**EGS 3625 Software Exam (MSP 2020) Nov 23, 2020**

**Name: Gus Lipkin 50 min**

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **Duration (d)** | **IPA** | **Type Rela** | **Lag** | **Labor X** | **Labor Y** |
| A | 3 | – |  |  | 3 | 3 |
| B | 4 | A | SS | 1 | 2 | 4 |
| C | 7 | A |  |  | 3 | 3 |
| D | 8 | A |  |  | 1 | 1 |
| E | 4 | B | FF | 3 | 3 | 2 |
| F | 5 | C, D |  |  | 2 |  |
| 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 ‘auto scheduled’ and tasks’ type as ‘fixed duration.’ The project will start on Jan 13, 2021. February 3rd is non-working day.

**−**Ignore resources X and Y:

1. When is the finish date of project? **2/9/2021**
2. Total duration of project? **19 Days**
3. What activities are on critical path? **A D F G**
4. What is the late start for activity F? **2/5/2021**

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

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

X **8** Y **8**

1. What is the total cost of project? **$28,800**
2. Now, assign 9 and 8 people for resources X and Y, respectively. What activities still have problems? **B, C, D, and E**
3. What is the total duration of project (days)? **19 Days**
4. Level all resources (No split is allowed). What is the total duration of project (days)? **19 Days**
5. On Feb 4, what activities need to be done? **F** How many hours of X and Y for each of them? **X: 16 Y: 0**

**−**Set your Baseline. Now, we know that activities A and B are completed, and D is in 30% completion.

1. What is the percentage of project completion? (Work **34**% & Duration **28**%)
2. Include a screenshot of Resource Cost Overview in cost report?

Chart

Description automatically generated