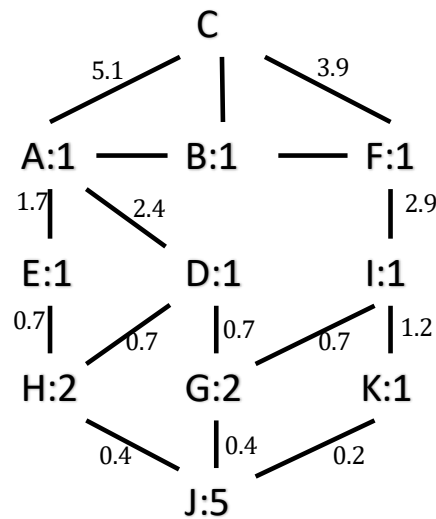


**Q1.(a)** (15 points)

**Suggested Marking Scheme:** Students are not required to show detailed steps. Full mark should be granted if the final output is correct. For each wrongly computed edge betweenness value, deduct 1 point.

**Q2.** (5 points)

Pros:

- Flexible. It can capture overlapping/nesting community structures

Cons:

- Fixed membership
- Parameters are not intuitive to set
- Computationally difficult to solve

**Suggested Marking Scheme:** The above list is not intend to be exclusive. Reasonable arguments should be granted a full mark.