1. (i) 1 (iii) 9 (v) 64 (vii) 8
(ii) 2 (iv) 5 (vi) 3 (viii) 7

2. (i) $6^3 = 31 + 33 + 35 + 37 + 39 + 41$

(ii) $83 = 57 + 59 + 61 + 63 + 65 + 67 + 69 + 71$.

(iii) $73 = 43 + 45 + 47 + 49 + 51 + 53 + 55$.

3. (3), (4), (5)

4.
2	392
2	196
3	99
3	33
	11

No. 392 is not a perfect cube.

$\therefore 392 = 2 \times 2 \times 3 \times 3 \times 11$

required No. $11 \times 11 \times 2 \times 3$
$= 121 \times 6$
$= 726$

5.
2	53240
2	26620
2	13310
5	6655
11	1331
11	121
	11

$53240 = 2^3 \times 5 \times 11^3$

required No to be multiplied, 25.

6.
2	1188
2	594
3	297
3	99
3	33
	11

$1188 = 2 \times 3 \times 3 \times 3 \times 11$

No it's not a cube.

→ required No to be multiplied
$= 2 \times 11 \times 11$
$= 242$.

7) 2 | 68600
2 | 34300
7 | 4900
7 | 700
2 | 100
2 | 50
5 | 25
5 | 5
1

$68600 = 2^3 \times 7^3 \times 5^2$

No. It's not a cube

∴ Required No to be multiplied

2 5.