

# Essar Quantitative Aptitude - I

Time Limit: 20 min 50 sec

**Question 1. (Single Selection)**

The sum of the squares of three consecutive natural numbers is 2030, then the middle number is:

1. 24
2. 26
3. 25
4. 27
5. None of these

**Question 2. (Single Selection)**

A student got thrice as many marks in Arithmetic as in English. If the total of his marks in the two subjects is 128, how many marks did he get in English?

1. 32
2. 64
3. 96
4. 16
5. None of these

**Question 3. (Single Selection)**

On selling 17 balls at Rs. 720/-, there is a loss equal to the cost price of 5 balls. The cost price of a ball in rupees is:

1. 45
2. 50
3. 55
4. 60
5. None of these

**Question 4. (Single Selection)**

$? \div \sqrt{0.81} = 300$

1. 2700
2. 270
3. 33.33
4. 540
5. None of these

**Question 5. (Single Selection)**

The difference between a number and its four-fifth is 25. What is the number?

1. 75
2. 100
3. 125
4. 150
5. None of these

**Question 6. (Single Selection)**

The difference between simple and compound interests compounded annually on certain sum of money for two years at 4% per annum is Rs. 1/-. The sum in Rs. is:

1. 625
2. 630
3. 640
4. 650
5. None of these

**Question 7. (Single Selection)**

A batsman scored 150 runs which included 5 boundaries, 2 sixes and other singles. What percentage of his total score did he make by running between the wickets?

1. 78.66
2. 75.66
3. 80.66
4. 82.66
5. None of these

**Question 8. (Single Selection)**

How many of the following numbers are divisible by 3 and not by 9?  
2133, 2343, 3474, 4131, 5286, 5340

1. 2
2. 3
3. 4
4. 6
5. None of these

**Question 9. (Single Selection)**

Which of the following number will be wrong in the number series?

7 13 22 31 49 67 88

1. 13
2. 21
3. 31
4. 49
5. 67

**Question 10. (Single Selection)**

Two radios and one calculator can cost Rs.3300, while two calculators and one radio cost Rs.5400. What is the price of a radio?

1. Rs. 2500
2. Rs. 700
3. Rs. 400
4. Rs. 1100
5. None of these

**Question 11. (Single Selection)**

The interest on a certain deposit at 4.5 p.c.p.a is Rs.202.50 in one year. How much will the additional interest be in one year on the same deposit at 5 p.c.p.a?

1. 20.25
2. 22.50
3. 225
4. 427.5
5. None of these

**Question 12. (Single Selection)**

An alloy is to contain copper and zinc in the ratio 9 : 5. How much zinc is required to be melted with 24 kg of copper?

1. 43.00
2. 43.20
3. 44.00
4. Cannot be determined
5. None of these

**Question 13. (Single Selection)**

$(16 \times 16 - 56) \div [(13 \times 12) - (8 \times 7)] = ?$

1. 4
2. 20
3. 200
4. 100
5. None of these

**Question 14. (Single Selection)**

A man in a train notices that he can count 20 electric poles in one minute. If the poles are 40 meters apart, what is the speed of the train in Km/Hr?

1. 60
2. 45
3. 48
4. 54
5. None of these

**Question 15. (Single Selection)**

Two pipes A and B can fill a tank independently in 20 minutes and 30 minutes respectively. If both the pipes were used together, how long would it take to fill the tank?

1. 12 min
2. 15 min
3. 25 min
4. 50 min

5. None of these

**Question 16. (Single Selection)**

If 24 men do a work in 40 days, in how many days will 30 men do it?

1. 30
2. 28
3. 26
4. 34
5. None of these

**Question 17. (Single Selection)**

? X 15 = 65% of 300

1. 195
2. 130
3. 2925
4. 13
5. None of these

**Question 18. (Single Selection)**

The average age of 28 employees is 23 years. If the manager's age is also included, the average age increases by one year. What is the manager's age in years?

