25/6/22
HW

Ex - 8(B)

Date
Page

1.i) F of 16 = 1, 2, 4, 8, 16
F of 35 = 1, 5, 7, 35
CF = 1
HCF = 1

ii) ~~F 25~~ = F of 25 = 1, 5, 25
~~F 20~~ = F of 20 = 1, 2, 4, 5, 10, 20
CF = 1, 5
HCF = 5

iii) F of 27 = 1, 3, 9, 27
F of 75 = 1, 3, 5, 15, 25, 75
CF = 1, 3
HCF = 3

iv) F of 8 = 1, 2, 4, 8
F of 12 = 1, 2, 3, 4, 6, 12
F of 18 = 1, 2, 3, 6, 8, 18
CF = 1, 2
HCF = 2

v) F of 24 = 1, 2, 3, 4, 6, 8, 12, 24
F of 36 = 1, 2, 3, 4, 6, 9, 12, 18, 36
F of 45 = 1, 3, 5, 9, 15, 45
F of 60 = 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
CF = 1, 3
HCF = 3

2i)

5 | 5	2 | 8
1	2 | 4
	2

F of 5 = 1 X 5
F of 8 = 1 X 2 X 2 X 2
CF = 1
HCF = 1

ii)

2 | 24	7 | 49	F of = 2 X 2 X 2 X 3
2 | 12	7	F of = 7 X 7
2 | 6		CF = 1
3		HCF = 1

iii)

2 | 40	2 | 60	2 | 80	F of 40 = 2 X 2 X 2 X 5
2 | 20	2 | 30	2 | 40	F of 60 = 2 X 2 X 3 X 5
2 | 10	3 | 15	2 | 20	F of 80 = 2 X 2 X 2 X 2 X 5
5	5	2 | 10	CF = 2 X 2 X 5
		5	HCF = 20

iv)

2 | 48	2 | 84	2 | 88	F of 48 = 2 X 2 X 2 X 2 X 3
2 | 24	2 | 42	2 | 44	F of 84 = 2 X 2 X 3 X 7
2 | 12	3 | 21	2 | 22	F of 88 = 2 X 2 X 2 X 11
2 | 6	7	11	CF = 2 X 2
3			HCF = 4

v)

2 | 12	2 | 16	2 | 28	F of 12 = 2 X 2 X 3
2 | 6	2 | 8	2 | 14	F of 16 = 2 X 2 X 2 X 2
3	2 | 4	7	F of 28 = 2 X 2 X 7
	2		CF = 2 X 2
			HCF = 4

Q2

3.i) 16)24(1
76
8)16(2
16
0

HCF = 8

ii) 18)30(1
18
12)18(1
12
6)12(2
12
0

HCF = 6

iii) 7)14(2
14
0

7)24(3
21
3)7(2
6
1)3(3
3
0

HCF = 1

iv) 70)80(1
70
10)70(7
70
0

120)150(1
120
30)120(4
120
0

10)30(3
30
0

HCF = 10

v

```
32)56(1          8)46(5
  -32              -40
  24)32(1          6)8(1
    -24              -6
    8)24(3           2)6(3
      -24              -6
       0                0
```

HCF = 2

4i)

```
45)75(1          15)135(9
  -45              -135
  30)45(1            0
    -30
    15)30(2
      -30
       0
```

HCF = 15

ii)

```
36)48(1          12)96(8
  -36              -96
  12)36(3            0
    -36
     0
```

HCF = 12

iii)

```
33)66(2          33)132(4
  -66              -132
   0                 0
```

HCF = 33

iv)

```
24)36(1          60)132(2
  -24              -120
  12)24(2          12)60(5
    -24              -60
     0                0

12)12(1
  -12
   0
```

HCF = 12

v) $30)60(2$, -60, 0 — HCF = 6

$90)105(1$, -90, $15)90(6$, -90, 0

$15)30(2$, -30, 0 — HCF = 15

5 $180)225(1$, -180, $45)180(4$, -180, 0 — HCF = 45

$45)315(7$, -315, 0

∴ So the greatest number are = 45

6. F of 45 = 1, 3, 5, 9, 15, 45

F of 56 = 1, 2, 4, 7, 8, 14, 28, 56

CF = 1

HCF = 1

7 15 and 16, 16 and 21, 21 and 28, 15 and 28

8 $93 - 3 = 90$

$111 - 3 = 108$

$129 - 3 = 126$

$90)108(1$, -90, $18)90(5$, -90, 0 — HCF = 18

$18)126(7$, -126, 0

— X —