

# Mark Scheme (Results)

Summer 2013

Principal Learning  
Information Technology (IT307/01)  
Unit 7: Making Projects Successful

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question Number	Answer	Mark
<b>1(a)</b>	Any two of: <ul style="list-style-type: none"><li>• Network new office space (35 computer)</li><li>• Upgrade Server to higher specification</li><li>• Carry out and complete project in July (2013)</li><li>• Future proof (quantified e.g. up to 15 users over next 3 years, network technology)</li><li>• Completed within budget of £35,000)</li></ul> Objectives must be quantified	<b>(2)</b>

Question Number	Answer	Mark
<b>1(b)(i)</b>	<p>First mark for identifying interest, second mark for associated expansion.</p> <p><b>YGH Supplies</b></p> <ul style="list-style-type: none"> <li>• <b>Professional Reputation:</b> show that they can do a good job on time, pitch for future contracts</li> <li>• <b>Repeat Business:</b> FunkiPad Ltd is a successful business and may need more equipment if they continue to expand / may be other companies on the business park that need equipment</li> <li>• <b>Generate Income/profit:</b> YGH supplies will be selling FunkiPad hardware, software and installing the equipment, will not get paid if the project is not successful</li> </ul> <p>Do not accept answers stating why FunkiPad are stakeholders e.g. providing equipment</p>	<b>(2)</b>

Question Number	Answer	Mark
<b>1(b)(ii)</b>	<p>First mark for identifying interest, second mark for associated expansion.</p> <p><b>Finance Bank UK</b></p> <ul style="list-style-type: none"> <li>• <b>Make Money / Interest payments:</b> use investment to create more income for shareholders</li> <li>• <b>Repeat Business:</b> FunkiPad Ltd is a successful business and may need future investment / loans to continue to expand the company</li> <li>• <b>Professional Reputation:</b> FunkiPad may recommend Finance Bank UK to other companies</li> </ul> <p>Do not accept answers stating why Finance Bank UK are stakeholders e.g. providing loan</p>	<b>(2)</b>

Question Number	Answer	Mark
<p><b>1(c)</b></p>	<p>First mark for identifying item, second mark for associated expansion.</p> <ul style="list-style-type: none"> <li>• <b>Exclusions/out of scope:</b> What the project will not include</li> <li>• <b>Timescale:</b> project start and end date / timeframe for each stage/estimated completion date</li> <li>• <b>Deliverables:</b> Key points /milestones in the project</li> <li>• <b>Resource requirements:</b> e.g. new server, contractors to install cables</li> <li>• <b>Constraints:</b> resources, budget, timescales, suppliers</li> <li>• <b>Tasks:</b> needed to complete the project</li> <li>• <b>Success Criteria:</b> to measure the success of the project on completion (also accept expansion that includes specific examples)</li> <li>• <b>Benefits:</b> realised by the completion of a successful project (also accept expansion that includes specific examples)</li> </ul> <p>Award up to three marks for one answer with a detailed explanation</p>	<p><b>(4)</b></p>

Question Number	Answer	Mark
2(a)	<p>First mark for identifying task, further marks for associated expansion.</p> <ul style="list-style-type: none"> <li>• <b>Create plan:</b> breakdown tasks/estimate timescales/define dependencies / identify milestones</li> <li>• <b>Plan resources:</b> equipment/labour/money/ timing</li> <li>• <b>Allocate Costs/Finance:</b> create budget/ identify contingency fund/plan tasks against availability of finance</li> <li>• <b>Quality assurance:</b> Specify standards required (client/legal)</li> <li>• <b>Acceptance testing :</b> set the parameters for acceptance, what it will be included</li> <li>• <b>Risk assessment:</b> identify, categorise and prioritise risks, mitigation</li> <li>• <b>Critical path analysis:</b> to identify tasks that have slack and tacks that are critical</li> <li>• <b>Set success criteria:</b> so the success of the project can be measured at project completion</li> <li>• <b>Communication with stakeholders:</b> define a communications plan</li> <li>• <b>Review / Reporting:</b> define when reviews will be carried out, how reporting will be managed</li> <li>• <b>Interview staff:</b> project and user requirements</li> <li>• <b>Assign roles/ responsibilities:</b> based on experience of project team/staff</li> </ul> <p>Answers must relate to tasks that are carried out during project planning.</p> <p>Award up to three marks for one answer with a detailed explanation</p>	(6)

