Unit:1

Ratio, Proportion and Percentage:

Q:1) If x:y = 3:4, then (7x+3y):(7x-3y) is equal to

Sol:

A:) 5:2

B:) 4:3

C:) 11:3

D:) 37:19

Correct: C

Q:2)The product of two positive numbers is 4752 and their ratio is 11:1B:) The smaller of these numbers is

Sol:

A:) 72

B:) 60

C:) 66

D:) 75

Correct: C

Q:3) Two numbers are in ratio 2:C:) If 2 be subtracted from the first and 2 be added to the second, the ratio becomes 1:B:) Find the sum of the numbers.

Sol:

A:) 30

B:) 28

C:) 24

D:) 10

Correct: A

Q:4) How to divide 3395 in ratio of 42 : 32 : 23?

Sol:

A:) 1470, 1120 and 805

B:) 1550, 1235 and 610

C:) 1245, 1150 and 1000

D:) 1764, 1022 and 529

Correct: A

Q:5) A:b = 3:7 and b:c = 9:5. What is b:c?

Sol:

A:) 3:15:5

B:) 21:16:45

C:) 3:7:5

D:) 27: 63:35

Correct: D

Q:6)Income ratio of Ramesh and Suresh is 5:6. Their spending ratio is 7:9. Ramesh saves 4000 and Suresh saves 3000. Income and spending respectively of Ramesh and Suresh are

Sol:

A:) Ramesh - 25000, 21000; Suresh – 30000, 27000

B:) Ramesh - 36000, 32000; Suresh – 30000, 27000

C:) Ramesh - 30000, 27000; Suresh – 36000, 32000

D:) None of the above

Correct: A

Q:7)10/13 = 11/28 = 21/11 = 12/11 = K. What is K?

Sol:

A:) 6/7

B:) 12/13

C:) 10/11

D:) 59/63

Correct: A

Q:8) Find the mean proportional between 7 and 63?

Sol:

A:) 35

B:) 21

C:) 27

D:) 30

Correct: B

Q:9) Find A:B:C:D when A:B = 2:3 ; B:C = 7:9 ; C:D = 5:7

Sol:

A:) 70 : 105 : 135 : 189

B:) 105 : 115 : 236 :189

C:) 70 : 124 : 155 : 201

D:) 12 : 78 : 256 : 189

Correct: A

Q:10)What is 4th proportional in 9, 13 and 153?

Sol:

A:) 251

B:) 181

C:) 175

D:) 221

Correct: D

Q:11) Ratio of two numbers is 3:8. On adding 5 to both numbers, the ratio becomes 2:5. Which is the smaller number out of the two?

Sol:

A:) 64

B:) 120

C:) 45

D:) 105

Correct: C

Q:12) The 3rd proportional to 18 and 54 is?

Sol:

A:) 144

B:) 72

C:) 162

D:) 972

Correct: C

Q:13)285 is summation of 3 numbers. Ratio between 2nd and 3rd numbers is 6:5. Ratio between 1st and 2nd numbers is 3:7. The 3rd number is?

Sol:

A:) 135

B:) 150

C:) 124

D:) 105

Correct: D

Q:14) Which of the following two ratios is greater 17:18 and 10:11?

Sol:

A:)17/18

B:)10/11

C:)Both are same

D:)Cannot determine

Correct: A

Q:15) wo numbers are in the ratio of 6 : 8. If 10 is subtracted from each, the new numbers are in the ratio 16 : 3B:) Find the smaller number.

Sol:

A:) 22

B:)12

C:)38

D:)15

Correct: D

Q:16) It was intended that Rs. 585 be divided among P, Q and R in the ratio of 4 : 3 : 2, but by mistake the distribution was made in the proportion of 1/4 : 1/3 : 1/B:) How much does 'R' gain by the error?

Sol:

A:) Rs. 99

B:) Rs. 126

C:) Rs. 140

D:) Rs. 152

E:) None of these

Correct :C

Q:17) a : b : : 3 : 5, b : c : : 4 : 3 and c : d : : 4 : 5, a : d = ?

Sol:

A:) 4 :5

B:) 16 : 25

C:) 64 : 25

D:) 64 : 125

E:) 16 : 125

Correct :B

Q:18)By giving Rs. 50 to M, A would have the amount equal to what M had earlier. If the sum of the amounts with A and M is Rs. 650. What is the ratio of the amount with A to that with M earlier?

Sol:

A:) 7 : 4

B:) 5 : 3

C:) 2 : 1

D:) 7 : 6

Correct :D

Q:19)By giving Rs. 50 to M, A would have the amount equal to what M had earlier. If the sum of the amounts with A and M is Rs. 650. What is the ratio of the amount with A to that with M earlier?

Sol:

A:) 7 : 4

B:) 5 : 3

C:) 2 : 1

D:) 7 : 6

E:) 2 : 3

Correct :D

Q:20)What will be the fraction of 20% Sol:

A:) 1/4

B:) 1/5

C:) 1/10

D:) None of above

Correct :B

Q:21) What will be the fraction of 4%

Sol:

A:) 1/20

B:) 1/5

C:) 1/75

D:) 1/25

Correct :D

Q:22) The ratio 5:20 expressed as percent equals to Sol:

A:) 50 %

B:) 125 %

C:) 25 %

D:) None of above

Correct :C

Q:23) The ratio 5:20 expressed as percent equals to Sol:

A:) 50 %

B:) 125 %

C:) 25 %

D:) None of above

Correct :C

Q:24) Half of 1 percent written as decimal is Sol:

A:) 5

B:) 0.5

C:) 0.05

D:) 0.005

Correct :D

Q:25) What is 15 percent of 34 Sol:

A:) 5.10

B:) 10

C:) 10

D:) 10

Correct :A

Q:26) A's salary is 50% more than B's. How much percent is B's salary less than A's?

Sol:

A:) 33(1/4)%

B:) 33(1/3)%

C:) 33(1/2)%

D:) 33%

Correct :B

Q:27)The price of cooking oil has increased by 25%. By what percent should a family reduce the consumption of cooking oil so as not to increase the expenditure in this account?

Sol:

A:)20%

B:)25%

C:)18%

D:)16%

Correct :A

Q:28)Ramesh's salary was reduced by 10% and then the reduced salary was increased by 10%. What was his ultimate loss?

Sol:

A:) 0%

B:) 10%

C:) 1%

D:) 5%

Correct :C

Q:29)5% of 5% of Rs. 100 is Sol:

A:) Rs. 0.25

B:) Rs. 0.50

C:) Rs. 10

D:) Rs. 25

Correct :A

Q:30)The average weight of a class of 24 students is 35 kg. If the weight of the teacher be included, the average rises by 400 g. The weight of the teacher is

Sol:

A:) 45

B:) 50

C:) 55

D:) 60

Correct: A

Q:31) The average age of the mother and her six children is 12 years which is reduced by 5 years if the age of the mother is excluded. How old is the mother

Sol:

A:) 40

B:) 41

C:) 42

D:) 43

Correct: C

Q:32) A motorist travel to a place 150 km away at an avearge speed of 50 km/hr and returns ar 30 km/hr.His average speed for the whole jouney in km/hr is

Sol:

A:) 36.5 km/hr

B:) 37.5 km/hr

C:) 35.5 km/hr

D:)5 km/hr

Correct: B

Q:33) The average of six numbers is X and the average of three of these is Y.If the average of the remaining three is z, then

Sol:

A:) x = y + z

B:) B 2x = y + z

C:) C x = 2y + z

D:) D x = y + 2z

Correct: B

Q:34) The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is

Sol:

A:) 40

B:) 35

C:) 45

D:) 55

Correct :A

Q:35) If the average marks of three batches of 55, 60 and 45 students respectively is 50, 55, 60, then the average marks of all the students is

Sol:

A:) 48

B:) 68

C:) 60

D:) 58

Correct :B

Q:47)When a student weighing 45 kgs left a class, the average weight of the remaining 59 students increased by 200g. What is the average weight of the remaining 59 students

Sol:

A:) 55

B:) 56

C:) 57

D:) 58

Correct :C

Q:48) Average age of 7 family members is 75 years. But average age of 6 of them is 74 years 6 months. What is the age of the 7th family member?

