ST.LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

First Term Examination – 2018

Class : 8

SUB :Arithmatic **F.M.80**

DURATION: 2 Hrs30Mins **DATE:23.04.2018**

Group-A

1. Choose the correct options: 1x5=5

i) $^{-32}/_{56}$ expressed as a rational number with numerator 4 is

a) $^{4}/_{7}$ b) $^{4}/_{14}$ c) $^{4}/_{-7}$ d) $^{4}/_{-14}$

ii) What number should be added to $^{-13}/_{20}$ to get $^{-1}/_{60}$?

a) $^{-19}/_{30}$ b) $^{-8}/_{15}$ c) $^{19}/_{30}$ d) $^{8}/_{15}$

iii) If 80% of x is 256, then the value of x is

a) 350 b) 300 c) 320 d) 400

iv) What is 5% of 5% of 500?

a) 12.5 b) 25 c) 1.25 d) 6.25

v) If 60% of A's income is equal to 75% of B's income, then B's income is what per cent of A's income?

a) 125% b) 80% c) 75% d) 60%

2. Write True or False: 1x5=5

a) Every rational number is a whole number.

b) The additive inverse of $^{-21}/_{-30}$ is $^{-21}/_{30}$.

c) Between any two distinct rational numbers, there is always a rational number.

d) 80% is equal to $^{3}/_{5}$.

e) $^{8}/_{15} \div {}^{7}/_{8} = {}^{7}/_{8} \div {}^{8}/_{15}$

3. Fill in the blanks: 1x5=5

a) 400 is greater than 300 by _____%.

b) 35% of 2 kg = _____.

c) 0.225 = _____%

d) -19/40 x 8/11 = 8/11 x _____.

e) 0 ÷ - 28/19 = _____.

Group-B

4. Answer the following: 2x5=10

a) Which of the two rational number is greater?

- 5/16 or -6/8

b) Write 2 rational numbers equivalent to -7/9.

c) Add -9/10 and 3/4.

d) Subtract 8/9 from -5/6

e) Express 40% as ratio.

5. Answer any five: 3x5=15

a) The sum of two rational numbers is -19/60. If one of the numbers is -7/12, find the other.

b) Find the additive inverse of 10/11, -26/13, 21/8.

c) Multiply -5/12 by 9/10

d) Find 48% of 1 litre.

e) A metal bar is 2.4 meters long. After heating its length increased by 2%. What is the new length?

f) The price of a concert ticket increased from Rs.65 to Rs.80. Find the percentage increase.

g) What per cent of a day is the time duration of 3 hour.

Group - C

6. Answer any eight questions: 5x8=40

a) Represent 13/3 and -13/3 on the number line.

b) Simplify: 2/5 + 8/3 + -11/15 + 4/5 + -2/3.

c) (-3/4 x -24/15) + (-11/13 x 78/55)

d) Find four rational numbers between 1/6 and 1/3.

e) A postcard is $10^2/_5$ cm long and $7^4/_5$ cm wide. Find the area of the postcard.

f) A recipe for French toast calls for ¾ liter of milk. If you want to make only 2/3 of the recipe how much milk should you use?

g) Radha spends 40% of her salary on food, 20% on house rent, 10% on entertainment, and 10% on conveyance. If her savings at the end of the month are Rs.1500, what is her salary per month?

h) B's salary is 25% less than A's salary. By what per cent is A's salary more than B's salary?

i) The adult population of a village is 6400. If 30% of the population are literate, what is the number of illiterate?

j) In an examination, 1100 boys and 900 girls appeared. 50% of the boys and 40% of the girls passed the examination. What is the percentage of candidates who failed?

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23/4/18.

FOR GOD AND COUNTRY

ST. LAWRENCE HIGH SCHOOL

FIRST TERM – 2018

Subject: ARITHMATIC **Class: VIII** **F. M. 80**

MODEL ANSWERS

Group-A

1. i) c) 4/-7
   ii)c) 19/30
   iii)c) 320
   iv)b) 1.25
   v) b) 80%

2. a) False
   b) True
   c) True
   d) False
   e) False

3. a) 25%
   b) 700gm
   c) 22.5%
   d) -19/40
   e) 0

Group-B

4. a) -5/16
   b) – 14/18, -21/-27
   c) – 3/20
   d) – 31/18
   e) 2:5

5. a) -19/60 – (-7/2) = – 19/60 + 7/2 = 16/60 = 4/15
   b) -10/11, 26/13 and -21/8
   c) -3/8
   d) 480 ml
   e) Increase in length 2/100 x 2.4 =0.048 m.
   ∴ New length 2.4 m + 0.048 m =2.448 m.
   f) $\frac{85-65}{65}$ x 100 = 15/65 x 100 = 300/13 %
   g) 3/24 X 100 = 25/2 =12.5%

Group-C

6.a) Draw the number line and show the respective points.

6. b) 2/5 + 8/3 + - 11/15 +4/5 + -2/3
   = $\frac{6+40-11+12-10}{15}$
   = $\frac{58-21}{15}$ = 37 / 15 (Ans)

c) (- ¾ x -24/15) + (-11/13 x 78/55)
= 6/5 + (-6/5) = 0

d) ½ (1/6 + 1/3) = ½ (1+2/6) = ½ .3/6 =1/4

½ (1/6+1/4) = ½ (2+3/12) = ½. 5/12 = 5/24

½ (1/6 + 5/24) = ½ (4+5/24) = ½.9/24 =9/48

½ (1/6 + 9/48) = ½ (8+9/48) = ½.17/48 = 17/96

e) Length: $10\frac{2}{5}$ = 52/5 cm.

Width: $7\frac{4}{5}$ = 39 / 5 cm.

Therefore area of postcard = (52/5 x 39/5) cm^2

= $81\frac{3}{25}$ cm^2

f) Amount of milk required = (2/3 x ¾) Litre = ½ Litre

g) Let total salary = Rs. X

Radha's total expenditure = (40+20+10+10) % = 80%

Therefore savings = (100 – 80) % = 20%

B.T.P 20% of x =Rs.1500

X = Rs. (1500 x 100/20) = Rs.7500

h) Let A's salary be Rs.100

B's salary is 25% less than A's salary.

Therefore, B's salary = Rs.75.

A's salary is Rs. 25 more than B's salary.

% by which A's salary is more than B's salary.

$(^{25}/_{75} \times 100)$ %

= $(^{100}/_{3})$ %

= $33^{1}/_{3}$ %

i) Total adult population = 6400

% of literate population = 30%

Number of literate people = 30% of 6400 = $^{30}/_{100}$ x 6400 = 1920.

Therefore number of illiterate people = 6400-1920 = 4480.

j) Number of boys = 1100

Number of boys passed is $^{50}/_{100}$ x 1100 = 550

Therefore number of boys failed is = (1100-550) = 550.

Number of girls = 900

Number of girls passed is $^{40}/_{100}$ x 900 = 360.

Therefore number of girls failed is = (900-360) = 540.

Total number of candidates who failed (550+540) = 1090.

Therefore percentage of candidates who failed is

= 1090/2000 x 100

= 54.5% (Ans)