**EGS 3625- Practice Software Exam (MSP 2020)**

**Name: Gus Lipkin 50 minutes**

{100 points} Based on the following table, fill in the blanks.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **Duration (d)** | **IPA** | **Type Rela** | **Lag** | **Labor X** | **Labor Y** |
| A | 8 | – |  |  | 3 | 4 |
| B | 7 | A | SS | 2 | 2 | 4 |
| C | 9 | A |  |  | 3 | 3 |
| D | 10 | A | SS | 3 | 1 | 2 |
| E | 4 | B | FF | 2 | 4 | 1 |
| F | 6 | C, D |  |  | 3 |  |
| G | 3 | E, F |  |  | 2 | 1 |
|  |  |  |  |  |  |  |

aIf the relationship type is not mentioned, it is finish to start (FS). If no lag is mentioned, it is zero.

Set tasks’ type as ‘fixed duration.’ The project will start on Jan 6, 2021. February 11th is non-working day.

**−**Ignore resources X and Y:

1. When is the finish date of the project? **February 10, 2021**
2. Total duration of project? **26 Days**
3. What activities are on critical path? **ACFG**
4. What is the late finish for activity E? **February 5, 2021**

**−**Now, allocate resources X and Y to activities. Regular hourly payment rates for X and Y are $20/hr and $30/hr, respectively. (1.5 times for overtime)

1. How many hours of resources X and Y are required for Activity C on its first day?

X **24** Y **24**

1. What is the total cost of project? **$45,760**
2. Now, 10 and 6 people are assigned to resources X and Y, respectively. What activities still have problems? **A, B, C, D, E**
3. What is the total duration of project (days)? **26**
4. Level all resources (No split is allowed). What is the total duration of project (days)? **29**
5. On Feb 12, what activities need to be done? **Activity G** How many hours of X and Y for each of them? **X: 48 and Y: 24**

**−**Set your Baseline. Now, we know that activities A and B are completed and D is in 20% completion.

1. What is the percentage of project completion? (See project statistics) **Duration: 36% and Work: 45%**
2. Explain the chart and numbers in your earned value report?

Graphical user interface, application

Description automatically generated

The EAC is the total cost. We’re not sure why the other numbers are zero.