

HONG KONG INSTITUTE OF VOCATIONAL EDUCATION

Laboratory 3: Project Management

TASK:

1. Given the following project activities and all the associated constraints:

Activity	Precedence	Duration
P	--	3
Q	--	4
R	P	5
S	Q	5
T	R, S	7
U	R, S	5
V	T	2
W	U	10

- (a) Draw a PERT Chart
- (b) Calculate the slack time for each activity;
- (c) Identify the critical path.

2. Given the following project activities and all the associated constraints:

Activity	Precedence	Duration
A	--	4
B	--	3
C	A	2
D	A	5
E	B	2
F	C	3
G	D	2
H	E	1
I	F, G, H	3

- (a) Draw a PERT Chart
- (b) Calculate the slack time for each activity;
- (c) Identify the critical path.

3. Given the following project activities and all the associated constraints:

Activity	Precedence	Duration
A	--	2
B	--	3
C	--	4
D	A	1
E	B	2
F	B	5
G	C	7
H	D, E	2
I	F, G	3
J	H, I	1

- (a) Draw a PERT Chart
- (b) Calculate the slack time for each activity;
- (c) Identify the critical path.

4. Given the following project activities and all the associated constraints:

Activity	Precedence	Duration
A	--	7
B	A	10
C	A	12
D	B	3
E	B	8
F	B	7
G	F	2
H	D, E	5
I	C	13
J	C	6
K	H	14
L	E, F	5

- (a) Draw a PERT Chart
- (b) Calculate the slack time for each activity;
- (c) Identify the critical path.