentioned. So we have 'DA'. Hence (2).

Directions for questions 73 - 74: In each question, a related pair of words is followed by four numbered pairs of words. Select the numbered pair that has a relationship similar to that in the original pair

97. **DIAMOND : BASEBALL ::**
 a) Tennis : court b) Arena : rugby c) **Gridiron : football** d) Mat : boxing.

98. **CIRCUMSPECT : RECKLESS**
 a) caption : fault-finding b) cogent: logical
 c) **copious: scarce** d) valuable: invaluable

Directions for questions 95- 100:

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

99. (a) Like his brother who did not wear his helmet b) and was injured in the accident,
 c) Vicky was always careful d) and wore his helmet without fail.
100. (a) If anyone had doubts about b) this lesson or the previous lesson
 c) they can meet me at my house d) either today or tomorrow.

Directions for question 72 : Which of the phrases (a), (b) and (c) given below each sentence should replace the word/phrase printed in **bold** in the sentence to make it grammatically correct? If the sentence is correct as it is given and no correction is required, mark (d) as the answer.

101. **From request** by the Indian Council of Historical Research (ICHR) and the Oxford University Press, the Delhi High Court has referred all disputes between them over the publication of Towards Freedom documents to an arbitrator.
- a) **On a request by**
 - b) As per requested
 - c) On being a request
 - d) No correction required

Direction for questions 70 – 73 : In each of the questions below, four different ways of writing a sentence are indicated. Choose the best way of writing the sentence.

- 70.
- 1) In the last few years, the number of convicted criminals given community service sentences, which allow the criminals to remain unconfined while they perform specific jobs benefiting the public, have increased
 - 2) In the last few years, the number of convicted criminals given community service sentences, performing specific jobs that benefit the public while being allowed to remain unconfined, have increased
 - 3) In the last few years, the number of convicted criminals given community service sentences, performing specific jobs beneficial to the public while they are allowed to remain unconfined, have increased
 - 4) **In the last few years, the number of convicted criminals given community service sentences allowing them to remain unconfined while performing specific jobs that benefit the public has increased**

Questions 76 – 78 : Read the passage carefully and choose the option to answer the questions that follow:

103. “Buying on credit may induce many consumers to buy things they do not really want, but it also allows them to take advantage of bargains when they are short of cash. Anyone who takes advantage of this latter possibility saves money by buying on credit.”
- Which of the following is an assumption made in the passage above?
- a) Credit is available to everyone who wants it.
 - b) **The cost of credit** does not exceed the savings on purchases that credit made possible.
 - c) Consumers who use credit wisely buy only bargains with it.
 - d) Most unnecessary purchases are made on credit.
104. From a certain farming region, trucks can carry vegetables to market in New Mexico in two days for a total cost of \$ 300. A train will carry the vegetables there in four days for \$ 200. If reducing time in transit is more important to the owner of the vegetables than is reducing the shipping bill, he or she will send the vegetables by truck.
- Which of the following is an assumption made in the passage above?
- a) Vegetables can be sold more profitably when shipped by train than by truck.
 - b) **Other than speed and cost**, there are no significant differences between truck and train transportation from the farming region to New Mexico.
 - c) The time required to ship vegetables by train from the farming region to New Mexico could be reduced to two days if the price for this service were raised.
 - d) Most owners of vegetables in the region are more concerned with shipping costs than with the time involved in shipping vegetables to market.
103. The basis of the argument of the passage is that credit may help one to save money if they are able to take advantage of bargains. But if the cost of credit exceeds the savings on the purchase then there is overall loss, and this obviates the premise. Hence (b). [Assumption / Medium]
104. The passage builds the premise that the final decision on whether to transport farm produce by truck or by train, depends on two factors the speed and cost of transport. The passage makes the assumption that there are no other factors affecting this decision. This is given by option (b). [Assumption / Medium]

Directions for questions 66 to 72: In each of the following sentences there are two blank spaces. Below each sentence there are five pair of words denoted by letters a), b), c), d), e). Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make it meaningfully complete.

105. In the early twentieth century, the discovery of radium _____ the popular imagination, not only was its discoverer, Marie Curie idolized, but its market value _____ that of the rarest gemstone.
- a) stormed ... sank to
 - b) horrified ... approached
 - c) taxed ... was equal to
 - d) **enflamed ... exceeded**
 - e) none of these
105. (d). The first gap requires a word that gives the notion of adding fuel to or intensifying, because of the words “popular imagination”. “enflamed” fits best as it means to add fire to. Also the second gap requires “exceed”. (d) fits best. enflamed, exceeded.

