

# Mark Scheme (Results)

Summer 2013

Principal Learning  
Information Technology (IT302/01)  
Unit 2: Understanding Organisations

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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>	Public Sector	<b>(1)</b>

Question Number	Answer	Mark
<b>1(b)(i)</b>	<p>One mark for each point. Max two marks</p> <ul style="list-style-type: none"> <li>• More/Greater communication between management and workers.</li> <li>• Better team spirit.</li> <li>• Less bureaucracy and easier decision making.</li> <li>• Fewer levels of management which includes benefits such as lower costs as managers are generally paid more than worker.</li> </ul>	<b>(2)</b>

Question Number	Answer	Mark
<b>1(b)(ii)</b>	<p>One mark</p> <ul style="list-style-type: none"> <li>• Workers may have more than one manager/boss</li> <li>• May limit/hinder the growth of the organisation/departments make decisions to promote themselves and not company</li> <li>• Communication across departments may be poor</li> <li>• Restricted promotion prospects with only two layers</li> </ul>	<b>(1)</b>

Question Number	Answer	Mark
<b>2(a)</b>	<p><b>Process of acquiring goods, works, and services (1)</b>, from outside parties or from in-house providers (1). The process covers the cycle from identification of needs, through to the end of a service contract or the end of the useful life of an asset (1).</p>	<b>(2)</b>

Question Number	Indicative Content
<b>2(b)</b>	<ul style="list-style-type: none"> <li>• <b>Inviting tenders:</b> invite suppliers to put in an offer or tender for control of leisure centres</li> <li>• <b>Evaluating tenders:</b> Council evaluates the tenders against set criteria</li> <li>• <b>Award the contract:</b> contract awarded to the supplier whose bid represents value for money.</li> <li>• <b>Managing how the contract is put in place:</b> put operations in place for the forthcoming contract.</li> <li>• <b>Managing the contract:</b> the supplier's performance is checked and monitored by the council.</li> </ul>

		<ul style="list-style-type: none"> <li><b>Review and testing:</b> the contract will be reviewed regularly and after a set period of time the contract may be advertised again</li> </ul>
Level	Mark	Descriptor
	<b>0</b>	No rewardable material
<b>1</b>	<b>1-2</b>	Candidates state 1 or 2 features of plan 1 way = 1 mark
<b>2</b>	<b>3-4</b>	Candidates attempt to explain 1 feature, 1 feature identified with extension = 3 marks. 2 ways + 1 extension = 4 marks
<b>3</b>	<b>5-6</b>	Candidates explain 2 features with extensions.

Question Number	Answer	Mark
<b>3(a)</b>	A computer system which is old/out of date but functional	<b>(1)</b>

Question Number	Answer	Mark
<b>3(b)</b>	1 mark for identifying problem; 1 mark for associated extension Maximum 2 marks per problem <ul style="list-style-type: none"> <li>▪ <b>Obsolete software</b> (1) – expensive to maintain / reduces effectiveness (1)</li> <li>▪ <b>Expensive to maintain</b> (1) – expensive to track errors / expensive to repair old systems (1)</li> <li>▪ <b>Will not run new software</b> (1) out of date programs / with insufficient functionality used (1)</li> <li>▪ <b>Integration/compatibility problems</b> (1) will not 'talk' to newer computer systems (1)</li> </ul>	<b>(6)</b>

Question Number	Answer	Mark
<b>3(c)</b>	Two marks 1 for identification , 1 for extension <ul style="list-style-type: none"> <li>• <b>New systems (1)</b> – training/unfamiliar (1)</li> <li>• <b>Migration of information (1)</b> – possible loss of data/increased workload (1)</li> <li>• <b>Down time (1)</b> disruption while being installed (1)</li> </ul>	<b>(2)</b>

Question Number	Indicative Content	Mark
<b>4(a)</b>	2 marks for correct answer. (125%) Allow 1 mark if some correct calculations shown but final answer is incorrect  $5 \times 15,000 = 75,000$ (1) $(75,000 \text{ divided by } 60,000) \times 100 = 125\%$ (1)	<b>(2)</b>

Question Number	Answer	Mark
<b>4(b)</b>	<p>One mark for a definition, up to two marks for an expansion</p> <p>Definition</p> <ul style="list-style-type: none"> <li>NPV compares the return on an investment over a given time span (1) against the interest that might money have been earned over the same time span (1) / income is discounted by the rate of interest to reflect what the money might have earned as interest (1)</li> </ul>	<b>(2)</b>

Question Number	Answer	Mark
<b>4(c)</b>	£5,900	<b>(1)</b>

Question Number	Answer	Mark
<b>4(d)</b>	<p>One mark for each valid point made. One for extension</p> <p>Maximum two marks</p> <ul style="list-style-type: none"> <li><b>Compares income against expenditure (1)</b> – more income than expenditure (1)</li> <li><b>Evaluate the efficiency of the organisation (1)</b> – Costs v Expenses / value for money (1)</li> <li><b>Based on real income and expenditure (1)</b> – actual picture not based on forecasts (1)</li> <li><b>Is long term (1)</b>, can only really evaluate in retrospect / uses historic trading data (1)</li> </ul>	<b>(2)</b>