Sol:

A:) 75.5

B:) 78

C:) 68

D:) 80

Correct :B

Q:49) Average age of 5 people is 42 years. Another group has 8 people who have average age of 81 years. When both groups are mixed what is average age of all people?

Sol:

A:) 64 years

B:) 66 years

C:) 65 years

D:) 70 years

Correct: B

Q:50) Average age of 5 people in a family is 55 years. However it is seen that 3 of the 5 people also have an average age of 55 years. What will be the average age of remaining two people of the family?

Sol:

A:) 85 years

B:) 27.5 years

C:) 55 years

D:) 110 years

Correct :C

DACC
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ARTS AND COMMERCE
COLLEGE

Unit:2

Profit and Loss:

Q:1) person sold a stove for Rs. 423 and incurred a loss of 6%. At what price would it be sold so as to earn a profit of 8%?

Sol:

A:) Rs. 525

B:) Rs. 500

C:) Rs. 490

D:) Rs. 486

Correct :D

Q:2)A fruit seller buys lemons at 2 for a rupee and sells then at 5 for three rupees. His gain percent is

Sol:

A:) 10%

B:) 15%

C:) 20%

D:) 25%

Correct :C

Q:3)A sells a car to B at 10% loss. If B sells it for Rs. 54000 and gains 20%, the cost price of the car for A was Sol:

A:) Rs. 25000

B:) Rs. 50000

C:) Rs. 37500

D:) Rs. 60000

Correct :D

Q:4)Ramesh sold a statue for a price 25% higher than the original price of the statue. He had however bought the statue at 20% discount on the original price. With the profit of Rs. 2025, find the original price of the statue.

Sol:

A:) Rs. 6000

B:) Rs. 7500

C:) Rs. 3500

D:) Rs. 4500

Correct :B

Q:5) If selling price of 40 articles is equal to cost price of 50 articles, the loss or gain percent is

Sol:

A:) 25% loss

B:) 20% loss

C:) 25% gain

D:) 20% gain

Correct: A

Q:6)Two bicycles were sold for Rs. 3990 each, gaining 5% on one and losing 5% on the other. The gain or loss percent on the whole transaction is

Sol:

A:) Neither gain nor loss

B:)5% gain

C:) B:)5% loss

D:) 0.25% loss

Correct :D

Q:7)The ratio of cost price and selling price is 4:5. The profit percent is

Sol:

A:) 10%

B:) 20%

C:) 25%

D:) 30%

Correct :C

Q:8)If a person sells a 'sari' for Rs. 5200, making a profit of 30%, then the cost price of the sari is

Sol:

A:) Rs. 4420

B:) Rs. 4000

C:) Rs. 3900

D:) Rs. 3800

Correct :B

Q:9)A shopkeeper earns a profit of 15% after selling a book at 20% discount on the printed price. The ratio of the cost price and printed price of the book is?

Sol:

A:) 20:23

B:) 23:20

C:) 16:23

D:) 23:16

Correct :C

Q:10)Simran bought pet food worth Rs. 56000. She then sold 1/3rd of it incurring a loss of 40%. What profit she must earn on rest of the supplies to nullify this loss?

Sol:

A:) 25%

B:) 20%

C:) 45%

D:) 50%

Correct :B

Q:11)If A:)b = 5:7 and c:d = 2A:)3b, then ac : bd is Sol:

A:) 20:38

B:) 50:147

C:) 10:21

D:) 50:151

Correct: B

Q:12)If x:y = 3:4, then (7x+3y):(7x-3y) is equal to

Sol:

A:) 5:2

B:) 4:3

C:) 11:3

D:) 37:19

Correct: C

Q:13)The product of two positive numbers is 4752 and their ratio is 11:1B:) The smaller of these numbers is

Sol:

A:) 72

B:) 60

C:) 66

D:) 75

Correct: C

Q:14)Two numbers are in ratio 2:c If 2 be subtracted from the first and 2 be added to the second, the ratio becomes 1:2 Find the sum of the numbers.

Sol:

A:) 30

B:) 28

C:) 24

D:) 10

Correct: A

Q:15)How to divide 3395 in ratio of 42 : 32 : 23?

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B:) 1550, 1235 and 610

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D:) 1764, 1022 and 529

Correct: A

Q:16)a:b = 3:7 and b:c = 9:5. What is a:b:c?

Sol:

A:) 3:15:5

B:) 21:16:45

C:) 3:7:5

D:) 27: 63:35

Correct: D

Q:17)Income ratio of Ramesh and Suresh is 5:6. Their spending ratio is 7:9. Ramesh saves 4000 and Suresh saves 3000. Income and spending respectively of Ramesh and Suresh are

Sol:

A:) Ramesh - 25000, 21000; Suresh – 30000, 27000

B:) Ramesh - 36000, 32000; Suresh – 30000, 27000

C:) Ramesh - 30000, 27000; Suresh – 36000, 32000

D:) None of the above Correct: A

Q:18)10/13 = 11/28 = 21/11 = 12/11 = K. What is K?

Sol:

A:) 6/7

B:) 12/13

C:) 10/11

D:) 59/63

Correct: A

Q:19)Find the mean proportional between 7 and 63?

Sol:

A:) 35

B:) 21

C:) 27

D:) 30

Correct: B

Q:20)Find A:)B:C:D when A:)B = 2:3 ; B:C = 7:9 ; C:D = 5:7

Sol:

A:) 70 : 105 : 135 : 189

B:) 105 : 115 : 236 :189

C:) 70 : 124 : 155 : 201

D:) 12 : 78 : 256 : 189

Correct: A

Q:21)What is 4th proportional in 9, 13 and 153?

Sol:

A:) 251

B:) 181

C:) 175

D:) 221

Correct: D

Q:22)Ratio of two numbers is 3:8. On adding 5 to both numbers, the ratio becomes 2:5. Which is the smaller number out of the two?

Sol:

A:) 64

B:) 120

C:) 45

D:) 105

Correct: C

Q:23)The 3rd proportional to 18 and 54 is?

Sol:

A:) 144

B:) 72

C:) 162

D:) 972

Correct: C

Q:24)285 is summation of 3 numbers. Ratio between 2nd and 3rd numbers is 6:5. Ratio between 1st and 2nd numbers is 3:7. The 3rd number is?

Sol:

A:) 135

B:) 150

C:) 124

D:) 105

Correct: D

Q:25) Which of the following two ratios is greater 17:18 and 10:11?

Sol:

A:)17/18

B:)10/11

C:)Both are same

D:)Cannot determine

Correct: A

Q:26) wo numbers are in the ratio of 6 : 8. If 10 is subtracted from each, the new numbers are in the ratio 16 : 3. Find the smaller number.

