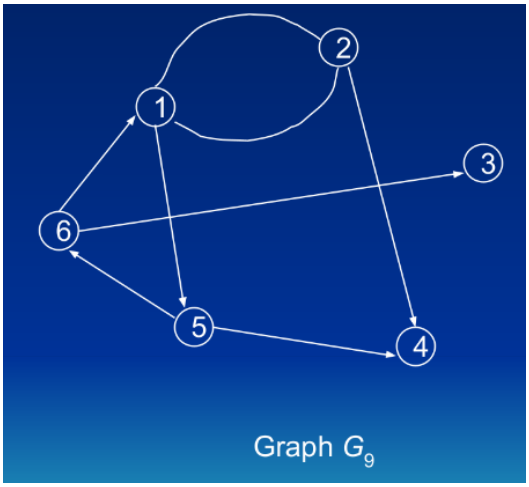
**ALCALA, LANCE WESLEY B. BSCPE 2-1 GRAPH EXERCISES**

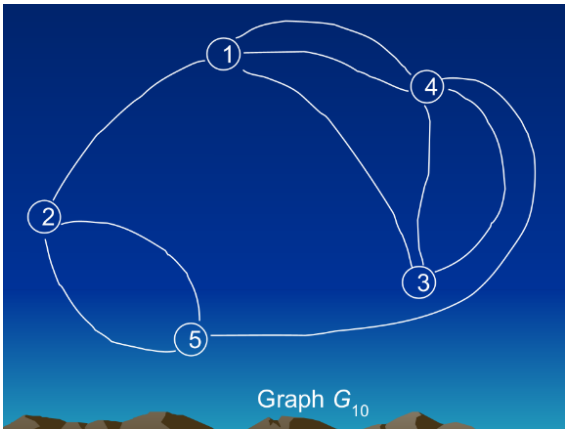
## Graph 09




$G_9 = (V_9, E_9)$
V9 = {1, 2, 3, 4, 5, 6)
$E_9$ = {(1,2), (1, 5), (2,1), (2,4), (5, 4), (5, 6), (6,3)}

| V | Outdegree | Indegree |
|---|---|---|
| **1** | 2 | 2 |
| **2** | 2 | 1 |
| **3** | 0 | 1 |
| **4** | 0 | 2 |
| **5** | 2 | 1 |
| **6** | 2 | 1 |

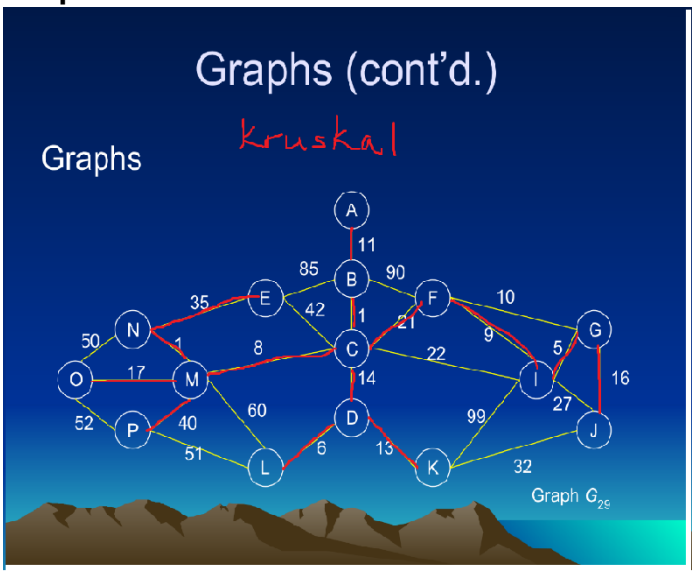
## Graph 10

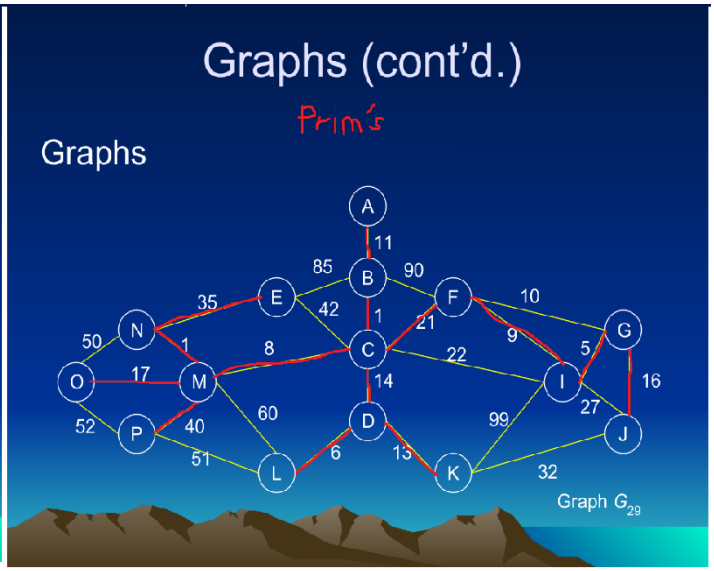



$G_{10} = (V_{10}, E_{10})$
V10 = {1, 2, 3, 4, 5)
$E_{10}$ = {(1,4), (2, 1), (2,5), (3,1), (3, 4), (4, 1), (4,3), (4,5), (5,2)

| V | Outdegree | Indegree |
|---|---|---|
| **1** | 1 | 3 |
| **2** | 1 | 1 |
| **3** | 2 | 1 |
| **4** | 3 | 2 |
| **5** | 1 | 2 |

## Graph 29




**Alcala, Lance Wesley B.**

**KRUSKAL'S ALGORITHM**

(N, M) = 1
(B, C) = 1
(I, G) = 5
(L, D) = 6
(M, C) = 8
(F, I) = 9
(A, B) = 11
(D, K) = 13
(D, C) = 14
(G, J) = 16
(O, M) = 17
(C, F) = 21
(N, E) = 35
(M, P) = 40
TOTAL = 197

**PRIM'S ALGORITHM**

(A, B) = 11
(B, C) = 1
(C, M) = 8
(M, N) = 1
(C, D) = 14
(D, L) = 6
(D, K) =13
(M, O) = 17
(C, F) = 21
(F, I) = 9
(I, G) = 5
(G, J) = 16
(N, E) = 35
(M, P) = 40
TOTAL = 197