

## Quantitative Aptitude

**Q.111)**

Marked price is 1.45 times of cost price. Selling price is Rs 1500. The profit is 25%. Find the discount percentage.

- |         |         |
|---------|---------|
| (a) 14% | (d) 12% |
| (b) 15% | (e) 13% |
| (c) 16% |         |

**Instruction for Q.112 to Q.115**

Identify the wrong term (X) and answer the questions that follow:

2,3,7,22,89,445,2677,18740

**Q.112)**

Find the LCM of  $(X - 400)$  and 25.

- |         |         |
|---------|---------|
| (a) 125 | (d) 275 |
| (b) 250 | (e) 450 |
| (c) 225 |         |

**Q.113)**

20% of X is same as which number from left?

- |            |            |
|------------|------------|
| (a) First  | (d) Fourth |
| (b) Second | (e) Fifth  |
| (c) Third  |            |

**Q.114)**

Which of the following is a prime number?

- |             |             |
|-------------|-------------|
| (a) $X + 2$ | (d) $X + 3$ |
| (b) $X + 4$ | (e) $X + 6$ |
| (c) $X + 5$ |             |

**Q.115)**

In Jar A, there is 40 litres milk and 6 litres water. In Jar B, there is 78 litres mixture of milk and water and the ratio is 10:3. A and B jars are emptied in a Jar C. In Jar C, there is already 6 litres water. What is the percentage of water in Jar C?

- |         |         |
|---------|---------|
| (a) 77% | (d) 75% |
| (b) 25% | (e) 21% |
| (c) 23% |         |

**Instruction for Q.116**

Consider the given question and decide which of the following statements is sufficient to answer the question.

**Q.116)**

What is the speed of train A?

**Statement A:** The length of train A is 180m and the length of train B is 220m.

**Statement B:** If train A crossed train B in 25 sec, both trains are running in the opposite direction.

- If question can be answered using A alone but not using B alone
- If question can be answered using B alone but not using A alone
- If question can be answered using either of the statements alone
- If question can be answered using both statements together but not using either A or B alone
- If question can't be answered even using A and B together

**Instruction for Q.117 to Q.118**

Consider the below given two series (with two missing values P and Q) and answer the questions thereafter:

15, 17, 11, 23, P, 33

400, Q, 300, 750, 2625, 11812.5

**Q.117)**

If R is a composite value such that  $14 < R < 18$ , what can be the possible values of  $(P + R)$ ?

- 18
- 19
- 20

- |             |                |
|-------------|----------------|
| (a) 1 and 2 | (d) 1, 2 and 3 |
| (b) 2 and 3 | (e) Only 1     |
| (c) 1 and 3 |                |

**Q.118)**

Find the value of  $(Q - 2) / P \times 3$

- |         |         |
|---------|---------|
| (a) 180 | (d) 201 |
| (b) 186 | (e) 192 |
| (c) 198 |         |

**Instruction for Q.119 to Q.121**

Consider the below two quadratic equations:

$$ax^2 - 9x + 7 = 0$$

$$by^2 - 8y + 4 = 0$$

- a and b are positive integers
- $b > a$
- $6/b$  is the bigger root of second equation
- The ratio of highest roots of equation 1 to 2 is 7:4.

**Q.119)**

What are the values of a and b respectively?

- |          |          |
|----------|----------|
| (a) 1, 2 | (d) 3, 1 |
| (b) 2, 3 | (e) 3, 2 |
| (c) 1, 3 |          |

**Q.120)**

Find the roots of the first equation.

- |              |              |
|--------------|--------------|
| (a) 2; $2/3$ | (d) 2; 3     |
| (b) 1; 2     | (e) 1; $5/4$ |
| (c) 1; $7/2$ |              |

**Q.121)**

Find the roots of the second equation.

- |               |               |
|---------------|---------------|
| (a) 2; 3      | (d) $4/3$ ; 1 |
| (b) 1; 2      | (e) $5/2$ ; 3 |
| (c) $2/3$ ; 2 |               |

**Q.122)**

What is Amit's present age?

- 1) Five years ago, Amit's age was double that of his daughter's age at that time.
- 2) Present ages of Amit and his daughter are in the ratio of 11:6 respectively.
- 3) Five years hence, the respective ratio of Amit's age and his daughter's age will become 12:7.

- (a) Only 1 and 3 are sufficient to answer the question
- (b) Only 1 and 2 are sufficient to answer the question
- (c) Only 2 and 3 are sufficient to answer the question
- (d) Any two of the three statements are sufficient to answer the question
- (e) All 1, 2 and 3 are required to answer the question

**Q.123)**

A invested 2000 more than B. A left the business after 8 months. If annual profit is 6800 and share of A is 400F, then find the investment of B.

Note:  $7F^2 = 472 - \sqrt{576}$

- |          |          |
|----------|----------|
| (a) 2400 | (d) 7200 |
| (b) 4000 | (e) 8000 |
| (c) 6000 |          |

**Q.124)**

Rohan mixed two varieties of clay for selling the mixture in his shop. What is the quantity of clay of the first variety in the mixture?