Sol:

A:) 22

B:)12

C:)38

D:)15

Correct: D

Q:27)It was intended that Rs. 585 be divided among P, Q and R in the ratio of 4 : 3 : 2, but by mistake the distribution was made in the proportion of 1/4 : 1/3 : 1/B:) How much does 'R' gain by the error?

Sol:

A:) Rs. 99

B:) Rs. 126

C:) Rs. 140

D:) Rs. 152

E:) None of these

Correct :C

Q:28)a : b : : 3 : 5, b : c : : 4 : 3 and c : d : : 4 : 5, a : d = ?

Sol:

A:) 4 :5

B:) 16 : 25

C:) 64 : 25

D:) 64 : 125

E:) 16 : 125

Correct :B

Q:29)By giving Rs. 50 to M, A would have the amount equal to what M had earlier. If the sum of the amounts with A and M is Rs. 650. What is the ratio of the amount with A to that with M earlier?

Sol:

A:) 7 : 4

B:) 5 : 3

C:) 2 : 1

D:) 7 : 6

Correct :D

Q:30) By giving Rs. 50 to M, A would have the amount equal to what M had earlier. If the sum of the amounts with A and M is Rs. 650. What is the ratio of the amount with A to that with M earlier?

Sol:

A:) 7 : 4

B:) 5 : 3

C:) 2 : 1

D:) 7 : 6

E:) 2 : 3

Correct :D

Q:31)What will be the fraction of 20%

Sol:

A:) 1/4

B:) 1/5

C:) 1/10

D:) None of above

Correct :B

Q:32) What will be the fraction of 4%

Sol:

A:) 1/20

B:) 1/5

C:) 1/75

D:) 1/25

Correct :D

Q:33)The ratio 5:20 expressed as percent equals to

Sol:

A:) 50 %

B:) 125 %

C:) 25 %

D:) None of above

Correct :C

Q:34)The ratio 5:20 expressed as percent equals to

Sol:

A:) 50 %

B:) 125 %

C:) 25 %

D:) None of above

Correct :C

Q:35) Half of 1 percent written as decimal is

Sol:

A:) 5

B:) 0.5

C:) 0.05

D:) 0.005

Correct :D

Q:36) What is 15 percent of 34

Sol:

A:) 5.10

B:) D:)10

C:) C:)10

D:) B:)10

Correct :A

Q:37)A's salary is 50% more than B's. How much percent is B's salary less than A's?

Sol:

A:) 33(1/4)%

B:) 33(1/3)%

C:) 33(1/2)%

D:) 33%

Correct :B

Q:38)The price of cooking oil has increased by 25%. By what percent should a family reduce the consumption of cooking oil so as not to increase the expenditure in this account?

Sol:

A:)20%

B:)25%

C:)18%

D:)16%

Correct :A

Q:39)Ramesh's salary was reduced by 10% and then the reduced salary was increased by 10%. What was his ultimate loss?

Sol:

A:) 0%

B:) 10%

C:) 1%

D:) 5%

Correct :C

Q:40)5% of 5% of Rs. 100 is

Sol:

A:) Rs. 0.25

B:) Rs. 0.50

C:) Rs. 10

D:) Rs. 25

Correct :A

Q:41)The average weight of a class of 24 students is 35 kg. If the weight of the teacher be included, the average rises by 400 g. The weight of the teacher is

Sol:

A:) 45

B:) 50

C:) 55

D:) 60

Correct: A

Q:42) The average age of the mother and her six children is 12 years which is reduced by 5 years if the age of the mother is excluded. How old is the mother

Sol:

A:) 40

B:) 41

C:) 42

D:) 43

Correct: C

Q:43) A motorist travel to a place 150 km away at an avearge speed of 50 km/hr and returns ar 30 km/hr.His average speed for the whole jouney in km/hr is

Sol:

A:) 36.5 km/hr

B:) 37.5 km/hr

C:) 35.5 km/hr

D:) 35 km/hr

Correct: B

Q:44)The average of six numbers is X and the average of three of these is Y.If the average of the remaining three is z, then

Sol:

A:) x = y + z

B:) B 2x = y + z

C:) C x = 2y + z

D:) D x = y + 2z

Correct: B

Q:45)The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is

Sol:

A:) 40

B:) 35

C:) 45

D:) 55

Correct :A

Q:46)If the average marks of three batches of 55, 60 and 45 students respectively is 50, 55, 60, then the average marks of all the students is

Sol:

A:) 5.48

B:) 5.68

C:) 560

D:) 5.58

Correct :B

Q:47)When a student weighing 45 kgs left a class, the average weight of the remaining 59 students increased by 200g. What is the average weight of the remaining 59 students

Sol:

A:) 55

B:) 56

C:) 57

D:) 58

Correct :C

Q:48) Average age of 7 family members is 75 years. But average age of 6 of them is 74 years 6 months. What is the age of the 7th family member?

Sol:

A:) 75.5

B:) 78

C:) 68

D:) 80

Correct :B

Q:49) Average age of 5 people is 42 years. Another group has 8 people who have average age of 81 years. When both groups are mixed what is average age of all people?

Sol:

A:) 64 years

B:) 66 years

C:) 65 years

D:) 70 years

Correct: B

Q:50)Average age of 5 people in a family is 55 years. However it is seen that 3 of the 5 people also have an average age of 55 years. What will be the average age of remaining two people of the family?

Sol:

A:) 8.5 years

B:) 27.5 years

C:) 55 years

D:) 110 years

Correct :C

Unit:3

Interest and Annuity:

Q:1) What day of the week does May 28 2006 fall on

Sol:

A:) Saturday

B:) Monday

C:) Sunday

D:) Thursday

Correct: C

Q:2) What will be the day of the week 15th August, 2010?

Sol:

A:) Saturday

B:) Monday

C:) Sunday

D:) Thursday

Correct: C

Q:3) Today is Monday. After 61 days, it will be

Sol:

A:) Sunday

B:) Saturday

C:) Monday

D:) Thursday

Correct: B

Q:4) On what dates of April, 2001 did Wednesday fall?

Sol:

A:) 2nd, 9th, 16th, 23rd

B:) 1st, 8th, 15th, 22nd, 29th

C:) 4th, 11th, 18th, 25th

D:) 3rd, 10th, 17th, 24th

Correct: C

Q:5) How many days are there in x weeks x days

Sol:

A:) 7

B:) 14x

C:) 7x2

D:) 8x

Correct: D

Q:6) The calendar for the year 2007 will be the same for the year

Sol:

A:) 2017

B:) 2018

C:) 2016

D:) 2014

Correct: B

Q:7) Which of the following is not a leap year? Sol:

A:) 1200

B:) 2000

C:) 700

D:) 800

Correct: C

Q:8) 01-Jan-2007 was Monday. What day of the week lies on 01-Jan-2008?

Sol:

A:) Sunday

B:) Tuesday

C:) Friday

D:) Wednesday

Correct: B

Q:9) 8th Dec 2007 was Saturday, what day of the week was it on 8th Dec, 2006?

Sol:

A:) Tuesday

B:) Friday

C:) Sunday

D:) Wednesday Correct: B

Q:10) On 8th Feb, 2005 it was Tuesday. What was the day of the week on 8th Feb, 2004?

