

Pabna Cadet College
Fortnightly Examination - 2021
Subject: Mathematics
Class: VII

Time: 15 minutes

Full Marks: 10

Answer all the questions

1. $\frac{x^2+x}{xy+y}$ when expressed in lowest term is
a. $\frac{x}{y}$ b. $\frac{y}{x}$ c. $\frac{x}{y^2}$ d. $\frac{1}{y}$
2. $\frac{3}{x+3} - \frac{2}{x+2} = ?$
a. $\frac{3x}{(x+2)(x+3)}$ b. $\frac{x}{(3x+2)(x+3)}$ c. $\frac{4x}{(3x+2)(x+3)}$ d. $\frac{x}{(x+2)(x+3)}$
3. $\frac{1}{5x} + \frac{2x}{5x} = ?$
a. $\frac{5}{3x}$ b. $\frac{3}{5x}$ c. $\frac{2}{7x}$ d. $\frac{4}{5x}$

Answer the questions 4-6 according to the following information

$$\frac{a}{bc}, \frac{a}{ac}$$

4. What is the LCM of the denominators?
a. ab b. bc c. ac d. abc
5. If the fractions are expressed with common denominators, what is the first term?
a. $\frac{a^2}{abc}$ b. $\frac{a}{abc}$ c. $\frac{b^2}{abc}$ d. $\frac{b^2}{abc}$
6. What is the summation of the terms?
a. $\frac{a+b}{bc}$ b. $\frac{a}{abc}$ c. $\frac{a+b}{abc}$ d. $\frac{a(a+b)}{bc}$

Answer the question 7-10 according to the following information.

11 9 10 16 12 23 8 22 7 19

7. What is the range of the numbers?
a. 16 b. 17 c. 18 d. 15
8. To make class interval 4, how many classes are required?
a. 3 b. 4 c. 5* d. 6
9. If the first class is 7-10, what is the frequency of the second class?
a. 1 b. 2 c. 3 d. 4
10. Which class has the highest frequency?
a. 7-10*
b. 11-14
c. 15-18
d. 19-22

CQ

Marks (out of 30) of 20 students are given below

18 20 14 15 25 16 25 22 20 16 17 19 14 19 15 20 19 24 18 17

- a. What is data?
- b. Why do we organize data?
- c. Make a frequency distribution from the given data set using no less than 4 classes.
- d. What have you understood from this distribution (made in c)? Relate with the advantages of organized data.