BPP2113 - PROJECT PLANNING & CONTROL

INDIVIDUAL TUTORIAL (5%)
TOPIC: PROJECT PLANNING (NETWORK DIAGRAM)

INSTRUCTION: ANSWER ALL QUESTION

Source: Eric & Clifford (2014), Project Management Chapter 6: Developing a Project Plan, pages 189 & 197

1. Draw a project network from the following information. What activity(s) is a burst activity? What activity(s) is a merge activity?

TABLE 1

Task/ Activity	Description	Predecessor
A	Identify topic	None
B	Research topic	A
C	Draft paper	B
D	Edit Paper	C
E	Create graphics	C
F	References	C
G	Final Draft	D, E, F

2. A large eastern city is requesting federal funding for a park-and-ride project. One of the requirements in the request application is a network plan for the design phase of the project. Sharifah Natrah, the chief engineer, wants you to develop a project network plan to meet this requirement. She has gathered the activity time estimates and their dependencies as shown in the Table 2. As a Project Planner, you have to manage this project and prepare an Activity on Node (AoN) network diagram for all the activities and their respective durations as listed in **Table 2** below.

TABLE 2

Task/Activity	Description	Predecessor	Duration (Days)
A	Survey	None	5
B	Soils Report	A	20
C	Traffic Design	A	30
D	Lot Layout	A	5
E	Approve Design	B, C, D	80
F	Illumination	E	15
G	Drainage	E	30
H	Landscape	E	25
I	Signing	E	20
J	Bid Proposal	F, G, H, I	10

a) Construct the Activity on Node (AON) diagram and analyse your project by forward and backward pass. Calculate your project network with the activity ES, EF, LS, LF and Slack (Total Float).

b) Determine the critical path and the total of project duration.

c) What will happen to project duration and the critical path if activity F is delayed by 10 days?