



# Holiday Assignments

English Junior Section

Mathematics 03 (Factors)

Grade 8

English Medium

**(I) Find the H.C.F of the following numbers :**

(a) 56,42,98

(h) 77,33,22

(b) 80,16,96

(i) 65,39,13

(c) 14,49,7

(j) 48,64,32

(d) 16,72,80

(k) 48,84, 6

(e) 4,37,51

(l) 22,77,66

(f) 8,56,32

(m) 24,48,72

(g) 24,90,78

(n) 77,49,56

**(II) Find the H.C.F of the following algebraic terms :**

(a)  $6x$  ,  $8x$

(f)  $14x$ ,  $14xy$ ,  $28x$

(b)  $4mn$  ,  $6n^2$

(g)  $4m^2n$  ,  $2mn$ ,  $m^3n^3$

(c)  $4x^2$  ,  $6xy$  ,  $5x$

(h)  $15p$ ,  $25pq$ ,  $5p$

(d)  $12a^2b$  ,  $16a^3b$  ,  $24ab$

(i)  $36ab^3c$ ,  $24a^3bc^2$

(e)  $36a^2$  ,  $36ba^2$

(j)  $2a^3$ ,  $4a^2$ ,  $3a^4$

**(III) Fill in the blanks :**

(a)  $7x^2y^2 + 21x^3 = \square (y^2 + \square)$

(b)  $26y^2 - 13xy = 13y (2y - \square)$

(c)  $15a + 45a^2 = 15a (\square + 3a)$

(d)  $3x^2 - 27x^2y = \square (1 - 9y)$

(e)  $8lm^2 + 48lm = \square (1 + 6)$

(f)  $4b^3 - 16b^2 = \square (b - \square)$

**(IV) Write each algebraic expression given below as a**

**product of two factors :**

(a)  $5a + 25$

(i)  $2p^3q^3 - 6pq^3$

(b)  $4xa - 6a$

(j)  $xy - \frac{1}{2}xy^2$

(c)  $6x + 8y$

(k)  $10ax^2 + 15ax^3$

(d)  $xy + 3x$

(l)  $12x + 48$

(e)  $12abc + 4ac$

(m)  $y^2 + 4y$

(f)  $px - pi$

(n)  $a^3 - ab^2$

(g)  $x^2 - 9x$

(o)  $10cd - 20cde$

(h)  $c^3 - c$

(p)  $\frac{1}{8}x^2y - \frac{1}{2}xy^2$