

Mark Scheme (Results)

Summer 2012

Principal Learning Information Technology Level 3 Unit 7 (IT307)

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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
1(a)	<ul> <li>Any three of:         <ul> <li>Operating systems upgraded to Window 7 professional</li> <li>Office application software upgraded to Microsoft Office 2010</li> <li>Outdated hardware replaced with newer, higher specifications</li> <li>Existing systems replaced with E-business Systems</li> </ul> </li> </ul>	(3)

Question Number	Answer	Mark
1(b)	First mark for identifying benefit, second mark for associated expansion. Maximum of two marks for each benefit.  • Upgraded hardware: higher performance, future proof.  • Upgraded software: future proof, keeping up with industry standard, windows XP support withdrawn.  • Consolidation of IT systems: reporting management, standardisation of business processes across organisation.  • E-procurement: employees able to create, manage and track orders.  Do not award answers relating to speeding up processes.	(4)

Question Number	Answer	Mark
1 (c)	First mark for interest, second mark for associated expansion.  • Professional reputation: show that they can do a competent job / could generate repeat or new business / failure reflects on company  • Payment: will receive quoted amount/ no late fees / penalties incurred / non payment	(2)

Question Number	Answer	Mark
2	First mark for identifying task, second mark for associated expansion. Maximum of two marks for each reason.  • Realistic bidding process / quotes: all costs are accurately identified so there are no unexpected extras  • Agree contingency funds: to accommodate any unforeseen scope creep that occurs without taking the project over budget  • Identifies tasks: Allocates costs to resources  • Agree availability of funds: stages identified when monies are released so that funds are available / no payment penalties incurred  • Produce budget plans: in appropriate software/that can be easily updated to consolidate costs into one budget  • Obtain stakeholders agreement to budget plan: prevents misunderstandings / authorisation of costs  If one task is explained in detail, award up to a maximum of three marks.	(6)

Question Number	Answer	Mark
3(a)	<ul> <li>First mark for identifying feature, second mark for associated expansion.</li> <li>Different views: use different visual representations (charts and graphs) to suit needs</li> <li>Create a baseline: provides reference points to compare actual project progress</li> <li>Generate reports: data consolidated to produce reports such as costings, budgets, resources etc</li> <li>Create summary headings: identifying stages in the project</li> <li>Create milestones: to identify a critical point in the project</li> <li>Define the project: set start time, completion times, constraints, non working days, working times</li> <li>Any other suitable feature that assists the PM create an effective plan: suitable expansion</li> <li>Do not accept any answers related to inputting task information e.g. duration,</li> </ul>	
	resources, costs, predecessors	(6)

Question Number	Answer	Mark
3(b)	One mark for each correctly identified answer:  i Task Name / Task ID / Task Number ii EST/Earliest start time iii Duration / length of time task takes iv EFT / Earliest finish time v LST/ Latest Start time vi Float / Slack vii LFT / Latest finish time	(7)

Question Number	Answer	Mark
3(c)	First mark for identifying reason, second mark for associated expansion. Maximum of two marks for each stage.  Clearly shows the critical path: identifying which tasks cannot be delayed without having an impact on the project completion date Identifies any tasks that have slack or float time: enabling the project manager to reallocate resources from these tasks if necessary to ensure critical tasks are completed on time Identifies the total length of time for the project: by calculating the total duration of tasks on the critical path. Identifies date flexibility within non critical tasks dates: EST, LST, EFT, LFT	(4)

Question Number	Answer	Mark
4(a)	First mark for identifying likely loss, second mark for associated expansion.  • Delay to PC installation/upgrades: whilst technicians are working on other jobs/task  • Late project completion date: loss of reputation for the IT Team/ potential loss of business as systems are not in place  Do not award answers relating to incompatibility of software	(2)