A) The price of the first variety of clay is Rs 36 per kg. Rohan earned a profit of 20% by selling the mixture at Rs 57.60 per kg.

B) The price of second variety of clay is Rs 50 per kg. The difference between the quantity of first variety and the second variety of clay in the mixture is 3 kg.

- (a) If question can be answered using A alone but not using B alone
- (b) If question can be answered using B alone but not using A alone
- (c) If question can be answered using either of the statements alone
- (d) If question can be answered using both statements together but not using either A or B alone
- (e) If question can't be answered even using A and B together

**Q.125)**

What is the rate of the compound interest?

A) A sum of 1000, amounts to 1331 at the rate of compound interest.

B) The amount was invested for the period of three years.

C) The simple interest received on that amount in one year is equal to the compound interest received on that amount in the first year.

- (a) The data in statements A and C together are sufficient to answer the question, while the data in statement B are not sufficient to answer the question.
- (b) The data in statements A and B together are sufficient to answer the question, while the data in statement C are not sufficient to answer the question.
- (c) The data in statement A, B and C together are not sufficient to answer the question.
- (d) The data in statement only A and B together or only statement C are sufficient.
- (e) The data in all the statements A, B and C together are necessary to answer the question.

**Q.126)**

A boat with a speed of 21 km/hr in still water, travels from point A to B in the downstream direction and returns to point A. Another boat with speed of 28 km/hr travels from B to A and returns to point B. The difference between the time taken by them to cover the distance is 6.5 hrs. What is the distance between points A and B, if the speed of stream is 7 km/hr?

- |            |            |
|------------|------------|
| (a) 420 km | (d) 350 km |
| (b) 120 km | (e) 210 km |
| (c) 280 km |            |

**Q.127)**

A person can purchase three articles in Rs. 49. What is the price of costliest article?

A) The cost price of two articles each is Rs. 1 less than the cost price of costliest article.

B) The cost price of two articles is same.

C) The cost price of costliest article is 6.25% more than the cost price of cheapest article.

- (a) Either statement A alone or statements B and C together are sufficient.  
 (b) Only statement C is sufficient.  
 (c) Only statement A and B together are sufficient.  
 (d) Only statement A and C together are sufficient.  
 (e) None of these

**Q.128)**

ABC bank offers 12% interest per annum compounded half yearly on deposits. DEF Bank and GHI Bank offer simple interest but the annual interest rate offered by GHI Bank is twice that of DEF Bank. Sameer invests a certain amount in DEF Bank for a certain period and Seema invests Rs 20,000 in GHI Bank for twice that period. The interest that would accrue to Sameer during that period is equal to the interest that would have accrued had he invested the same amount in ABC Bank for one year. The interest accrued to Seema is

- (a) Rs 9992 (d) Rs 9844  
 (b) Rs 9888 (e) None of the above  
 (c) Rs 9910

**Q.129)**

A double-decker bus travelled at  $\frac{2}{3}$ rd of its normal speed and therefore reached the destination 45 minutes after the scheduled time. On its return journey, the bus initially travelled at its normal speed for 10 minutes but then stopped for 5 minutes for an emergency. The percentage by which the bus must now increase its normal speed in order to reach the destination at the scheduled time, is nearest to

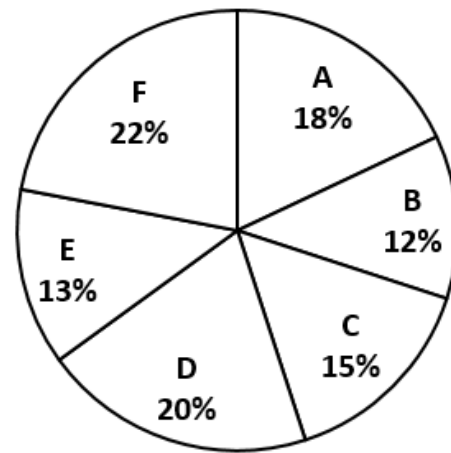
- (a) 9% (d) 13.33%  
 (b) 6.67% (e) 5%  
 (c) 10%

**Instruction for Q.130 to Q.133**

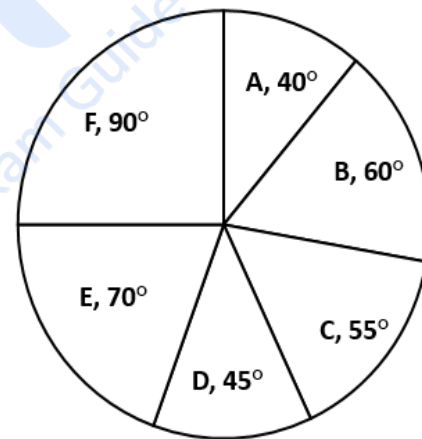
Study the following pie charts carefully and answer the questions given beside.

Total number of commodities being manufactured in a factory is 10,00,000 units. Total commodities being sold are 2,80,000 units. There are 6 types of commodities namely A, B, C, D, E and F. Total number of commodities manufactured of these six types in terms of percentage has been given in pie chart-1, and pie chart-2 gives the number of commodities unsold in terms of degrees.

