1. Draw the following $A-$ on-N network. Include EST, LST, duration and float in your drawing. Calculate the total duration. Mark all arrows on the critical path by double-slashing: $\longrightarrow$ /

| Activity | Duration (weeks) | Preceding activity | EST | LST | Float |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Start | 0 | - | 0 | 0 | 0 |
| A | 3 | Start | 0 | 0 | 0 |
| B | 3 | Start | 0 | 0 | 0 |
| C | 2 | Start | 0 | 1 | 1 |
| D | 2 | Start | 0 | 9 | 9 |


| E | 2 | A, B | 3 | 3 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| F | 2 | C | 2 | 3 | 1 |
| G | 2 | E, F | 5 | 5 | 0 |
| H | 2 | F | 4 | 5 | 1 |
| J | 1 | H | 7 | 7 | 0 |
| K | 3 | D, K | 8 | 8 | 0 |
| Stop | 0 | 11 | 11 | 0 |  |

The tricky parts of this network are:
(a) activity D, which has no preceding or succeeding activities (students who used a Start and a Finish dummy event did not get fooled by this one), and
(b) that the critical path forks into two paths over activities A and B. Remember - if an activity has a slack of zero, it is on the critical path (and vice versa).

An example of how to do a critical path analysis is given in this YouTube video:
https://www.youtube.com/watch?v=irfI_eSQOM4
2. Maylor uses the dimensions volume and variety in his model "volume vs variety and projects". Describe the model. What does it tell us? p 8 . Reduction of points if what-is-not-projects ('repetitive operations') is not included.
3. What is a PMO? Which are the roles (tasks) that can be associated with a PMO? pp 63.
4. Draw an example of a responsibility matrix (including different kinds of responsibilities). p 207.
5. Describe the Critical Chain Approach. Which observation of behaviour was central to its development? Ch 7.
6. Describe one qualitative and one quantitative approach to risk analysis. Ch 10.
7. Maylor talks about different methods for decision support. Describe two of these. Ch 15.3.
8. What is BOK (Body of Knowledge) and who created it? E.g. pp 40.
9. Describe the process from deconstruction of the project to a time-plan. Ch 6.1 (important to include identification of dependencies)
10. Describe the seven wastes. This is a Lean philosophy, described at pp 392.