Sol:

A:) Monday

B:) Saturday

C:) Friday

D:) Sunday

Correct: D

Q:11) The last day of a century cannot be

Sol:

A:) Tuesday

B:) Monday

C:) Wednesday

D:) Friday

Correct: A

Q:12) January 1, 2008 is Tuesday. What day of the week lies on Jan 1, 2009?

Sol:

A:) Sunday

B:) Saturday

C:) Thursday

D:) Wednesday

Correct: C

Q:13) If Jan 1, 2006 was a Sunday, What was the day of the week Jan 1, 2010?

Sol:

A:) Tuesday

B:) Thursday

C:) Friday

D:) Saturday

Correct: C

Q:14) What was the day of the week on 17th June 1998?

Sol:

A:) Monday

B:) Sunday

C:) Wednesday

D:) Friday

Correct: C

Q:15) 6th March, 2005 is Monday, what was the day of the week on 6th March, 2004?

Sol:

A:) Friday

B:) Saturday

C:) Wednesday

D:) Sunday

Correct: D

Q:16) What day of the week was 1 January 1901 Sol:

A:) Saturday

B:) Friday

C:) Monday

D:) Tuesday

Correct: D

Q:17) What day of the week will 22 Apr 2222 be? Sol:

A:) Sunday

B:) Tuesday

C:) Monday

D:) Thursday

Correct: C

Q:18) Today is Thursday. The day after 59 days will be? Sol:

A:) Saturday

B:) Monday

C:) Tuesday

D:) Sunday

Correct: D

Q:19) What is the year next to 1990 which will have the same calendar as that of the year 1990? Sol:

A:) 2001

B:) 1995

C:) 1992

D:) 1996

Correct: A

Q:20) January 1, 2004 was a Thursday, what day of the week lies on January 1 2005. Sol:

A:) Monday

B:) Sunday

C:) Saturday

D:) Tuesday

Correct: C

Q:21) Sam borrowed some money from his friend at simple interest of 6% per annum. He returned his friend Rs. 15600. After how much time did Sam return the money if he borrowed Rs. 12000?

Sol:

A:) 8 years

B:)5 years

C:) 5 years

D:)5 years

Correct: C

Q:22)Kabir paid Rs. 9600 as interest on a loan he took 5 years ago at 16% rate of simple interest. What was the amount he took as loan?

Sol:

A:) Rs. 16400

B:) Rs. 12000

C:) Rs. 12500

D:) Rs. 18000

Correct: B

Q:23) Suresh for 2 years invested Rs. 500 in SBI. He also invested Rs. 300 in ICICI for 4 years. At the end he received Rs. 220 from both banks as simple interest. What must have been rate of interest?

Sol:

A:) 10%

B:) 12%

C:) 11%

D:) 5.5%

Correct: A

Q:24)Raman paid Rs. 11400 as interest after 9 years. He had borrowed some money at rate of 6% for first two years, 9% for next three years and 14% for rest of the perioD:) How much money did he borrow?

Sol:

A:) Rs. 10000

B:) Rs. 15000

C:) Rs. 12000

D:) Rs. 12500

Correct: C

Q:25)Ram gets Rs. 2600 for Rs. 2000 in 5 years at some rate of simple interest. Had he invested in other places where rate of simple interest is 3% more than current rate, how much would have Ram got in same time?

Sol:

A:) Rs. 2900

B:) Rs. 3000

C:) Rs. 3100

D:) Rs. 2800

Correct: A

Q:26)Guddi invested some money in a bank at rate of 6% per annum. At simple interest, after 9 years, she got Rs. 8470. How much did she invest?

Sol:

A:) Rs. 5250

B:) Rs. 6550

C:) Rs. 6400

D:) Rs. 5500

Correct: D

Q:27) Aman got a salary of Rs. 8600. The salary was invested by him in two parts. Find the difference between the two parts of his salary, if in first part he got some simple interest at 15% per annum in 4 years, which was same as the second part which he invested at 20% for 3 years.

Sol:

A:) Rs. 0

B:) Rs. 2400

C:) Rs. 100

D:) Rs. 4500

Correct: A

Q:28)Aman invests Rs. 8000 at some rate of interest. Being simple interest the money doubles in 5 years. Raj sees this and invests Rs. 6250 for 3 years at same rate of interest. How much interest does Raj get?

Sol:

A:) Rs. 3750

B:) Rs. 6250

C:) Rs. 3125

D:) Rs. 4250

Correct: A

Q:29) If simple interest for 2 years for a sum is Rs. 600 and compound interest for the same sum for 2 years and same rate of interest is Rs. 645, what will be the rate of interest?

Sol:

A:) 10%

B:) 15%

C:) 30%

D:) 5%

Correct: B

Q:30)In 4 years the simple interest on certain sum of money is 9/25 of the principal. The annual rate of interest is Sol:

A:) 4%

B:) (1/2)%

C:) 9%

D:) 10%

Correct: C

Q:31)If simple interest on a certain sum for 15 months at 7(1/2) % per annum exceeds the simple interest on the same sum for 8 months at 12(1/2)% per annum by Rs. 3B:))50, then the sum (in Rs.) is

Sol:

A:) 312

B:) 3150

C:) 3120

D:) 3120.50

Correct: C

Q:32) A sum becomes Rs. 3000 at the rate of 12% per annum (simple interest). The same sum becomes Rs. 3300 at the rate of 15% per annum (simple interest) in the same duration. Find the sum and the duration.

Sol:

A:) Rs. 2000 and 20 years

B:) Rs. 1900 and 8.25 years

C:) Rs. 1500 and 7 years

D:) Rs. 1800 and 5.5 years

Correct: D

Q:33) An amount becomes 7 times in 15 years. In how many years will the same amount become 10 times? The rate of interest remains the same for both cases.

Sol:

A:) 20 years

B:) 18.75 years

C:) 50 years

D:) 255 years

Correct: C

Q:34) In 40 years an amount becomes 6 times the original amount. What is the rate of interest?

Sol:

A:) 15%

B:) 24%

C:) 6.67%

D:) 34%

Correct: A

Q:35)A TV can be bought for Rs. 20000 cash or by paying in four equal monthly installments with an initial down payment of Rs. 4000. If the rate of interest for this facility is 8% per annum, then what would be the installment charged for each month?

Sol:

A:) Rs. 4000

B:) Rs. 4106.67

C:) Rs. 4050.33

D:) Rs. 4066.01

Correct: D

Q:36)How much should be the annual installment to completely pay off a debt of Rs. 1078 in 6 years at 9% per annum rate of interest?

Sol:

A:) Rs.146.35

B:) Rs.156.25

C:) Rs.126.55

D:) Rs.118.35

Correct: A

Q:37) An amount of Rs. 6500, at simple quarterly interest of 8%, will yield how much in 2 and half years?
Sol:

A:) Rs. 6300

B:) Rs. 7050

C:) Rs. 6600

D:) Rs. 7800

Correct: D

Q:38)Rs. 20400 was divided in two parts and then investeD:) One part invested at 6.25% for 8 years yields the same interest as the other part invested at 7% for 5 years. What is the value of smaller part?

A:) Sol: B:) 9600

C:) 8400

D:) 10100

E:) 6500

Correct: B

Q:39)1/5 part of an amount was given at 3% simple interest, 1/3 part was given at 5% simple interest, 2/5 parts at 9% simple interest and remaining part at 11% simple interest. The total interest received was Rs.297. How much amount was originally given?