Question Number	Answer	Mark
<b>2(b)</b>	One mark for each correct answer: <ul style="list-style-type: none"> <li>• Start up</li> <li>• Execution / design and development</li> <li>• Testing/ implementation</li> <li>• Close down / handover</li> </ul> Do not accept 'planning'	<b>(2)</b>

Question Number	Indicative Content	
<b>3</b>	<b>Key points</b> <ul style="list-style-type: none"> <li>• <b>Covers all communications during the project:</b> written, verbal, formal, informal</li> <li>• <b>Provides a Schedule:</b> time, date, location of all meetings</li> <li>• <b>Identifies Attendees:</b> so parties are aware which meetings they must attend</li> <li>• <b>Provides Contact details:</b> for parties involved in project/attendees at meeting</li> <li>• <b>Identifies Communications method:</b> face to face, video conference, telephone conference etc.</li> <li>• <b>Identifies Responsibilities for cascading information:</b> so information is fed back to relevant parties</li> </ul>	
Level	Mark	Descriptor
	<b>0</b>	No awardable mark
<b>1</b>	<b>1-2</b>	Candidate produces an unstructured response, showing little or any understanding of a communications plan. They identify one or two points.
<b>2</b>	<b>3-4</b>	Candidate attempt to produce a structured response, which demonstrates some understanding of a communications plan. They describe several points.
<b>3</b>	<b>5-6</b>	Candidates produce a structured response, which demonstrates a good understanding of a communications plan. They mention most points.

Question Number	Answer	Mark
<b>4(a)(i)</b>	<p>First mark for identifying feature, second mark for associated expansion.</p> <p>Summary Heading</p> <ul style="list-style-type: none"> <li>• <b>Used to group tasks:</b> for a particular stage of the project / improves understanding of the plan</li> <li>• <b>Provides an overview of the stage:</b> how long a group of tasks takes to complete, start / end date</li> <li>• <b>Used for tracking:</b> provides an overall % complete for the stage in the project</li> </ul>	<b>(2)</b>

Question Number	Answer	Mark
<b>4(a)(ii)</b>	<p>First mark for identifying feature, second mark for associated expansion.</p> <p>Milestones</p> <ul style="list-style-type: none"> <li>• <b>Identifies the completion of a stage in the project:</b> all tasks included in the stage need to be completed to reach the milestone</li> <li>• <b>Allocated zero time:</b> the milestone is not a task, they represent an achievement</li> <li>• <b>Can be used to track progress:</b> if milestone is achieved on date stated then the project is on track</li> <li>• <b>Can be used as a checkpoint:</b> for project team to report progress, discuss next milestone</li> </ul>	<b>(2)</b>

Question Number	Answer	Mark
4(b)	<p>First mark for identifying information, second mark for associated expansion.</p> <ul style="list-style-type: none"> <li>• <b>Resources:</b> material needed for the task, staff requirements</li> <li>• <b>Costs:</b> per unit and quantity</li> <li>• <b>Predecessor:</b> tasks that need to be completed before this task can start</li> <li>• <b>Duration:</b> no of days allocated for the task</li> <li>• <b>Task dates:</b> start and finish times</li> <li>• <b>Task ID :</b> Individual ID number for the task</li> <li>• <b>Task name:</b> meaningful description identifying task</li> <li>• <b>Constraints:</b> cannot start before dates, must be completed by dates</li> <li>• <b>Progress:</b> percentage completion of task</li> </ul> <p>Award up to three marks for one answer with a detailed explanation</p>	(6)

Question Number	Answer	Mark
<b>5(a)</b>	<ul style="list-style-type: none"> <li>• Duration</li> <li>• Task ID / name</li> <li>• Predecessor / Dependencies</li> </ul>	<b>(2)</b>

Question Number	Answer	Mark
<b>5(b)</b>	<p>One mark for correct label with operator. Two marks for a fully correct answer</p> <p>i. LFT – EFT (latest finish time – earliest finish time)</p> <p>ii. LFT – Duration (latest finish time – Duration)</p> <p>iii. EST + duration (earliest start time + duration)</p>	<b>(6)</b>