1. 28
2. 51
3. 52
4. 53
5. None of these

**Question 19. (Single Selection)**

The difference between squares of two consecutive even numbers is always divisible by:

1. 3
2. 4
3. 5
4. 2
5. None of these

**Question 20. (Single Selection)**

Ashutosh purchased a motor cycle at  $(13/15)$ th of its selling price and sold it at 12% more than its selling price. Ashutosh's net gain is:

1. 20%
2. 29.23%
3. 30.67%
4. 38.13%
5. None of these

**Question 21. (Single Selection)**

Which number should replace both the question marks in  $? \div 32 = 392 \div ?$

1. 112
2. 32
3. 16
4. 196
5. None of these

**Question 22. (Single Selection)**

If  $3690 \div 20.5 = 180$ ;  $36.90 \div 2.05 = ?$

1. 0.18
2. 1.8
3. 18
4. 1800
5. None of these

**Question 23. (Single Selection)**

A mother is three times as old as her son. After 15 years she will be twice as old as her son. What is the present age of the mother in years?

1. 40
2. 50
3. 60
4. 70
5. None of these

**Question 24. (Single Selection)**

'A' started business investing Rs.6000/-. Three months later 'B' joined him investing Rs.4000/-. If they make a profit of Rs.5100/- at the end of the year, how much should be 'B's' share?

1. Rs. 1700
2. Rs. 3400
3. Rs. 1300
4. Rs. 1732.75
5. None of these

**Question 25. (Single Selection)**

20 transistors go in a box and two dozen boxes are packed in a carton. How many cartons will be needed to pack 1920 transistors?

1. 96
2. 12
3. 8
4. 4
5. None of these

### Quantitative Aptitude - II

Classification of 100 students based on the marks obtained by them in Mathematics and Accounts in an examination

Subjects

Marks Interval (Marks out of 50)

	41-50	31-40	21-30	11-20	1-10
<b>Mathematics</b>	23	09	48	12	08
<b>Accounts</b>	04	21	60	10	05
<b>Approximate number of students in marks interval for both the subjects</b>	13	15	54	11	7

**Time Limit: 4 min 10 sec**

**Question 1. (Single Selection)**

If it is known that at least 28% marks are required for the students to be eligible for a seminar on Accounts. The numbers of Accounts students who can give the seminar are:

1. 85
2. 80
3. 95
4. 91
5. None of these

**Question 2. (Single Selection)**

The approximate number of students securing less than 41 marks in both the subjects is

1. 91
2. 85
3. 93
4. 87
5. None of these

**Question 3. (Single Selection)**

What is the difference between the number of students getting at least 21 marks in Accounts over those getting at least 21 marks in Mathematics approximately?

1. 19
2. 12
3. 7
4. 5
5. None of these

**Question 4. (Single Selection)**

What is the difference between the number of students passed with at least 31 marks both in Accounts and Mathematics?

1. 9

2. 19
3. 12
4. 7
5. None of these

**Question 5. (Single Selection)**

If at least 31 marks in Mathematics are required for pursuing higher studies in Mathematics, how many students would be eligible to pursue higher studies in Mathematics?

1. 60
2. 32
3. 57
4. 68
5. None of these

**Quantitative Aptitude - III**

**Expenditure of a company in Lac Rupees per annum over the given years**

Year	Item of Expenditure				
	Salary	Fuel & Transport	Bonus	Interest on Loans	Taxes
1998	150	100	5	25	85
1999	175	150	5	35	115
2000	200	175	10	45	75
2001	225	275	10	50	125
2002	250	400	20	45	100
<b>TOTAL</b>	1000	1000	50	200	500

**Time Limit: 4 min 10 sec**

**Question 1. (Single Selection)**

What is the percentage of the total amount of bonus paid by the company during the given period in relation to the salary paid during the given period?

