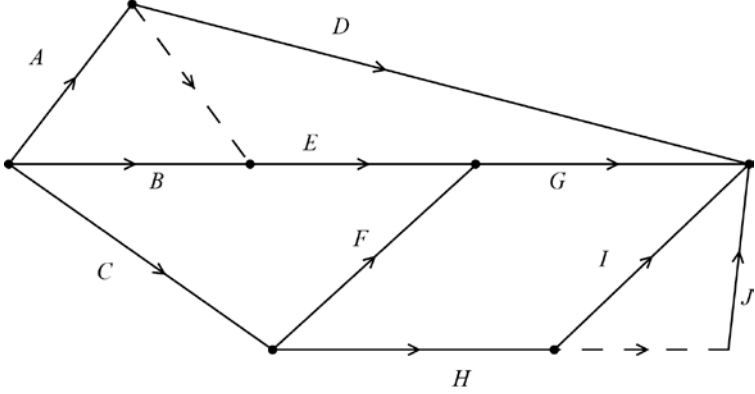


Q	Scheme	Marks	AOs	Pearson Progression Step and Progress Descriptor
<p><b>1a</b></p>	<p>e.g.</p>  <p>Dummy either before/after activity <i>J</i> or before/after activity <i>I</i></p>	<p><b>M1</b> <b>A1</b> <b>A1</b></p>	<p>1.1b</p>	<p>3rd Be able to model a project by a network from a precedence table</p>
<p><b>1b</b></p>	<p>Dummy after <i>A</i> is required as <i>D</i> follows only <i>A</i>, but <i>E</i> follows <i>A</i> and <i>B</i></p> <p>Dummy before/after <i>I/J</i> is required as <i>I</i> and <i>J</i> join the same pair of vertices</p>	<p><b>B1</b> <b>B1</b></p>	<p>2.4 2.4</p>	<p>4th Understand the use of dummies</p>
		<p><b>(3)</b></p>		
<p><b>(5 marks)</b></p>				
<p style="text-align: center;"><b>Notes</b></p> <p><b>1a M1:</b> At least five activities and one dummy, including arrow, correct.  <b>A1:</b> <i>ABCD</i><i>FG</i> and first dummy, including arrow, correct.  <b>A1:</b> <i>EHI</i> and second dummy, including arrow, correct.</p>				

Q	Scheme		Marks	AOs	Pearson Progression Step and Progress Descriptor
2	<b>Activity</b>	<b>Preceding activities</b>	<b>B3</b>	1.1b	3rd  Be able to complete a precedence table from a given network
	A	-			
	B	-			
	C	-			
	D	B,C			
	E	B,C			
	F	C			
	G	A,D			
	H	D			
	I	D,E,F			
	J	F			
	<b>(3 marks)</b>				
<b>Notes</b>					
B1: A-D					
B1: E-G					
B1: H-J					

Q	Scheme	Marks	AOs	Pearson Progression Step and Progress Descriptor
3	$x = 7$	B1	2.4	5th
	An activity connecting two critical events does not have to be a critical activity; $3 + 5 \neq 18$	B1	2.4	Identify critical activities and the critical path
				<b>(2 marks)</b>
<b>Notes</b>				

Q	Scheme	Marks	AOs	Pearson Progression Step and Progress Descriptor
4a		<p><b>M1</b> <b>A1</b> <b>M1</b> <b>A1</b></p>	1.1b	<p>5th</p> <p>Know how to carry out a forward pass and a backward pass on a given network</p>
		(4)		
4b	17 days	<b>B1</b>	1.1b	5th
	C, F, I	<b>B1</b>		Identify critical activities and the critical path
		(2)		
4c	44 ÷ 17	<b>M1</b>	1.1b	5th
	Three workers	<b>A1</b>		Identify critical activities and the critical path
		(2)		
<b>(8 marks)</b>				
<b>Notes</b>				
<p><b>4a M1:</b> All top boxes complete. <b>A1</b> All top boxes correct.</p> <p><b>M1:</b> All bottom boxes complete. <b>A1</b> All bottom boxes correct.</p>				

Q	Scheme	Marks	AOs	Pearson Progression Step and Progress Descriptor
5a	<i>D</i> : 29 – 15 – 11	M1	1.1b	5th Know how to determine float
	= 3	A1	1.1b	
	<i>H</i> : 53 – 38 – 13 = 2	B1	1.1b	
		(3)		
5b		M1 A1 A1	1.1b	5th Know how to construct and interpret Gantt charts
		(3)		

<b>5c</b>	<i>C, D, F</i>	<b>B1</b>	3.2a	5th Know how to construct and interpret Gantt charts
		<b>(1)</b>		
<b>5d</b>	No effect as a float of 3	<b>M1</b> <b>A1</b>	2.4	6th Solve critical path problems and use Gantt charts in familiar contexts
		<b>(2)</b>		
<b>(9 marks)</b>				
<b>Notes</b>				
<p><b>5b M1:</b> At least eight activities including four floats. Scheduling diagram scores <b>M0</b>. Clear distinction made between activity and its float.</p> <p><b>A1:</b> Correct critical activities and at least four correct non-critical activities.</p> <p><b>A1:</b> cao All correct.</p>				