Chapter 8

**Exercise 2**

The loading chart for resources is given below

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Carpenter | 1 | 1 | 1 | 3 | 2 | 2 | 2 | 2 |  |  |  |  | 6 | 6 |
| Electrician |  |  |  |  | 5 | 5 | 5 | 5 | 5 |  |  |  |  |  |
|  |  |  |  | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 |  |  |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

Basis the resource schedule,

Critical activities are 1 – 3- 5- 6 and activity 4

There is a slack of 1 for activity 2

The project duration is 14

**Exercise 5**

The slack has reduced for activity 3 from 3 weeks to 1 week

Similarly, slack for activity 5 has reduced to 0 and now the activity is on critical path.

**Exercise 6**

Yes, we can say yes to Broker’s request as the project is finishing in 11 weeks.

**Exercise 11**

The baseline budget form is given below

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | Week | | | | | | | | | | | | |
| ID | | | | | Budget | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Design prototype | | | | | 24 | 12 | 12 |  |  |  |  |  |  |  |  |  |  |  |
| Build prototype | | | | | 30 |  |  | 10 | 10 | 10 |  |  |  |  |  |  |  |  |
| Order parts | | | | | 10 |  |  |  |  |  | 5 | 5 |  |  |  |  |  |  |
| Prepare production | | | | | 64 |  |  |  |  |  | 16 | 10 | 22 | 16 |  |  |  |  |
| Prepare marketing | | | | | 30 |  |  |  |  |  | 6 | 6 | 0 | 6 | 12 |  |  |  |
| Assemble & test | | | | | 36 |  |  |  |  |  |  |  |  |  |  | 18 | 18 |  |
| Launch | | | | | 12 |  |  |  |  |  |  |  |  |  |  |  |  | 12 |
| Total | | | | | 206 | 12 | 12 | 10 | 10 | 10 | 27 | 21 | 22 | 22 | 12 | 18 | 18 | 12 |
| Cumulative | | | | | | 12 | 24 | 34 | 44 | 54 | 81 | 102 | 124 | 146 | 158 | 176 | 194 | 206 |