Question Number	Answer	Mark
4(b)	First mark for identifying likely reason, second mark for associated expansion.  • Technicians experienced: used to carrying out this sort of project so are competent / specification agreed with expert knowledge  • Technical Specification of software identified: used to spec hardware required	(2)

Question Number	Answer	Mark
4(c)	Any two of:	(2)

Question Number	Answer	Mark
5(a)	Any two of:      Site / environment     Equipment     Management     People     Policies / procedures     External factors     Costs     Any other suitable category  Must be a category specific to the scenario	(2)

Question Number	Answer	Mark
5(b)	First mark for identifying process, second marks for associated mark. Maximum of two marks for each process:  • Problem is defined: All team members have to be very clear about what exactly the problem is  • Problem statement is described	
	<ul> <li>clearly: in the fish head portion.</li> <li>Major branches connecting to the spine: identifying the categories</li> </ul>	
	Causes suggested: team members takes turns to suggest a cause for the problem	
	Cause is "hung" on the branch:     categorizing areas that problems have     occurred in	
	<ul> <li>Plan of action agreed: by the senior management / PM</li> </ul>	(6)

Question Number	Answer	Mark
6(a)	First mark for identifying method, second mark for associated expansion. Maximum of two marks for each reason:  • Communicate with other stakeholders / Arrange progress review meeting: to identify any problems and provided solutions  • Re-allocate staffing resources: take staff from non critical tasks and reallocate them to critical tasks so project deadline is not effected  • Reschedule non critical tasks: postponement of task start time to the latest start time / use of slack time (free up staff)  • Arrange for extra hours to be worked: use of contingency fund to pay overtime or agree time off in lieu of payment  • Consider possibility of outsourcing tasks: if budget and nature of task will accommodate this  If one method is explained in detail, award up to a maximum of three marks.	(6)

Question	Answer	Mark
Number		
6(b)	Any two of :	
	<ul> <li>Changes in government policy</li> </ul>	
	<ul> <li>Changes in VAT</li> </ul>	
	<ul> <li>Cash flow problems</li> </ul>	
	<ul> <li>Inflation/recession</li> </ul>	
	<ul> <li>Staff absenteeism resulting in</li> </ul>	
	overtime payments / hiring in	
	contractors	(2)

Question Number	Answer	Mark
7	First mark for identifying activity, second mark for associated expansion. Maximum of two marks for each reason:  • Production of end of project review report: documenting the project, identifying strengths and weaknesses, listing contacts, project performance/evaluation, residual issues  • Formal handover to the client: finalisation of any contracted services, handover of all documents e.g. warranties, training manuals, guarantees  • Celebration of project completion: congratulations of job well done by project team and stakeholders  • Formalisation of project success: using success criteria established at start up  • Final reconciliation of invoices and final payments: produce a report comparing the actual financial performance against the budget  • Sign off project completion: all stakeholders can be paid/ move onto new projects or contracts  If one activity is explained in detail, award up to a maximum of three marks	(6)

Question Number	Answer	Mark
8(a)	<ul> <li>Any three of:</li> <li>A single telephone number / easy to remember telephone number for access to all government information and non-emergency services</li> <li>Completion within one year</li> <li>Budget \$25 million</li> <li>Replacement of 40 separate call centres/14 pages of phone numbers</li> </ul>	
	<ul> <li>Avoid disruptions of services</li> <li>Information will be updated in real time</li> </ul>	(3)

Question Number	Answer	Mark
8(b)	First mark for identifying reason, second mark for the associated expansion.	
	<ul> <li>Effective Technical steering         Committee: Understanding of /         shaping the request for bids from         suppliers</li> <li>Selection Committee established:         one committee to make all key         decisions</li> <li>Received good support from the         City's Office of Management and         Budget: considerable experience of         past IT programmes and project.</li> <li>Assistance helped the management         team to make effective decisions         about the relative costs, risks and         credibility of the different bids and         bidders: resulted in the lowest cost bid         being rejected in favour of a more         expensive but more convincing         proposal.</li> </ul>	(6)