Question Number	Indicative Content
<b>5(c)</b>	<p>Key points</p> <ul style="list-style-type: none"> <li>• Identifies the critical path</li> <li>• Identifies the length of time needed to complete a project / how many days the project will take to complete</li> <li>• Identifies tasks which must be completed on time for the whole project to be completed on time.</li> <li>• Identifies which tasks can be delayed (slack time) if resource needs to be reallocated to catch up on missed or overrunning tasks</li> <li>• Identifies where tasks are running parallel</li> <li>• Can use to monitor project progress – if tasks on the critical path are completed on time, the project will be delivered in time</li> </ul>

Level	Mark	Descriptor
	<b>0</b>	No awardable mark
<b>1</b>	<b>1-2</b>	Candidate produces an unstructured response, showing little or any understanding of CPA. They mention one or two points.
<b>2</b>	<b>3-4</b>	Candidate attempt to produce a structured response, which demonstrates some understanding of CPA. They mention several points.
<b>3</b>	<b>5-6</b>	Candidates produce a structured response, which demonstrates a good understanding of CPA. They mention most points.

Question Number	Answer	Mark
<b>6(a)</b>	<p>First mark for identifying information, second mark for associated expansion.</p> <ul style="list-style-type: none"> <li>• <b>According to likelihood:</b> ranking the probability of the of the risk occurring</li> <li>• <b>According to severity:</b> ranking the effects or impact of the risk</li> <li>• <b>Multiply risk severity by likelihood/Quantative analysis:</b> quantify the outcome of the risk event/attach a numerical score to the risk</li> </ul> <p>Award up to three marks for one answer with a detailed explanation</p>	<b>(4)</b>

Question Number	Answer	Mark
<b>6(b)</b>	<p>Any two of:</p> <ul style="list-style-type: none"> <li>• Avoid the risk</li> <li>• Take precautions to prevent or mitigate impact / preventative measures / reduce impact</li> <li>• Accept the risk</li> <li>• Share the risk</li> <li>• Limit the risk</li> <li>• Transfer the risk</li> </ul>	<b>(2)</b>

Question Number		Indicative Content
<b>7</b>		<p>Key points</p> <ul style="list-style-type: none"> <li>• Task 14 connect workstations was due to take place on 12<sup>th</sup> July but will have to be postponed as the PC's will not be delivered until 15<sup>th</sup> July</li> <li>• Task 14 – connect work stations is not on the critical path</li> <li>• Slack time available to use as contingency</li> <li>• Testing work stations is not due to start until 24<sup>th</sup> July</li> <li>• Task 14 will be rescheduled to start at a later date</li> <li>• Task 15 to 18 will be rescheduled and started earlier</li> <li>• Resources will need to be reallocated</li> <li>• Project should still complete on time if delay managed appropriately / PM has 10 days to reschedule project plans and inform all stakeholders</li> </ul>
Level	Mark	Descriptor
	<b>0</b>	No awardable mark
<b>1</b>	<b>1-2</b>	Candidate produces an unstructured response, showing little or any understanding of the effect of the late delivery. They mention one or two points
<b>2</b>	<b>3-4</b>	Candidate attempt to produce a structured response, which demonstrates some understanding of the effect of the late delivery. They mention several points.
<b>3</b>	<b>5-6</b>	Candidates produce a structured response, which demonstrates a good understanding of the effect of the late delivery. They mention most points.

Question Number	Answer	Mark
<b>8(a)(i)</b>	Sun Microsystems	<b>(1)</b>

Question Number	Answer	Mark
<b>8(a)(ii)</b>	EDS	<b>(1)</b>

Question Number	Answer	Mark
<b>8(a)(iii)</b>	ActivIdentity Inc.	<b>(1)</b>

Question Number	Answer	Mark
<b>8(b)</b>	<p>First mark for identifying aim, second mark for the associated expansion.</p> <ul style="list-style-type: none"> <li>• <b>Create a standard electronic identity card for military, civilian, and contract staff: to enable physical access to buildings and controlled spaces/ Gain access to the Department's computer networks and systems/ assure identity to obtain privileges and benefits</b></li> <li>• <b>Deliver an electronic smart card:</b> containing demographic data of the user and information such as name, rank and blood type.</li> <li>• <b>Business processes to be streamlined:</b> by centralising basic data into one place and assisting in the automation of manual paper based transactions.</li> <li>• <b>Build a network of 2000 card issuing workstations:</b> at 900 sites</li> <li>• <b>Install more than one million card readers:</b> issue cards to more than 3.2. million personnel</li> </ul>	<b>(6)</b>