Sol:

A:) 4500

B:) 5500

C:) 3950

D:) 4200

Correct: A

Q:40) A man got Rs. 130 less, as simple interest, when he invested Rs. 2000 for 4 years as compared to investing Rs. 2250 for same duration. What is the rate of interest?

Sol:

A:) 12%

B:)13%

C:) 15%

D:) 10.50%

Correct: B

Q:41)Find the principal which yields a simple interest of Rs. 20 and compound interest of Rs. 21 in two years, at the same percent rate per annum?

Sol:

A:) Rs. 520

B:) Rs. 480

C:) Rs. 420

D:) Rs. 200

Correct: D

Q:42) A sum of Rs. 4000 amounts to Rs. 4600 in 5 years at a certain rate of simple interest. What would be the amount, if the rate of interest is increased by 3 %.

Sol:

A:) Rs. 4900

B:) Rs. 5000

C:) Rs. 5200

D:) Rs. 5600

E:) None of these

Correct: C

Q:43)Akhil borrowed a certain sum of money at the rate of 6%, 9% and 14% for a period of first two years, next three years and beyond the period of five years respectively. If at the end of nine years, he paid Rs. 8550 as interest, then find the sum of money he had borroweD:)

Sol:

A:) Rs. 9,000

B:)Rs.14,000

C:)Rs.15,000

D:)Rs.18,000

E:)None of these

Correct: A

Q:44) Karan borrowed a certain amount at 6% per annum simple interest for 9 years. After 9 years, he returned Rs. 8110/-. Find out the amount that he borrowed.

Sol:

A:) Rs. 4,900

B:) Rs. 5,000

C:) Rs. 5,100

D:) Rs. 5266

E:) None of these

Correct: D

Q:45)In how many years, Rs. 200 will produce the same interest @ 5 % as Rs. 900 produce in 2 years @ 3 ½ %?

Sol:

A:) 6.3 years

B:) 8.2 years

C:) 9 years

D:) 12 years

Correct: A

Q:46)certain sum earns simple interest of Rs. 800 in 2 years at a certain rate of interest. If the same sum earns compound interest of Rs. 845 in the same period of 2 years, What must be the rate of interest?

Sol:

A:) 5% p.a

B:) 7.5% p.a

C:) 10% p.a

D:) 15% p.a

Correct: A

Q:47)Find the simple interest on Rs. 78000 at 15(2/5) % per annum for 9 months. Sol:

A:) Rs. 7804

B:) Rs. 8979

C:) Rs. 8046

D:) Rs. 9009

Correct: D

Q:48)Simple interest at x% for x years will come out to be Rs x on a sum of Rs? Sol:

A:)x

B:)100/x

C:)100/x2

D:)100x

Correct: B

Q:49)What is the minimum number of years upon which SI on Rs 2600 at 6.67% interest rate will be in whole number?

Sol:

A:)2

B:)6

C:)3

D:)4

Correct :C

Q:50)What time will be taken by an amount of Rs. 900 to yield Rs. 81 as interest at D:))5% per annum of simple interest?

Sol:

A:) 2 years

B:) 1 years

C:) 3 years

D:) 4 years Correct: A

Unit:4

Matrices and Determinant:

Q:1) If A and B are symmetric matrices of the same order, then Sol:

A:) AB is a symmetric matrix

B:) A – B is askew-symmetric matrix

C:) AB + BA is a symmetric matrix

D:) AB – BA is a symmetric matrix

Correct :C

Q:2)If A=[32x+3x−1x+2] is a symmetric matrix, then x = Sol:

A:) 4

B:) 3

C:) -4

Correct :C

Q:3)If A is a square matrix, then A – A' is a Sol:

A:)diagonal matrix

B:) skew-symmetric matrix

C:) symmetric matrix

D:) none of these

Correct: B

Q:4) If A is any square matrix, then which of the following is skew-symmetric?

Sol:

A:) A + AT

B:) A – AT

C:) AAT

D:) ATA

Correct: B

Q:5)

If $A = \begin{bmatrix} a & b \\ b & a \end{bmatrix}$ and $A^2 = \begin{bmatrix} \alpha & \beta \\ \beta & \alpha \end{bmatrix}$, then

Sol:

A:) α = a2 + b2, β = ab

B:) α = a2 + b2, β = 2ab

C:) α = a2 + b2, β = a2 – b2

D:) α = 2ab, β = a2 + b2

Correct :B

Q:6)Two bicycles were sold for Rs. 3990 each, gaining 5% on one and losing 5% on the other. The gain or loss percent on the whole transaction is

Sol:

A:) Neither gain nor loss

B:)5% gain

C:)5% loss

D:) 0.25% loss

Correct :D

Q:7) If A = [1334] and A2 – KA – 5I = 0, then K =

Sol:

A:)) 5

B:) 3

C:) 7

D:) None of these

Correct: A

Q:8)There are 12 Buses running between London and Manchester, In how many ways can Jose Mourinho go from London to Manchester and return in a different Bus ?

Sol:

A:) 132

B:) 144

C:) 264

D:) 64

Correct: A

Q:9) In how many ways number of 2 digits can be formed out of the four digits 1,2,3 and 4 ?" Sol:

A:) 6

B:) 9

C:) 12

D:) 18

Correct: C

Q:10) Find the number of words that can be formed using letters L,M,N and O ?" Sol:

A:) 32

B:) 64

C:) 72

D:) 128

Correct: B

Q:11) In how many ways a football Team of 11 can be selected from a squad of 15 players ? Sol:

A:) 2100

B:) 2330

C:) 2410

D:) 2730

Correct: D

Q:12) How many arrangements can be formed out of letters of the word CALCUTTA ? Sol:

A:) 2520

B:) 10080

C:) 5040

D:) 6000

Correct: C

Q:13) How many different words can be formed with the letters of the word BHARAT? Sol:

A:) 180

B:) 240

C:) 300

D:) 360

Correct: D

Q:14) How many numbers greater than a million can be formed with the digits 2,3,0,4,3,3,3 ? Sol:

A:) 300

B:) 360

C:) 440

D:) 620

Correct: B

Q:15) In how many ways the letters of the word FAMILY can be arranged when F and Y are always together ? Sol:

A:) 60

B:) 120

C:) 240

D:) 480

Correct: C

Q:16) In how many different ways the seven letters in the word MINIMUM be arranged if all of the 7 letters are used each time ?

Sol:

A:) 36

B:) 128

C:) 420

D:) 626

Correct: C

Q:17) If a Car registration number have four symbols, the first two of which are letters and the remainder digits, how many different registration numbers can be made ?

Sol:

A:) 58500

B:) 62250

C:) 63375

D:) 65515

Correct: A

Q:18) How many 5 digit cell phone numbers with pairwise distinct digits can be composed ?

Sol:

A:) 28560

B:) 30240

C:) 16650

D:) 21424

Correct: B

Q:19) How many greeting cards can be purchased by chain of 12 friends on the eve of Diwali festival if each sends a card to each other ?

Sol:

A:) 66

B:) 96

C:) 132

D:) 166

Correct: C

Q:20) A gentleman has got 6 sorts of note papers, 7 different ink-stands and 4 different pens. In how many ways can he begin to write a letter ?