1. 20%
2. 4%
3. 3%
4. 2%
5. None of these

**Question 2. (Single Selection)**

The total expenditure of the company for all items of expenditure for the year 2002 is what percent of the year 2000?

1. 61
2. 18
3. 69
4. 38
5. None of these

**Question 3. (Single Selection)**

The total expenditure for all the items of expenditure in the year 1998 to the year 2002 is approximately:

1. 59%
2. 54%
3. 458%
4. 41%
5. None of these

**Question 4. (Single Selection)**

What is the average amount of interest per year, which the company had to pay during these years?

1. 50
2. 35
3. 40
4. 45
5. None of these

**Question 5. (Single Selection)**

The ratio between the total expenditure on taxes and the total expenditure on fuel and transport respectively for all the years is approximately:

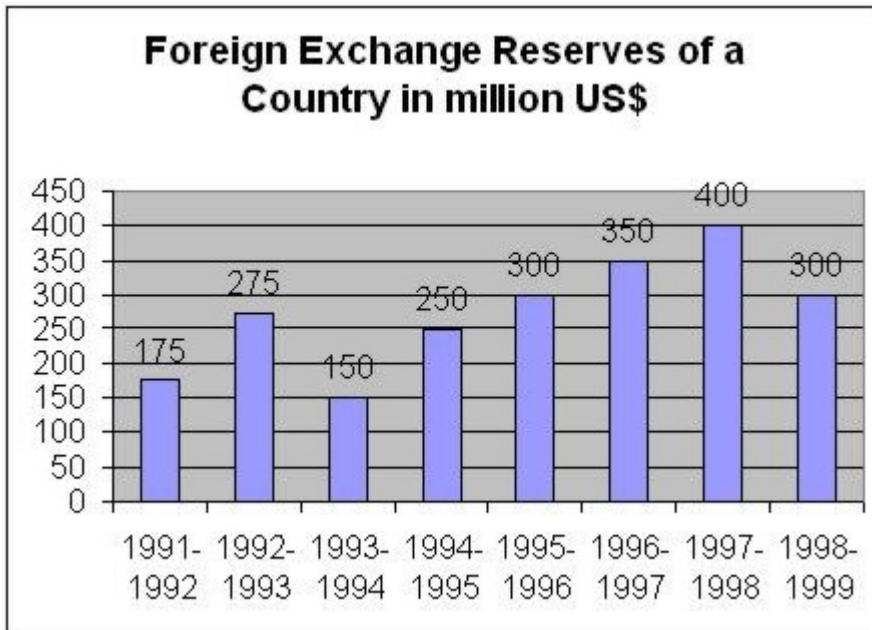
1. 3 : 4
2. 1 : 2
3. 2 : 3
4. 1 : 4
5. None of these

**Quantitative Aptitude - IV**

**Description:**

The bar graph given below shows the foreign exchange reserves of a country in million US\$ for the years 1991-1992 to 1998-1999. Answer the questions based on this graph given below:





**Time Limit: 4 min 10 sec**

**Question 1. (Single Selection)**

What was the % decrease in foreign exchange reserves in 1998-1999 over 1996-1997?

1. 11.28
2. 14.28
3. 11.28
4. 17.28
5. None of these

**Question 2. (Single Selection)**

The average foreign exchange reserves over the period under review are:

1. 325
2. 300
3. 314
4. 250
5. None of these

**Question 3. (Single Selection)**

The foreign exchange reserves of how many years is above the average foreign exchange reserves of the given period?

1. 5
2. 2
3. 3
4. 4
5. None of these

**Question 4. (Single Selection)**

The foreign exchange reserves in 1996-1997 was approximately how many times that of the year

1992-1993?

1. 1.21
2. 1.24
3. 1.27
4. 1.30
5. None of these

**Question 5. (Single Selection)**

What was the approximate % increase in foreign exchange reserves in 1997-1998 over 1995-1996?

1. 33
2. 36
3. 39
4. 30
5. None of these