Question Number		Indicative Content
<b>9</b>		<p><b>Key Points:</b></p> <p>Tested over a twelve month period.</p> <ul style="list-style-type: none"> <li>• The first test site was established in October 2000</li> <li>• By mid-2001, 70 sites around the world were issuing cards.</li> <li>• The project team used this initial phase of the roll-out to improve both the card technology and the business process.</li> </ul> <p>The early stages of the card issuing process identified strains on the capacity of the computer systems involved.</p> <ul style="list-style-type: none"> <li>• Due to unreliable connectivity between key systems, some pilot locations were unable to issue cards at certain times of day.</li> <li>• Steps were taken to address the connectivity problem and to add redundancy and robustness to the issuance infrastructure.</li> </ul> <p>Feedback from front line staff was used to improve the card issuing process.</p> <ul style="list-style-type: none"> <li>• The programme manager visited the best performing pilot locations to consult front line staff on what worked well.</li> <li>• This process identified some simple lessons, such as the need to clean printers thoroughly and to bolt down hardware at the issuing sites.</li> <li>• These lessons were passed to other locations and improved their card issue performance.</li> </ul> <p>As the programme scaled up / user base grew, problems arose in achieving the key goal of meeting the DoD's mandate to digitally sign all electronic mail and other electronic documents.</p> <ul style="list-style-type: none"> <li>• The programme team identified the need for a new validation protocol – Distributed Online Certificate Status Protocol</li> <li>• Reduced validation time and increased security.</li> </ul>
Level	Mark	Descriptor
	<b>0</b>	No awardable mark
<b>1</b>	<b>1-3</b>	Candidates produce an unstructured response, showing little if any understanding of the testing strategies used. Information may be a list of some points.
<b>2</b>	<b>4-6</b>	Candidates attempt to produce a structured response that demonstrates some understanding of the testing strategies used. Discuss several points.
<b>3</b>	<b>7-9</b>	Candidates produce a structured, well thought out response and clearly demonstrate a good understanding of the testing strategies used. Discuss most points.

Question Number		Indicative Content
<b>10</b>		<p><b>Key Points:</b></p> <p>Delivered efficiency gains.</p> <ul style="list-style-type: none"> <li>• The time taken to issue an identity card has been reduced from hours to 15 minutes</li> <li>• Reduced paperwork and simplifying card issuing arrangements</li> <li>• This efficiency benefit will continue with each card issued to new staff or reissued by existing staff</li> </ul> <p>The card enables army divisions to assess deployment readiness in minutes rather than hours</p> <ul style="list-style-type: none"> <li>• Previously, army personnel were required to present their finance, personnel, and medical records to twelve different contact points</li> <li>• Waited in line for their details to be processed to determine if they were equipped to go on manoeuvres</li> <li>• All the required information can now be read automatically from a single interaction</li> <li>• Deployment readiness can be verified almost instantaneously.</li> <li>• Saves 30,000 man-hours a year by using the smartcard rather than the paper-based process</li> </ul> <p>The Department of Defense has identified that the card technology can deliver further savings and more functionality</p> <ul style="list-style-type: none"> <li>• No need to issue new cards</li> <li>• Already been extended to support a travel system that allows users to sign their travel vouchers electronically, eliminating the need for paper based processes</li> <li>• The next technological challenge will be the incorporation of biometric data into the card</li> </ul>
Level	Mark	Descriptor
	<b>0</b>	No awardable mark
<b>1</b>	<b>1-4</b>	Candidates produce an unstructured response, showing little if any understanding of the benefits. They mention a few benefits from any key point / points.
<b>2</b>	<b>5-8</b>	Candidates attempt to produce a structured response that demonstrates some understanding of the benefits of the project. They discuss several benefits for a minimum of two key points
<b>3</b>	<b>9-12</b>	Candidates produce a structured, well thought out response and clearly demonstrate a good understanding of the benefits of the project. They discuss most benefits for all key points

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