Monthly Examination-July -2022

| Grade - **8** | **Mathematics** | Time: 1 hour |

Part I

Answer for all questions

1) Find the H.C.F of $4ax$, $6abx$

2) Find the value of $\sqrt{5^3 \times 5}$

3) Simplify $7t\ 300kg - 4t\ 750kg$

4) Write as a power of a product. $a^3 \times (2b)^3 \times c^3$

5) $5x - 20y$: Write as a product of factors.

6) Find the value of $\sqrt{12 \times 27}$

7) Convert 4.03 $\boldsymbol{t}$ into $\boldsymbol{kg}$.

8) Find the value of $(-\mathbf{1})^2 \times 3^3$

9) The area of a square shaped flower bed is **441 m²**. Find the length of a side of the square.

10) For the following statements put a $\sqrt{}$ mark for the correct statement and put a **X** for the incorrect statement

    (i) $- 4pq + 12pr = 4p(-q + 3r)$ ☐

    (ii) $- 4pq + 12pr = -4p(q + 3r)$ ☐

$(4 \times 10 = 40\ \text{marks})$

Part II

01) Due to the economic crisis in the country, the details regarding the relief packets given to a particular area for a period of one month are given in the incomplete table below

Number of family members	Mass of a packet(kg)	Number of families	Total mass of the packet in (kg)	Total mass of the packet in (t)
1 , 2	5	140		
3 , 4 , 5	10	370		
above 5	15	210		

    I. Complete the above table
   II. Calculate the **total mass** of the packets required to supply for the period of one month in **metric ton**.

   III.   If the vehicle used for this relief works is capable of carrying maximum of 2 metric tons of weight, find at least **how many times** should this vehicle travel?

$$(18 + 6 + 6 = 30 \ \text{marks} \ )$$

02) *a*) Fill in the blanks.

  I. $81 = 9^{\square}$ $II. \ 160 = 2^{\square} \times 5^{\square}$
 III. $64 = \square^{2}$ $IV. \ 72 = \square^{3} \times 3^{\square}$

b)**Compare** the followings using the symbols $>, =$ and $<$

  I. 2^{3} ………. 2^{5} $II. \ (-3)^{20}$ ………. $(-3)^{25}$
 III. 2^{4} ………. $(-2)^{4}$ $IV. \ (-1)^{10}$ ………. $(-1)^{100}$

$$(18 + 12 = 30 \ \text{marks} \ )$$