Directions for questions 95- 100:

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

106. (a) Ramesh is more talkative than
c) he is not afraid of the teacher
- b) any boy in the class because
d) who is his own brother

Direction for questions 70 – 73 : In each of the questions below, four different ways of writing a sentence are indicated. Choose the best way of writing the sentence.

107. 1) **Seismologists studying the earthquake that struck northern California in October 1989 are still investigating some of its mysteries: the unexpected power of the seismic waves, the upward thrust that threw one man straight into the air, and the strange electromagnetic signals detected hours before the temblor**
2) Seismologists studying the earthquake that struck northern California in October 1989 are still investigating some of its mysteries: the unexpected power of the seismic waves, the upward thrust that threw one man straight into the air, and strange electromagnetic signals were detected hours before the temblor
3) Seismologists studying the earthquake that struck northern California in October 1989 are still investigating some of its mysteries: the unexpected power of the seismic waves, the upward thrust threw one man straight into the air, and hours before the temblor strange electromagnetic signals were detected
4) Seismologists studying the earthquake that struck northern California in October 1989 are still investigating some of its mysteries: the unexpected power of the seismic waves, one man who was thrown straight into the air by the upward thrust, and strange electromagnetic signals that were detected hours before the temblor
108. 1) A letter by Mark Twain, written in the same year as The Adventures of Huckleberry Finn were published, reveals that Twain provided financial assistance to one of the first Black students at Yale Law School.
2) A letter by Mark Twain, written in the same year of publication as The Adventures of Huckleberry Finn, reveals that Twain provided financial assistance to one of the first Black students at Yale Law School.
3) **A letter by Mark Twain, written in the same year that The Adventures of Huckleberry Finn was published,** reveals that Twain provided financial assistance to one of the first Black students at Yale Law School.
4) Mark Twain wrote a letter in the same year as he published The Adventures of Huckleberry Finn that reveals Twain provided financial assistance to one of the first Black students at Yale Law School.

Directions for questions 57 – 60: Each sentence has some underlined/highlighted word(s). Find a suitable replacement, if required, from the options given. (e) will be the answer if no correction is required.

109. He would rather have wine instead of beer.
a) Instead than
d) Instead having
- b) instead from
e) **NCR**
- c) instead to
110. The CAG had arrived at the figure of the loss in the exchequer on the basis of the prices fetched in the 3G auction held in the middle of last year.
a) with the exchequer
d) on the exchequer
- b) at the exchequer
e) NCR
- c) **to the exchequer**
109. (e). No correction Required (NCR).
110. (c). to the exchequer.

Historians of women's labor in the United States at first largely disregarded the story of female service workers – women earning wages in occupations such as salesclerk, domestic servant, and office secretary. These historians focused instead on factory work, primarily because it seemed so different from traditional, unpaid "women's work" in the home, and because the underlying economic forces of industrialism were presumed to be gender-blind and hence emancipatory in effect. Unfortunately, emancipation has been less profound than expected, for not even industrial wage labor has escaped continued sex segregation in the workplace.

To explain this unfinished revolution in the status of women, historians have recently begun to emphasize the way a prevailing definition of femininity often determines the kinds of work allocated to women, even when such allocation is inappropriate to new conditions. For instance, early textile-mill entrepreneurs, in justifying women's employment in wage labor, made much of the assumption that women were by nature skillful at detailed tasks and patient in carrying out repetitive chores; the mill owners thus imported into the new industrial order hoary

stereotypes associated with the homemaking activities they presumed to have been the purview of women. Because women accepted the more unattractive new industrial tasks more readily than did men, such jobs came to be regarded as female jobs. And employers, who assumed that women's "real" aspirants were for marriage and family life, declined to pay women wages commensurate with those of men. Thus many lower-skilled, lower-paid, less secure jobs came to be perceived as "female".

More remarkable than the origin has been the persistence of such sex segregation in twentieth-century industry. Once an occupation came to be perceived as "female", employers showed surprisingly little interest in changing that perception, even when higher profits beckoned. And despite the urgent need of the United States during the Second World War to mobilize its human resources fully, job segregation by sex characterized even the most important war industries. Moreover, once the war ended, employers quickly returned to men most of the "male" jobs that women had been permitted to master.

