CHAPTER 2

Fractions, Decimals and Approximations

1. Simplify
$$\frac{4\frac{1}{2} + \frac{2}{3}}{\frac{8}{13} \times 4\frac{1}{3}}$$
.

- 2. Arrange $\frac{11}{12}$, $\frac{5}{8}$, $\frac{4}{15}$ in ascending order.
- 3. Evaluate $[(1\frac{5}{7} 4\frac{2}{3}) \div 4\frac{3}{7}] 8$.
- 4. Find the average of $\frac{3}{8}$, $\frac{1}{4}$ and $\frac{2}{5}$.
- 5. Express $\frac{7-1\frac{2}{3}}{2+1\frac{5}{9}}$ as a single fraction in its lowest terms.
- 6. Evaluate the following, giving your answers in their simplest form:

(a)
$$\frac{1}{2} + \frac{1}{4} + \frac{1}{8}$$

(b)
$$2 \times \frac{22}{7} \times \frac{21}{4}$$

(c)
$$\left(2\frac{1}{4} + 3\frac{1}{2}\right) \div \frac{1}{8}$$

(d)
$$\frac{4}{5} - \frac{1}{2}$$

7. Evaluate:

8. Evaluate:

(a)
$$3.14 \times 16 \times 2$$

9. Evaluate:

(a)
$$0.7 \times 0.6 \times 0.3$$

(b)
$$27 \div 0.9$$

10. Evaluate:

(a)
$$5 \times (2 + 0.2) - 4 \div 16$$

(b)
$$0.8 \times 0.9$$

(c)
$$5.8 + 6.2 \times 0.2$$

20. Given that
$$h = 7$$
 and $k = -1$, evaluate

(a)
$$3h + 4k$$
, (b) $2h^2$,

(c)
$$h(3k-10)$$
.

21. Given that
$$a = -4$$
, $b = 3$ and $c = 0$, find the value of

(b)
$$a - 2b + 3c$$
,

(c)
$$a^2 - b^2 + c^2$$
.

22. Evaluate the following by taking
$$p = 4$$
, $q = \frac{1}{2}$, $r = -3$ and $s = -\frac{3}{4}$.

(a)
$$5p + (r - s)$$

(b)
$$\frac{1}{2}(2p-3q)+\frac{r}{s}$$

(c)
$$7pr^2 + 4q^2s$$

(d)
$$rs\left(\frac{1}{p} - \frac{1}{q}\right)$$

(e)
$$3p^2q - 6sr$$

(f)
$$pr + r[(q + 8s - pq) - 6q]$$

Find the product of the following:

- (a) 7w and 5x
- (b) 3w and -8x
- 6m and $7n^2$ (c)

Sumpary use following expression

Simplify the follow-urg expressions

- 9pq and $-4p^2q$
- (e) 15c and -9c

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(f) -4a and -23a

Find the quotient

- when $168a^2$ is divided by 12a,
- when -49xy is divided by -14y,
- when 44p is divided by -66pq, (c)
- (d) when 52c(-d) is divided by 4b(-c),
- when -17rs is divided by 85p(-r), (e)
- when 24ab is divided by $\frac{1}{3}ab^2$.

Simplify: (a)
$$10a + b - 15a + 3b$$

(b)
$$2(a+b) - 5(a+2b)$$

(c)
$$\frac{1}{3}(2x + y) - \frac{5}{6}x + \frac{2}{9}y$$

26. Simplify
$$5x - 4[2x - (6y - 3x)]$$
.

27. Simplify:

(a)
$$4(a+3b)-15b$$

(b)
$$\frac{1}{3}[4a - (6 - 5a)]$$

28. Simplify
$$-5a - \frac{1}{3}a + 3(\frac{1}{6}a - 7)$$
.

(a)
$$\frac{2x-5}{3} - \frac{3x-7}{5}$$

(b)
$$\frac{1}{5}x - \frac{7}{2} \left[\frac{6}{21}x - \left(\frac{3}{7}y - \frac{1}{14}x \right) \right]$$

(04)



FINAL TERM ASSESSMENT PAPER

Time : $\frac{3}{4}$ hour

Marks: 40

ALL questions may be attempted.

Answers are to be written on the question paper in the spaces provided. Omission of essential workings will result in loss of marks. No calculators are allowed. This paper consists of 10 questions.

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(a)
$$\left(2\frac{1}{3} + 1\frac{2}{9}\right) \times 2\frac{2}{5}$$

(b)
$$\{6 \times [108 \div (-17 + 8)] - 36\} + 12$$

(c) $12^2 - 2^3 + 7^2$

(c)
$$12^2 - 2^3 + 7^2$$

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Given that $-3 \le p \le 4$ and $2 \le q \le 6$, find

(a) the least possible value of p - q,

the least possible value of pq.

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(b)