Question Number	Indicative Content
9	Key Risks:
	<ul> <li>Inter-operability between different agencies' business processes and systems.</li> <li>the City invested significant resources on employing business analysts to examine processes thoroughly</li> <li>Had to achieve a clear picture of the capacities and capabilities of the various agencies' existing call centres.</li> </ul>
	<ul> <li>Delivery time</li> <li>No public announcement of a "go live" date</li> <li>Avoided creating unhelpful hostages to fortune.</li> <li>Once the system was live, the City embarked on a public awareness campaign promoting the availability of the number</li> </ul>
	<ul> <li>IT Solutions</li> <li>Off-the-shelf and mature technology was used to</li> <li>Avoided the added risk in developing bespoke systems and software.</li> </ul>
	<ul> <li>Centre Consolidation</li> <li>Progressive expansion of the new system</li> <li>Did not consolidate all 40 call centres at the same time</li> <li>initially consolidated only 11 agencies were fully consolidated into the 3-1-1 call centre</li> </ul>
	<ul> <li>Large numbers of caller scenarios were tested before the system went live.</li> <li>The 3-1-1 system was also designed to scale up rapidly to meet demands in an emergency situation.</li> </ul>

Level	Mark	Descriptor
	0	No awardable mark
1	1-3	Candidates produce an unstructured response, showing little if any understanding of the risks. Answer may be a list of some points with no or little relevance to the case study
2	4-6	Candidates attempt to produce a structured response that demonstrates some understanding of the risks involved. Some key points discussed.
3	7-9	Candidates produce a structured, well thought out response and clearly demonstrate a good understanding strategies used. Most key points discussed

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Question Number	Indicative Content
10	<ul> <li>Key Points:</li> <li>Customer satisfaction</li> <li>All calls to 3-1-1 are answered by live operators / 24/7, with access to over 170 language translations</li> <li>NYC 3-1-1 has been well received by citizens in respect of its responsiveness and access to information and services / 6.7 million calls rising to 11 million, 40,000 per day</li> <li>All callers receive the standard level of customer service</li> <li>Provides citizens with one number to access information on the city state and federal government services to lodge service requests</li> <li>Numbers easy to remember / Call can be redirected if</li> </ul>
	Streamlined processes  Call centres from 40 different agencies and hotlines across New York City consolidated into a single call centre  Centralised 3-1-1 allowed the city to provide a standard level of customer service for the first time  Streamlined reporting process avoids the risk of duplication of activities from different agencies / as many as three different agencies might become involved in filling a pothole or dealing with an environmental health issue  Prompted agencies to develop protocols for arbitration and escalation of issues between themselves, to address inter-agency operational decisions, and to make for clear assignment of roles and responsibilities

Improved service delivery	
<ul> <li>Information updated in real time / 3-1-1 works closely with other City agencies to maintain the most current information</li> <li>Provides accurate, consistent measurement and analysis of citywide service delivery</li> <li>Information also allows for performance measurement and reporting across the different City agencies</li> <li>Response times to service requests, and other</li> </ul>	
performance criteria, are routinely monitored centrally  Better targeting of services / accurate monitoring of "quality of life" complaints e.g. excessive or latenight noise assists the police to target their activities to particular areas and times  Specialist or professional staff can focus on core activities, rather than becoming distracted by routine requests for information or services e.g. requests for information about day- for Children's Services previously	

Level	Mark	Descriptor
	0	No awardable mark
1	1-4	Candidates produce an unstructured response, showing little if any understanding of the benefits. They mention some benefits from any key points
2	5-7	Candidates attempt to produce a structured response that demonstrates some understanding of the benefits of the project. They discuss several benefits from some key points
3	8-12	Candidates produce a structured, well thought out response and clearly demonstrate a good understanding of the benefits of the project. They discuss most benefits from all key points.

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