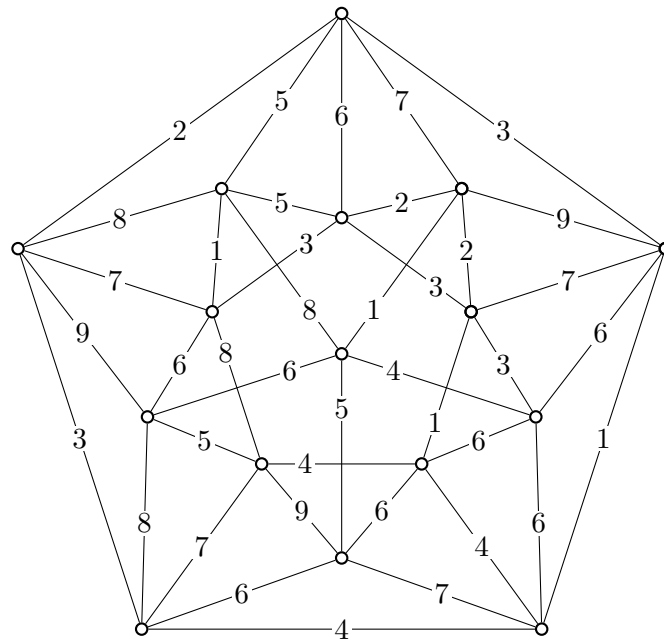


## Coursework 2

### COMP2721 Algorithms and Data Structures II

1. Find a minimum spanning tree in the graph below. Please mark its edges in a drawing of this graph. There is no need to give information about intermediary steps.

[0:30h expected time] [5 marks]



2. Find shortest paths from the central vertex to all other vertices of the graph above. Please mark the edges on the shortest paths in a drawing of this graph. There is no need to give information about intermediary steps. [0:30h expected time] [5 marks]

**Submission:** Work out and present your solution on paper. Stitch together all your sheets and a filled header form and submit via SSO. Indicate date and time of your tutorial, that is, one of the following:

- Tuesday 12–1
- Tuesday 4–5
- Friday 1–2
- Friday 2–3

For a proof of submission, convert your solution into portable document format (via `pdflatex` if you use  $\text{\LaTeX}$  or scan your manuscript) and submit it in Minerva.

**Deadline:** Monday 2 March 2020, 10am.

**Credits:** This piece of summative coursework is worth 5% of your grade.