



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Second Term Examination - 2018

Class : 6



Sub : Arithmetic

F.M.: 90

DURATION: 2 Hrs 30 Mins

DATE: 01.08.2018

GROUP - A

1. MCQ

[1x5=5]

1.1 Find the difference between smallest 6 - digit number and the largest 4 digit number.

- | | |
|----------|----------|
| a) 1111 | c) 99000 |
| b) 90001 | d) 1 |

1.2 The product of a non-zero whole number and its successor is always

- | | |
|-------------------|--------------------------|
| a) An even number | c) Always divisible by 6 |
| b) An odd number | d) A Prime number |

1.3 Anita lives $5\frac{5}{8}$ km from her school. Sanya lives $1\frac{5}{9}$ times as far as Anita. How far does Sanya live from the school?

- | | |
|-----------------------|------------------------|
| a) $5\frac{3}{16}$ km | c) $8\frac{3}{4}$ km |
| b) 6 km | d) $5\frac{25}{72}$ km |

1.4 To change grams into kilograms, we divide by

- | | |
|--------|----------|
| a) 100 | c) 1000 |
| b) 10 | d) 10000 |

1.5 Which one of the following is not a prime?

- | | |
|--------|--------|
| a) 397 | c) 259 |
| b) 107 | d) 181 |

2. State TRUE or FALSE for the following statements

[1x4=04]

- 2.1 Any whole number divided by itself gives the quotient 1.
- 2.2 Any two consecutive numbers are co-prime.
- 2.3 All numbers which are divisible by 4 may not be divisible by 8.
- 2.4 $5:7 > 8:11$

3. Fill in the blanks

[1x10=10]

- 3.1 The successor of the smallest whole number is _____
- 3.2 $639 + 256 = 256 + 639$; Property _____
- 3.3 $10000 - \underline{\hspace{2cm}} = 7235$

- 3.4 $\frac{3}{4} = \frac{36}{?}$
- 3.5 One - fourth of 1 minute = _____
- 3.6 $0.009 \times 0.049 =$ _____
- 3.7 _____ is a factor of all natural numbers.
- 3.8 $8 \text{ kg} : \underline{\hspace{1cm}} = 16 \text{ m} : 12 \text{ m}$
- 3.9 $21 : 49 = 33 : \underline{\hspace{1cm}}$
- 3.10 $1+1 \div \{1 + 1 \div (1 + \frac{1}{3})\} =$ _____

4. Answer the following questions:

[1x6=06]

- 4.1 Express the following as percent: $\frac{35}{100}$
- 4.2 Convert the following into decimal fraction: 43%
- 4.3 Express the following as percentage: $\frac{3}{4}$
- 4.4 Find the value of 25% of 720
- 4.5 Increase Rs 120 by 40%
- 4.6 Decrease Rs 150 by 30%

GROUP - B

5. Answer the following :

(5X2 = 10)

- i) Write three consecutive successors of 10999.
- ii) Write two equivalent fractions of $\frac{8}{13}$.
- iii) Simplify: $43.51 - 51.4146 + 703.83 - 453.51$
- iv) A boy scored 60 marks in Science and 75 marks in Mathematics. What is the ratio of his mathematics marks to his science marks?
- v) Increase Rs. 80 by 8%.
- 6 Answer the following: (Any 5) :-
- (5X3 = 15)
- i) A box contains 400 apples. 8 dozen apples were found spoiled. Find the percentage of good apples in the box.
- ii) A car travels 60 kilometers in 5 litres of petrol. How much petrol will be needed to cover a distance of 320 kilometers?
- iii) Tell whether each number is Prime or Composite:
- a) 5
- b) 31
- c) 42
- iv) What are Co - primes, Twin Primes and Prime Triplet. Give examples.
- v) Simplify: $27 - [48 \div \{4 + (15 - 13 - 2)\}]$
- vi) Find the least number which when divided separately by 15, 20, 36 and 48 leaves 3 as the remainder in each case.
- vii) Simplify: $\frac{5}{6} \text{ of } \left(\frac{4}{9} + \frac{2}{3}\right) \div 3\frac{1}{3}$

Group C

5X8

Q7. Answer any eight of the following questions.