Sol:

A:) 168

B:) 176

C:) 186

D:) 196

Correct: A

Q:21) There are 5 ways from A to B and 3 from B to C, How many ways are there from A to C via B ? Sol:

A:) 5

B:) 10

C:) 12

D:) 15

Correct: D

Q:22) In a crossword puzzle there are 2 solutions to each of the 3 given places and 3 solutions to 1 other place. How many different solutions can be set in ?

Sol:

A:) 12

B:) 24

C:) 36

D:) 48

Correct: B

Q:23) How many words can be formed from the letters of the word GLOBE ? Sol:

A:) 60

B:) 120

C:) 150

D:) 180

Correct: B

Q:24) Find the number of Triangles formed by joining the angular points of a polygon of 9 sides ? Sol:

A:) 27

B:) 45

C:) 60

D:) 84

Correct: D

Q:26) In how many different ways can the letters of the word Auction can be arranged in such a way that the vowels always come together ?",

Sol:

A:) 30

B:) 48

C:) 144

D:) 576

Correct: D

Q:27) In an examination there are 3 multiple choice questions and each question has 4 choices. The number of ways in which a student can fail to get all answers correct is ?

Sol:

A:) 11

B:) 27

C:) 63

D:) 84

Correct: c

Q:28) In how many different ways can 5 girls and 5 boys form a circle such that the boys and the girls alternate? Sol:

A:) 1200

B:) 1400

C:) 2880

D:) 3212

Correct: C

Q:29) Find out the number of ways in which 6 rings of different types can be worn in 3 fingers?

Sol:

A:) 120

B:) 729

C:) 125

D:) 720

Correct: B

Q:30) In how many ways can 5 man draw water from 5 taps if no tap can be used more than once? Sol:

A:) 720

B:) None of these C:) 120

D:) 60

Correct: C

Q:31) How many two digit numbers can be generated using the digits 1,2,3,4 without repeating any digit?

Sol:

A:) 10

B:) 12

C:) 4

D:) 16

Correct: B

Q:32) There are three places P, Q and R such that 3 roads connects P and Q and 4 roads connects Q and R. In how many ways can one travel from P to R?

Sol:

A:) 8

B:) 10

C:) 12

D:) 14

Correct: C

Q:33) There are 10 women and 15 men in an office. In how many ways can a person can be selected? Sol:

A:) 25

B:) None of these

C:) 150

D:) 50

Correct: A

Q:34) There are 10 women and 15 men in an office. In how many ways a team of a man and a woman can be selected?

Sol:

A:) None of these

B:) 150

C:) 50

D:) 25

Correct: B

Q:35) In how many ways can three boys can be seated on five chairs? Sol:

A:) 80

B:) 60

C:) 30

D:) 120

Correct: B

Q:36)How much should be the annual installment to completely pay off a debt of Rs. 1078 in 6 years at 9% per annum rate of interest?

Sol:

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Sol:

A:) 9600

B:) 8400

C:) 10100

D:) 6500

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B:) 13%

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D:) 10.50%

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Sol:

A:) Rs. 520

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Sol:

A:) Rs. 4900

B:) Rs. 5000

C:) Rs. 5200

D:) Rs. 5600

E:) None of these

Correct: C

Q:43)Akhil borrowed a certain sum of money at the rate of 6%, 9% and 14% for a period of first two years, next three years and beyond the period of five years respectively. If at the end of nine years, he paid Rs. 8550 as interest, then find the sum of money he had borroweD:

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Sol:

A:) Rs. 4,900

B:) Rs. 5,000

C:) Rs. 5,100

D:) Rs. 5266

E:) None of these

Correct: D

Q:45)In how many years, Rs. 200 will produce the same interest @ 5 % as Rs. 900 produce in 2 years @ 3 ½ %?

Sol:

A:) 6.3 years

B:) 8.2 years

C:) 9 years

D:) 12 years

Correct: A

Q:46)certain sum earns simple interest of Rs. 800 in 2 years at a certain rate of interest. If the same sum earns compound interest of Rs. 845 in the same period of 2 years, What must be the rate of interest?

Sol:

A:) 5% p.A:

B:) 7.5% p.A:

C:) 10% p.A:

D:) 5% p.A:

Correct: A

Q:47)Find the simple interest on Rs. 78000 at 15(2/5) % per annum for 9 months.

Sol:

A:) Rs. 7804

B:)Rs. 8979

C:)Rs. 8046

D:)Rs. 9009

Correct: D

Q:48)Simple interest at x% for x years will come out to be Rs x on a sum of Rs?

Sol:

A:) x

B:) 100/x

C:) 100/x2

D:) 100x

Correct: B

Q:49)What is the minimum number of years upon which SI on Rs 2600 at 6.67% interest rate will be in whole number?

Sol:

A:) 2

B:) 6

C:) 3

D:) 4

Correct :C

Q:50)What time simple interest?

Sol:

A:) 2 years

B:) 1 years

C:)3 years

D:)4 years

Correct: A

Unit:5

Linear Programming Problem (LPP)

Q1 - Q5): Study the information given below and answer the following questions:

Mr X has built a mansion with 10 rooms. He was confused about the colours he should use while painting each room. He had the following choice of colours: blue, hazy grey, jumping yellow, teal, violet latte, Terry Cherry and happy pink. It was also known that he could paint more than 1 room with a single colour. Finally, he set up an algorithm to decide the colours that he would be using.

- If he painted any room teal, then he did not paint any other room happy pink.
- If he painted any room blue, then he did not paint any other room jumpingyellow.
- If he painted any room blue, then he painted at least one room happy pink.
- If he painted any room jumping yellow, then he painted at least one room violet latte.
- If he painted any room violet latte, then he painted at least one room happypink.
- If he painted any room happy pink, then he painted at least rooms happy pink.

Q:1) Which one of the following could be a complete list of the number of rooms and colours that Mr X used to paint some of the rooms of his house?

A:) one blue, one Terry cherry, one violet latte, two happy pink

B:) one blue, one teal, one Terry cherry, three happy pink

C:) two blue, one teal, three Terry Cherry

D:) one jacket,one Terry cherry, two violet latte and one happy pink

Correct: A

Q:2) If Mr. X did not paint any room happy pink, what was the maximum number of the different types of colours that he could paint ?

A:) two

B:) three

C:) four

D:) five

Correct: B

Q:3) Which one of the following statements must be false?

A:) Mr. X painted exactly four rooms with colours, one of which was a hat.

B:) Mr. X painted exactly three rooms with colours, one of which was a happy pink.

C:) Mr. X painted exactly four rooms with colours, one of which was a blue.

D:) None of these

Correct: D

Q:4) If Mr. X painted as many different types of colours as possible, then it must be true that he did not paint one of the following types of colours.

A:) blue

B:) hazy grey

C:) teal

D:) jumping yellow

Correct: C

Q:5) If Mr. X painted at least one room, find out which one of the following are the minimum and the maximum numbers of the types of colours that he could paint ?

A:)) 1, 4

B:) 1, 5

C:) 1, 6

D:) 2, 5

Correct: B

Directions (Q6 - Q8): The two pie charts below show the percentage market share on value basis of the companies A to D and others in a sectorial market for 1999 and 2000

FIGURE 1: YEAR 1999

FIGURE 2 : YEAR 2000

Market size 1999= 150 crore and Market size 2000= 375 crore

Q:6) Which company had the minimum growth in sales in these two years?

