If the indirect cost for each duration are $1,300 for 16 weeks, $1,290 for 15 weeks, $1,250 for 14 weeks, $1,200 for 13 weeks, $1,100 for 12 weeks, $1,020 for 11 weeks and $1,000 for 10 weeks, compute the total cost for each duration. Show critical paths. What is the optimum cost-time schedule? Show your work with analysis.

Rubric: 7x2 + 4 (Optimum cost-time schedule) + 7 (critical Analysis and Discussion)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | **Crash Cost (Slope)** | **Maximum Crash Time** | **Normal Time (Weeks)** | **Normal Cost** |
| A | 10 | 1 | 4 | 030 |
| B | 70 | 2 | 7 | 060 |
| C | 0 | 0 | 1 | 080 |
| D | 20 | 2 | 4 | 040 |
| E | 50 | 3 | 5 | 110 |
| F | 200 | 3 | 5 | 090 |
| G | 30 | 1 | 2 | 060 |
| H | 40 | 1 | 2 | 070 |
| I | 0 | 0 | 2 | 140 |
|  |  |  |  | $ 680 |



Complete the following table:

|  |  |  |  |
| --- | --- | --- | --- |
| Duration | Direct Cost | Indirect Cost | Total /Critical Path |
| 10 |  | $ 1,000.00 |  |
| 11 |  | $ 1,020.00 |  |
| 12 |  | $ 1,100.00 |  |
| 13 |  | $ 1,200.00 |  |
| 14 |  | $ 1,250.00 |  |
| 15 |  | $ 1,290.00 |  |
| 16 |  | $ 1,300.00 |  |

Discuss the associated risk.