111. According to the passage, job segregation by sex in the United States was
- greatly diminished by labor mobilization during the Second World War
 - perpetuated by those textile-mill owners who argued in favor of women's employment in wage labor**
 - one means by which women achieved greater job security
 - a constant source of labor unrest in the young textile industry
112. According to the passage, historians of women's labor focused on factory work as a more promising area of research than service-sector work because factory work
- involved the payment of higher wages
 - required skill in detailed tasks
 - was assumed to be less characterized by sex segregation**
 - fitted the economic dynamic of industrialism better
113. It can be inferred from the passage that early historians of women's labor in the United States paid little attention to women's employment in the service sector of the economy because
- the extreme variety of these occupations made it very difficult to assemble meaningful statistics about them
 - fewer women found employment in the service sector than in factory work
 - women's employment in the service sector tended to be much more short-term than in factory work
 - employment in the service sector seemed to be different than the unpaid work associated with homemaking**
114. The passage supports which of the following statements about the early mill owners mentioned in the second paragraph?
- They hoped that by creating relatively unattractive "female" jobs they would discourage women from losing interest in marriage and family life.
 - They sought to increase the size of the available labor force as a means to keep men's wages low.
 - They argued that women were inherently suited to do well in particular kinds of factory work.**
 - They thought that factory work bettered the condition of women by emancipating them from dependence on income earned by men.
115. It can be inferred from the passage that the "unfinished revolution" the author mentions refers to the
- entry of women into the industrial labor market
 - recognition that work done by women as homemakers should be compensated at rates comparable to those prevailing in the service sector of the economy
 - introduction of equal pay for equal work in all professions
 - emancipation of women wage earners from gender-determined job allocation**
116. Which of the following words best expresses the opinion of the author of the passage concerning the notion that women are more skillful than men in carrying out detailed tasks?

- a) patient b) repetitive c) hoary d) homemaking

117. Which of the following best describes the relationship of the final paragraph to the passage as a whole?
 a) **The central idea is reinforced by the citation of evidence drawn from twentieth-century history.**
 b) The central idea is restated in such a way as to form a transition to a new topic for discussion.
 c) The central idea is restated and juxtaposed with evidence that might appear to contradict it.
 d) A partial exception to the generalizations of the central idea is dismissed as unimportant.

111. (B) Refer 2nd paragraph, 4th line.
 112. (C) Refer to 1st paragraph, 3rd line.
 113. (D) Refer to 2nd paragraph, 7th line.
 114. (C) Refer to 2nd paragraph, 5th line.
 115. (D) Refer to 1st paragraph, 6th line.
 116. (C) hoary – very old & well known & hence not interesting.
 117. (D) provides the best required description. Hence (D)

Directions for questions 66 to 72: In each of the following sentences there are two blank spaces. Below each sentence there are five pair of words denoted by letters a), b), c), d), e). Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make it meaningfully complete.

118. No one is _____ about Stephens; he inspires either uncritical adulation or profound _____ in those who work for him.
 a) Infuriated ... aversion b) Worried ... anxiety c) Enthusiastic ... veneration
 d) **neutral ... antipathy** e) vigilant-empathy

119. While transportation officials on Monday would not discuss the 10 month review prompted by investigations, industry does not expect a definitive defect finding that would inject new drama into the Toyota.....
 a) **Congressional, saga** b) conventional, chronicle
 c) legend, congress ion d) confidential, chronicle
 e) conference, adventure

120. That the economy was in and delaying a Budget would cause greater economic uncertainty did not.... Congress from pursuing power politics.
 a) bedlams, intimidate b) muddles, frighten c) disarray, preclude
 d) confusion, dissuade e) **shambles, deter**

118. (d). In the first gap “infuriated” and “worried” don’t fit because there is no guilt or risk involved in the rest of the statement. “Vigilant” is completely wrong. “Neutral” fits best because the second part of the statement follows through with “adulation”. The second gap require an antonym of “adulation” as it refers to two opposing states differentiated by “or”. So (d) fits best. neutral, antipathy
 119. (a). Congressional, saga. The meanings are: congressional-- of or pertaining to a congress; saga- epic, tale
 120. (e) shambles, deter. The meanings are: shambles-- any scene in a disorder; deter --- to discourage or restrain.