A:) B

B:) A

C:) C

D:) Other

Correct: A

Solution:

Company	1999	2000
A	60	11B:)5
B	30	9C:)75
C	30	56.25
D	2B:)5	75
Others	7.5	37.5

Q:7) If each company increases its sales value by 10%, then what is the percentage growth of the detergent market?

A:)) 10%

B:) 20%

C:) 30%

D:) 8%

Correct: A

Q:8) If the total sales of the market is doubled for 1999 and 2000, what would be the ratio of sales of D for 2000 to 1999?

A:)) 2:1

B:) 3:4

C:) 15:8

D:) 10:3

Correct: D

Directions (Q9 - Q13): Study the information given below and answer the following questions: The given figure shows the production and consumption of Ragi in India over a period of 5 years.

Q:9) If surplus ragi available each year was exported, what % of the ragi produced between the years ’97-98 and ’00-01 was exported?

A:)) 15%

B:) 10%

C:) 6%

D:) None of these

Correct: D

Q:10) Between the years ’96-97 and ‘00-01,the following can be said about the cumulative production and consumption of ragi

A:) Cumulative production of ragi exceeded that of consumption by 18 lac tones

B:) Cumulative consumption of ragi was 89% of the cumulative consumption of ragi during this period.

C:) Cumulative production of ragi exceeded cumulative consumption of ragi by D:)7% during this period.

D:) Consumption of ragi never exceeded the production of ragi during this period.

Correct: C

Q:11) Which of the following statements are true?

I) The YOY rate of growth of production of ragi has been greater than the YOY rate of growth of consumption of ragi during the period 97-98 to 00-01

II) The CAGR rate of growth of production of ragi has been greater than the CAGR rate of growth of consumption of ragi during the period 97-98 to 00-01

III) The amount of ragi exported in a given year was greater than the previous year during all the years in the period 97-98 to 00-01

A:) I only

B:) I and II only C:) III only

D:) II only

Correct: D

Q:12) What was the % rate of growth in production of ragi between the period 99-00 and 00-01?

A:)05%

B:) 5.71%

C:) 67%

D:) 10%

Correct: B

Q:13) Which of the following years witnessed a two digit rate of growth of ragi?

I) 97- 98

II) 99-00

III) 00-01

A:) I only

B:) I and II

C:) I and III

D:) None of these

Correct: B

Direction (Q14 - Q18): The International Kabbadi League (IKL) was formed last month to give a boost to the game at international standards.

It had a tournament, where 2 teams played some matches. Each team comprised of 7 players each. The listings of the 2 teams X and Y were lost, but certain details regarding the players were available.

A,B,C,D,E,F,G,H,I,J,K,L,M and N are the players.

- D and E were in Team X, K and G were in team Y.
- H and B were in the same team, but not in the team in which F was.
- The sum of the scores of members of Team Y was not greater than 115.
- The table containing the details of the players and their scores is below

A	B	C	D	E	F	G	H	I	J	K	L	M	N
28	12	29	10	9	11	13	14	22	28	16	20	18	15

Q:14) Which of these players was definitely in Team Y?

A:) L

B:) M

C:) N

D:) None of these

Correct: D

Q:15) If the score for team Y was less than 110, what could be the score of team X?

A:)) 135

B:) 137

C:) 139

D:) Cannot be determined

Correct: B

Q:16) Which of these players could not be in team Y, if the score of Y was 115?

A:) A

B:) L

C:) M

D:) N

Correct: A

Q:17) Which of these players was definitely in team X, if the score of Y was 112?

A:) I

B:) L

C:) M

D:) N

Correct: C

Q:18) Which of these players are definitely in Team X?

A:) F

B:) H

C:) B

D:) None of these Correct: D

Q:19) Eight students J, K, L, M, N, O, P and Q go on for a science exhibition in two batches of four each. J and K never go together. M and O do not go together. K and Q have to go together. If K and L go in one batch, then which of the following can be in the other batch?

A:) J, M, O and P

B:) J, M, Q and P

C:) J, M, N and P

D:) J, L, N and P

Correct: C

Q:20) Three Students – Jose, Bharath and Simon – have to select three sports each out of the six sports– Hockey, Baseball, Tennis, Basketball, Cricket and Football. If Football is selected, then Hockey cannot be selected. If Simon selects Tennis, then Jose does not select Football. If Bharath selects Baseball, then Simon cannot select Tennis and if Jose selects Hockey, then Simon selects Cricket and Football. If Simon selects Football and Bharath selects Baseball, then Simon cannot select

A:) Hockey and Tennis.

B:) Baseball and Tennis.

C:) Tennis and Basketball.

D:) Hockey and Cricket

Correct: A

Directions (Q21 - Q25):

It's Valentine's Day and five boys Amit, Bhuvan, Chetan, Dilip and Ehsaan are buying flowers for their respective girlfriends.

Each of these boys has a preference from 1 to 5 (1 being first preference, it is given the first rank) of flowers among orchid, rose, carnation, gerbera and daffodil.

There is a level of dissimilarity between the five boys and this is measured as the sum of the differences in the ranks assigned by them to each of these 5 flowers. The greater this difference, the more dissimilar the persons. The following table indicates the preferences of each of these five boys:

	Amit	Bhuvan	Chetan	Dilip	Ehsaan
Orchid	2	5	1	4	1
Rose	4	2	3	3	3
Carnation	3	1	4	2	2
Gerbera	5	4	5	1	4
Daffodil	1	3	2	5	5

Q:21) The pair of persons who are the most dissimilar among the following is:

A:) Amit- Bhuvan

B:) Bhuvan- Dilip

C:) Dilip- Ehsaan

D:) Chetan- Ehsaan

Correct: A

Q:22) Who among the following is most similar to Amit?

A:) Bhuvan

B:) Chetan

C:) Dilip

D:) Ehsaan

Corret: C

Q:23) Which of the following pairs are the least dissimilar among the five?

A:) Dilip-Ehsaan

B:) Amit- Chetan

C:) Chetan-Ehsaan

D:) Amit- Ehsaan

Correct: B

Q:24) For the person who's second preference is Rose, what is the level of dissimilarity with the one who's fourth preference is orchid?

A:)) 8

B:) 6

C:) 10

D:) 12

Correct: A

Q:25) What is the level of dissimilarity between Amit and Ehsaan?

A:)) 6

B:) 8

C:) 4

D:) 10

Correct: B

Directions (Q26 - Q28):

On a playing ground, Ariya, Amita, Binoy, Shama and Payal are standing as described below facing the North.

(i) Amita is 40 metres to the right of Shama.

(ii) Ariya is 60 metres to the south of Amita.

(iii) Binoy is 25 metres to the west of Shama.

(iv) Payal is 90 metres to the north of Ariya.

Q:26) Who is to the north-east of the person who is to the left of Amita?

A:) Binoy

B:) Shama

C:) Ariya

D:) Payal

Correct: D

Q:27) If a boy walks from Binoy, meets Shama followed by Amita, Ariya and then Payal, how many metres has he walked if he has travelled the straight distance all through?

A:) 215 metres

B:) 185 metres

C:) 155 metres

D:) 245 metres

Correct: A

Q:28) Who is to the south of the person who is to the north-east of Shama?

A:) Ariya

B:) Binoy

C:) Amita

D:) both A & C

Correct: D

Directions (Q29 - Q31):

Eight years ago, Yellow was half as old as Green will be when Green is one year older than Blue will be at the time when Yellow will be five times as old as Blue will be 2 years fromnow.

