

**IIT121/ICS 121/ISS123: Introduction to Software Engineering**  
**Assignment**  
**Due: 27 April 2020**

- 1) Using the information in the table below, assuming that the project activity durations are in weeks and that all tasks will start as soon as possible:

Task	Description	Duration	Predecessor
A	Requirements Analysis	5	-
B	System Design	15	A
C	Programming	25	B
D	Telecoms	15	B
E	Hardware Installation	30	B
F	Integration	10	C, D
G	System Testing	10	E, F
H	Training/ Support	5	G
I	Handover/Go-Live	5	H

- i. Draw the network diagram for the project [5]
  - ii. Determine the critical path of the project [3]
  - iii. Calculate the planned duration of the project in weeks [2]
- 2) Prepare a Gantt chart for the above project. [6]
- 3) Differentiate between cohesion and coupling in functional dependence. [4]
- 4) Explain the capability maturity model as a framework to improve the software process. [10]
- 5) List and explain any four techniques of dealing with project risks. [8]
- 6) State and explain the four levels of software testing. [12]