

PHRM-740 Project Management**Time - 3 Hour****MM-50****This question paper contains 1 printed page/s.**

Q.1. Consider the following table summarizing the launching of a Product in Market. (50 Marks)

KIND OF ACTIVITY	ACTIVITY	PREDECESSOR (s)	DURATION (Months)		
			Optimistic time	Most likely time	Pessimistic time
Product Idea Brainstorming	A	no	7	8	10
Evaluate the Ideas	B	no	2	3	6
Market Evaluation	C	no	2	4	8
Analyze the Competitive Situation	D	A	2	3	4
Prototype and Marketing	E	B	2	3	10
Market Testing	F	C	2	6	10
Product testing	G	C	3	3	9
Packaging/labelling/transportation	H	E,F	5	5	11
Final product quality check	I	D	3	6	9
Prepare for Launch	J	H,G	3	3	9
Product Monitoring in Market	K	I,J	2	3	5
Sales of Product	L	J	3	6	9

Answer the following questions using Project Evaluation and Review technique (PERT):

- A) Construct the Project Network. (Marks: 5)
- B) Find the expected duration and variance of each activity. (Marks: 15)
- C) Find the critical path and expected project completion time. (Marks: 15)
- D) What is the probability of completing the project on or before 25 Months? (Marks: 15)