Ten years from now Blue will be twice as old as Green was when Yellow was nine times as old as Blue. When Blue was one year old, Yellow was three years older than Blue will be when Green is three times as old as Yellow was six years before the time

when Green was half as old as Blue will be when Yellow will be ten years older than Yellow was when Green was 1/3 rd as old as Blue will be when Yellow will be three times as old as she was when Green was born.

Q:29) How old is Blue?

A:)) 4

B:) 6

C:) 2

D:) 3

Correct: D

Q:30) How old will Green be 10 years from now?

A:)) 17

B:) 8

C:) 18

D:) none of these

Correct: C

Q:31) How old would have Yellow been 6 years ago?

A:) 15

B:) 8

C:) 9

D:) none of these

Correct: C

Directions (Q32 - Q36):

After the 2nd MOCK CSAT, Seven friends – Charles, David, Hanish, Kedar, Mahoud, Ninja and Raul are comparing their scores in this exam. We know the following information about their scores.

- Kedar scored the same marks as the average of the marks scored by Charles and David where Charles scored more marks than David.
- Both Mahoud and Ninja scored less marks than Hanish but more than Raul and the marks scored by Raul is not the least
- The number of persons who scored more marks than Kedar is same as the number of persons who scored less marks than Kedar.
- Charles scored less marks than Mahoud.

Q:32) Among them who scored the second highest marks?

A:) Ninja

B:) Mahoud

C:) Chandru

D:) Cannot be determined

Correct: B

Q:33) Among them who scored the second lowest marks?

A:) Charles

B:) Raul

C:) Ninja

D:) Cannot be determined

Correct: B

Q:34) How many people scored more marks than Charles?

A:) 5

B:) 4

C:) 3

D:) 2

Correct: D

Q:35) Whatis the number of persons whose scores are in between the scores of Ninja and David?

A:)) 3

B:) 2

C:) 1

D:) 0

Correct: C

Q:36) Which of the following is true?

A:) Ninja scored more than Mahoud.

B:) David scored more than Ninja.

C:) Raul scored more than Kedar

D:) Ninja scored more than David.

Correct: D

Directions (Q37 - Q40):

To assess the SOPS handed out in the Union budget during a prime time program, a news channel must choose 2 GDA members and 2 RGP members. At least one should be an economist and at least one should be an industrialist. The GDA members are A,B,C,D and E, RGP members are F,G,H and I. C,F, and G are economists. D and I are industrialists. F and C are at loggerheads, and will not appear together. F will take part only if A takes part. D refuses to participate if G is present and E refuses to participate if I is present.

Q:37) Which of the following is not an acceptable panel?

A:) F,H,A,D

B:) G,H,A,C

C:) H,I,B,C

D:) F,I,A,D

Correct: B

Q:38) How many acceptable panels can be put together?

A:)) 9

B:) 5

C:) 10

D:) 11

Correct: A

Q:39) Which of the nine members in the panel will feature in the greatest number of different acceptable panels?

A:) C

B:) F

C:) A

D:) I

Correct: D

Q:40) If A and B are chosen as the GDA members, then who will represent the panel from the RGP party?

A:) F and I only

B:) G and H

C:) G and I only

D:) A or C

Correct: D

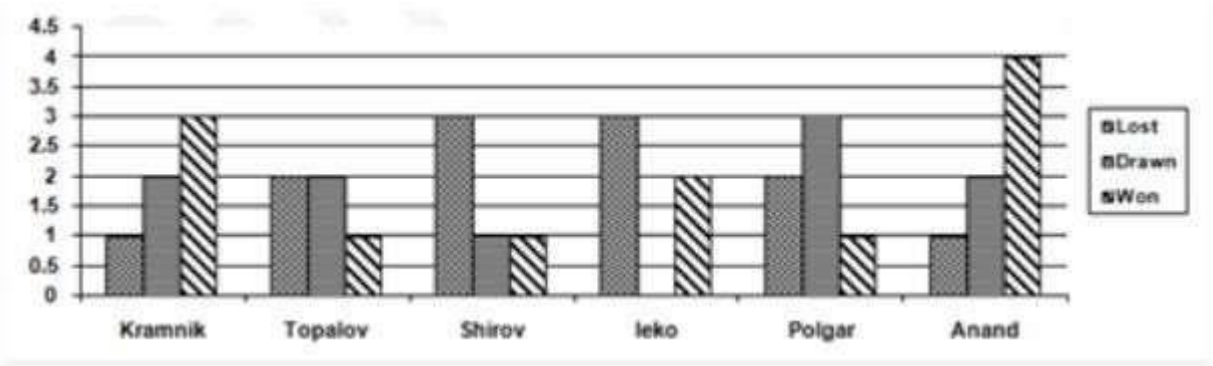
Directions (Q41 - Q45): Six players, Kramnik, Topalov, Shirov, Leko, Polgar and Anand participate in a chess tournament.

In the first round, each player plays one match against every other player. The winning player is awarded 3 points and the losing player gets 1 point.

In case of a draw, each player is awarded 2 points. The player with the highest number of points enters the final. The semifinal is played between the next two players. The winner of the semifinal enters the final. The winner of the finals is declared the champion.

There can be no draws in the final and the semifinal. The results of all the matches played by the players at the

end of the tournament are given below.



Q:41) Who is the champion?

A:) Kramnik

B:) Topalov

C:) Leko

D:) Anand

Correct: D

Q:42) The semifinal is played between players A:) Kramnik and Topalov

B:) Topalov and Polgar

C:) Kramnik and Anand D:) Polgar and Anand

Correct: D

Q:43) Find the points of the semifinalists before the semifinal A:) 9,10

B:) 10,10

C:) 10,11

D:) 11,11

Correct: C

Q:44) Which two players played the final?

A:) Kramnik and Topalov

B:) Topalov and Leko

C:) Kramnik and Anand

D:) Topalov and Anand

Correct: D

Q:45) Which of the following is/are true?

I. The top three rankings at the end of the tournament are the same as those at the end of the first round.

II. Anand won the maximum number of matches in the first round.

III. Kramnik has the highest number of points at the end of first round.

A:) I only

B:) II only

C:) III only

D:) I, II and III

Correct: C

Directions (Q46 - 50): The Poolside chess club management had misplaced the order of it's annual winners from 2001 to 2005, among Pavan, Bishu, Rahul, Arti and Gavin.

When 5 of the regular staff (A,B,C,D,E) in the club were questioned about the winners, each gave their respective orders as shown in the table.

When the records were finally retrieved, the management, out of sheer exuberance, decided to reward the staff as follows. If any of the staff had named all 5 in the right order he would get Rs 10000 as cash prize. If the staff names "n" out of all 5 years correctly, he will get (n+1) thousand Rupees as cash. It was found that each staff won a different amount of money

Q:46) Who won the chess tournament in 2003?

A:) Pavan

B:) Gavin

C:) Arti

D:) none of these

Correct: A

Q:47) How many of the staff correctly mentioned the winner of 2003 ?

A:) 1

B:) 4

C:) 0

D:) 3

Correct: B

Q:48) Who won the least amount as reward?

A:) A

B:) D

C:) B

D:) C

Correct: B

Q:49) Who won the chess tournament in 2001?

A:) Arti

B:) Rahul

C:) Bishu

D:) cannot be determined

Correct: D

Q:50) How much was the middle amount won as reward money?

A:) 2000

B:) 4000

C:) 1000

D:) none of these

Correct: D