- i. Find the product of the greatest 3-digit number and the greatest 2-digit number.
- ii. Find the H.C.F. of 2280 and 2544.
- iii. Which ratio is greater, 2:3 or 3:4 ?
- iv. Two numbers are in ratio 8:9 and their sum is 153. Find the numbers.
- v. A pole casts a shadow of length 30 m at a time, when a tree 8 m high casts a shadow of length 10 m. Find the height of the pole.
- vi. Pallavi obtained 570 marks out of 600 and Neha obtained 740 marks out of 800. Whose performance is better?
- vii. Chalk contains 40% calcium, 12% carbon and rest oxygen. What is the amount of oxygen in 8 kg of chalk?
- viii. A rectangular wooden picture frame is 1.08 m wide and 2.63 m long. What is the smallest length of wood in metres required to make this frame?
- ix. A bamboo plant grew 45.6 inches in one day. What is the average growth per hour ?
- x. Hazel is training for a marathon. If she runs at an average speed of 9.25 km per hour , how long will it take her to run 46.25 kilometres?

.....



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Pri: Thwish De 218115



SECOND TERM - 2018
CLASS - VI

SUBJECT - ARITHMETIC_Solution
DURATION - 2 HOURS 30 MINUTES

F.M. : 90
DATE- 1/8/2018

GROUP - A

1. 1.1 b 1.2 b 1.3 c 1.4 c 1.5
2. 2.1 T, 2.2 T 2.3 T 2.4 F
3. 3.1)1 3.2) Commutative 3.3) 2765 3.4)48 3.5) 15 seconds 3.6) 0.000441
3.7)1 3.8) 6 3.9) 77 3.10)11/7
4. 4.1)35% 4.2) 0.43 4.3)75% 4.4)180 4.5)168 4.6)105

GROUP - B

5) Answer the following :

(5X2 = 10)

i) Write three consecutive successors of 10999.

A: 11000, 11001, 11002

ii) Write two equivalent fractions of $\frac{8}{13}$.

$$A: \frac{8}{13} = \frac{8 \times 2}{13 \times 2} = \frac{8 \times 3}{13 \times 3}$$

$$\text{or, } \frac{16}{26} \text{ and } \frac{24}{39}$$

iii) Simplify: $43.51 - 51.4146 + 703.83 - 453.51$

A: 242.4154

iv) A boy scored 60 marks in Science and 75 marks in Mathematics. What is the ratio of his mathematics marks to his science marks?

A: 5 : 4

v) Increase Rs. 80 by 8%.

A: Rs. 86.40

6) Answer the following: (Any 5) :-

(5X3 = 15)

i) A box contains 400 apples. 8 dozen apples were found spoiled. Find the percentage of good apples in the box.

A: Total Number of apples = 400

No. Of spoiled apples = $8 \times 12 = 96$

No. of good apples left = $400 - 96 = 304$

% of good apples: $\frac{304}{400} \times 100 = 76\%$

ii) A car travels 60 kilometers in 5 litres of petrol. How much petrol will be needed to cover a distance of 320 kilometers?

A: $26\frac{2}{3}$ litres

iii) Tell whether each number is Prime or Composite:

a) 5 - prime

b) 31 - prime

c) 42 - composite

iv) What are Co – primes, Twin Primes and Prime Triplet. Give examples.

A: Co – primes – Two natural numbers that have 1 as the only common factors are called co – primes.

Eg. (2,3) , (3,4)

Twin Primes: Prime numbers that differ by two

e.g. (3, 5), (11, 13)

Prime Triplet : A set of three consecutive prime numbers that differ by 2 is called a prime triplet.

e.g. (3, 5, 7)

v) Simplify: $27 - [48 \div \{4 + (15 - 13 - 2)\}]$

A: 21

vi) Find the least number which when divided separately by 15, 20, 36 and 48 leaves 3 as the remainder in each case.

A: LCM of (15, 20, 36, 48) + 3
= 720+3
= 723

vii) Simplify: $\frac{5}{6}$ of $(\frac{4}{9} + \frac{2}{3}) \div 3\frac{1}{3}$

A: $\frac{5}{18}$

GROUP – C

7.i. $999 \times 99 = 98901$

ii. $2280 = 3 \times 8 \times 95$

$2544 = 3 \times 8 \times 106$

iii. $2:3 = 8:12$ and $3:4 = 9:12$. So $3:4 > 2:3$.

iv. $17x = 153$, ie, $x = 9$. So the numbers are 72 and 81

v. When the length of the shadow is 10 m the height is 8m

So when the length of the shadow is 30 m the height is $8 \times 30 / 10 = 24$ m

vi. Pallavi obtained $570/6 = 95$ out of 100

Neha obtained $740/8 = 92.5$ out of 100.

So Pallavi's performance is better.

vii. Amount of oxygen is 48%. In 8 kg it is 3.84 kg.

viii. perimeter = $2(1.08 + 2.63) = 7.42$ m.

ix. Per hour it grows $45.6/24 = 1.9$ m

x. Hazel runs 9.25 km in 1 hour.

So she runs 46.25 in 5 hours.
