Project management Question and Answers

Student’s Name

Institution

Date

Q6: In addition to activity c,f,h and I may crash as follows

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity**  | **Prec Evt** | **Suc Evt**  | **TE Week** | **Prec. Activity**  |
| A | 1 | 2 | 3 | None |
| B | 1 | 3 | 6 | None  |
| C | 1 | 4 | 8 | None |
| D | 2 | 5 | 7 | A |
| E | 3 | 5 | 5 | B |
| F | 4 | 5 | 10 | C |
| G | 4 | 6 | 4 | C |
| H | 5 | 7 | 5 | D,e,f |
| I | 6 | 7 | 6 | g |

In addition to activity c,f,h and I may crash as follows

The best schedule is

|  |  |  |
| --- | --- | --- |
| **Activity**  | **Cost Time**  | **Cost Per Week**  |
| A | 1 | $20 |
| B | 2 | $40 |
| C | 4 | $20 |
| D | 7 | $30 |
| E | 5 | $30 |
| F | 7 | $40 |
| G | 6 | $20 |
| H | 2 | $10 |
| I | 3 | $30 |

7.

|  |  |  |
| --- | --- | --- |
|  | **Crash Schedule**  | **Normal Schedule**  |
| **Activity**  | **Time** | **Cost**  | **Time**  | **Cost**  |
| 1-2. City Center  | 3 | $6 | 5 | $4 |
| 1-3. City Northeast  | 1 | 5 | 5 | 3 |
| 2-4. City South  | 5 | 7 | 10 | 4 |
| 3-4. City South East  | 2 | 6 | 7 | 4 |
| 2-6. City West  | 2 | 5 | 6 | 3 |
| 4-6. County East  | 5 | 9 | 11 | 6 |
| 4-5. County North  | 4 | 6 | 6 | 3 |
| 6-7. County South  | 1 | 4 | 5 | 6 |
| 5-7. County west  | 1 | 5 | 4 | 2 |

**Normal Schedule and Cost**

|  |  |  |
| --- | --- | --- |
| **Activity**  | **Cost Time**  | **Cost Per Week**  |
| 1-2. City Center  | 3 | $60 |
| 1-3. City Northeast  | 3 | $60 |
| 2-4. City South  | 4 | 70 |
| 3-4. City South East  | 5 | 40 |
| 2-6. City West  |  | $30 |
| 4-6. County East  | 7 | $40 |
| 4-5. County North  | 6 | $20 |
| 6-7. County South  | 2 | $40 |
| 5-7. County west  | 3 | $60 |

**Crush Schedule Cost**

|  |  |  |
| --- | --- | --- |
| **Activity**  | **Cost Time**  | **Cost Per Week**  |
| 1-2. City Center  | 2 | $40 |
| 1-3. City Northeast  | 3 | $60 |
| 2-4. City South  | 5 | $80 |
| 3-4. City South East  | 3 | $40 |
| 2-6. City West  | 1 | $30 |
| 4-6. County East  | 5 | $60 |
| 4-5. County North  | 4 | $40 |
| 6-7. County South  | 3 | $50 |
| 5-7. County west  | 5 | $60 |

**Q8: a. the shortest task first**

Based on the data on Q7, the activities to be crashed based on the shortest time first are the County South with a crash time of 1hr at a cost of $4. It is followed by County West and County northeast with a crush time of 1 week at a cost of $5.

Q8b. Most Resources (using normal cost as the basis)

The most resources used based on normal cost is County east which cost $600,000 and to be completed in 11 weeks.

Q8c. Minimum Slack first

The minimum slack is 2 weeks.

Q8d. most critical followers

City West

Q8e. County East

City West