**Chart 1 : Number Of Commodities Manufactured**



**Chart 2 : Number Of Commodities Unsold**



**Q.130)**

In pie chart-2, there is some discrepancy in one of the commodities in terms of number of units sold and unsold. Identify that commodity.

- (a) A (d) D  
 (b) B (e) E  
 (c) C

**Q.131)**

The average number of units unsold of commodities B, D and F together are what % of total manufactured units of commodity B?

- (a) 110.33% (d) 108.33%  
 (b) 108.66% (e) None of the above  
 (c) 110.66%

**Q.132)**

Half of units sold of commodity A, one-fourth units sold of commodity C and one-fifth units sold of commodity D were sold to a particular customer. If the number of units sold to this particular customer are represented on a pie chart, then what corresponding angle the number of units sold of C will make? (approximately)

- (a)  $40^\circ$  (d)  $46^\circ$   
 (b)  $42^\circ$  (e)  $48^\circ$   
 (c)  $44^\circ$

**Q.133)**

It is known that 15%, 10% and 5% of units unsold of commodities A, C, and F respectively are defective, while 10% and 20% of B and D respectively are defective. In B and D, how many more/less units are defective with respect to A, C, and F?

- (a) 5% (d) 6.25%  
 (b) 5.25% (e) 7%  
 (c) 6%

**Instruction for Q.134 to Q.137**  
 Study the table and answer the given question.

The below table contains data related to salary structure of individuals from different organizations in March:

Individuals	Basic salary (Rs)	Total allowance (Rs)	Total deduction (Rs)	Net salary (Rs)
P	21800	28600	-	-
Q	-	-	4350	25850
R	10400	12400	2800	20000
S	11200	13800	-	-
T	-	21600	5700	-

Note:

Total Deduction = Provident Fund Deduction (which is 10% of the basic salary) + Other deduction

Net salary = Basic salary + Total Allowance – Total Deduction

Few values are missing in the table. A candidate is expected to calculate the missing value, if it is required to answer the given question, on the basis of the given data and information.

**Q.134)**

If Q's total allowance was Rs.3,000 more than his basic salary, what was his total allowance?

- (a) Rs. 18,000 (c) Rs. 15,500  
 (b) Rs. 16,600 (d) Rs. 19,000

(e) Rs. 22,000

**Q.135)**

If the respective ratio of Provident Fund Deduction and other deduction of S was 7:13, what was S's other deduction?

- (a) Rs. 3100 (d) Rs. 2150  
 (b) Rs. 2080 (e) Rs. 3245  
 (c) Rs. 3500

**Q.136)**

If other deduction of P was Rs. 4,720, what was his net salary?

- (a) Rs. 35500 (d) Rs. 40000  
 (b) Rs. 42510 (e) Rs. 43500  
 (c) Rs. 51000

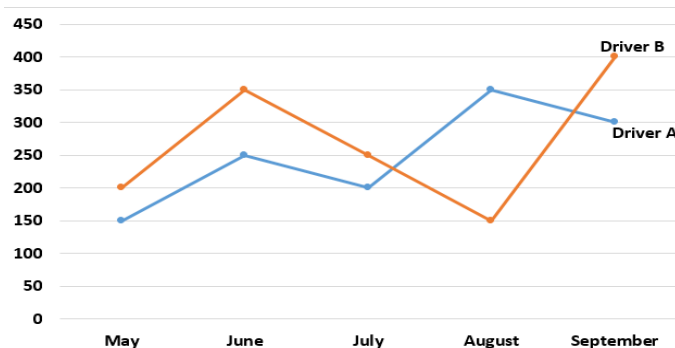
**Q.137)**

Basic salary of S is what percent more than the basic salary of R?

- (a)  $1(1/12)\%$  (d)  $7(9/13)\%$   
 (b)  $3(4/13)\%$  (e)  $4(3/8)\%$   
 (c)  $5(1/12)\%$

**Instruction for Q.138 to Q.140**

The given line graph shows the number of passengers travelled by 2 cab drivers and the table shows the percentage of females who travelled in the cabs in different months.



Month	Driver A Percentage of females	Driver B Percentage of females
May	30%	50%
June	50%	70%
July	20%	40%
August	60%	30%
September	40%	50%

**Q.138)**

Find the ratio of the average of the female in the month of June and July by Driver A to the average of the males in the same month by Driver B.

- (a) 55 : 42
- (b) 42 : 55
- (c) 11 : 17
- (d) 17 : 11
- (e) 29 : 27

**Q.139)**

Driver A rejects 20% of the total passengers who booked for the cab in the month of May and Driver B rejects 10% of the passengers who booked for the cab for the same month. Find how much percent Driver A picks the passengers less than that of Driver B in the same month.

- (a) 25%
- (b) 50%
- (c) 40%
- (d) 20%
- (e) 33.33%

**Q.140)**

Find the ratio of number of female passengers who booked for Driver A in the month of July and August to the number of male passengers who booked for Driver B in the month of May and September.

- (a) 2 : 3
- (b) 1 : 4
- (c) 3 : 7
- (d) 5 : 6
- (e) 2 : 5