Question Number	Answer	Mark
<b>4(e)(i)</b>	<p>One mark for a definition; one mark for an associated expansion. Maximum 4 marks</p> <ul style="list-style-type: none"> <li><b>Low income (1)</b>, people cut back on luxury such as fitness (1)</li> <li><b>Unemployment (1)</b>, little money to spend on leisure (1)</li> <li><b>Stability of currency (1)</b> insecurity so people only spend on essentials (1)</li> <li><b>Higher taxes (1)</b>, less disposable income (1)</li> <li><b>Competition (1)</b>, cheaper facilities mean people go elsewhere</li> </ul>	<b>(4)</b>

Question Number	Answer	Mark
<b>4(e)(ii)</b>	<p>One mark for a definition; one mark for an associated expansion. Maximum 2 marks</p> <ul style="list-style-type: none"> <li>• <b>Increased income (1)</b>, people spend on luxuries such as fitness (1)</li> <li>• <b>Competition (1)</b>, price reduction/offers draw more people to centre (1)</li> <li>• <b>Employment/working arrangements (1)</b>, people have more time to spend on leisure (1)</li> </ul> <p><b>Additional guidance:</b> Do <b>NOT</b> allow opposite point from Q04(e)(i) eg in e(i) high unemployment so little money for luxuries and low unemployment –more money for luxuries. One reason may be used twice with different responses – as outlined for Employment</p>	<b>(2)</b>

Question Number	Answer	Mark
<b>5(a)</b>	<p>One mark for problem, one mark for extension</p> <ul style="list-style-type: none"> <li>• <b>Different data types (1)</b>; variations in the assignment of data types may prevent transfer (1)</li> <li>• <b>Data attributes (1)</b>; if attributes such as field size are not compatible then the new structure may not be able to store all of the existing data (1)</li> <li>• <b>Validation (1)</b> more complex validation rules applied to the new structure may reject items of existing data (1)</li> </ul>	<b>(2)</b>

Question Number	Indicative Content
<b>5(b)</b>	<p>Examples of protocols:</p> <ul style="list-style-type: none"> <li>• HTTP</li> <li>• VOIP</li> <li>• ITP</li> <li>• IP</li> <li>• TCP</li> <li>• DHCP</li> <li>• FTP</li> </ul> <p>Protocols:</p> <ul style="list-style-type: none"> <li>• <b>An agreed set of rules to enable different systems to communicate</b> So that data passes from one system to another</li> <li>• <b>Rules applied at the point of interchange</b> to allow communication</li> <li>• <b>Applied at various levels</b>, packet level, address level, hardware level</li> </ul>

		<ul style="list-style-type: none"> <li>• <b>Agreed by an industry or an international body</b> International communication, international language</li> <li>• <b>Allow data to be transferred securely</b> -https Interfaces</li> <li>• <b>Allow integration of software</b> programs can communicate</li> <li>• <b>Allow integration of hardware</b> programs can communicate</li> <li>• <b>User access to two systems</b> users can work on two systems simultaneously</li> </ul>
Level	Mark	Descriptor
	<b>0</b>	No rewardable material
<b>1</b>	<b>1-3</b>	Candidates state protocols/network interface and simple purpose
<b>2</b>	<b>4-6</b>	Candidates attempt to explain protocols/network interface and purpose eg rules, where applied, different protocols
<b>3</b>	<b>7-9</b>	Candidates explain purpose of protocols and network interfaces. Must mention security to obtain full marks

Question Number	Indicative Content	Mark
<b>6(a)</b>	One mark for identification (1) plus extension (1) <ul style="list-style-type: none"> <li>• <b>Double booking of pitch (1)</b> centres not communicate information (1) emails/telephone calls between centres missed (1)</li> <li>• <b>Invoice</b> sent to two people for same pitch (1) or no invoice sent out (1)</li> <li>• <b>Time wasting (1)</b> centres have to communicate with each other (1)</li> </ul>	<b>(2)</b>

Question Number	Indicative Content
<b>6(b)</b>	<b>Possible benefits:</b> <ul style="list-style-type: none"> <li>▪ Times how long staff take to complete a task</li> <li>▪ Evaluates work rate of individual in relation to task</li> <li>▪ Applies a time allowance for each task</li> <li>▪ Resources (pitches, fitness suites etc) may be used more effectively and efficiently/cost effectively – unnecessary administration removed/reduced</li> <li>▪ Reduce workload and duplication of work</li> <li>▪ Develop suitable working conditions.</li> <li>▪ Employees will know what is expected of them. Work measurement quantifies objectively what should be expected of an individual, or team, or work group, or process.</li> <li>▪ May result in improved standards and performance compared to targets - provides a benchmark and an understanding of how an operation is doing, and a basis for planning any corrective action necessary.</li> <li>▪ Employees gain a more balanced workload, the</li> </ul>

		<p>amount of work equalized</p> <ul style="list-style-type: none"> <li>▪ Recognise constraints – limitations within present working conditions</li> <li>▪ Improve layout/design of workplace</li> </ul>
Level	Mark	Descriptor
	<b>0</b>	No rewardable material
<b>1</b>	<b>1-3</b>	Candidates state 1 or 2 features and/or benefits of time and motion 1 feature/benefit = 1 mark
<b>2</b>	<b>4-6</b>	Candidates attempt to explain benefits, 1 benefit identified with extension = 4 marks. 2 benefits + 1 extension = 5 marks
<b>3</b>	<b>7-9</b>	Candidates explain 3 ways with extensions or show a clear understanding of time and motion

Question Number	Indicative Content	
<b>6(c)</b>	<ul style="list-style-type: none"> <li>• <b>More easily accessible/public can find information easier</b></li> <li>• <b>More information on facilities offered is available</b></li> <li>• <b>Advertise</b> the leisure centres and facilities</li> <li>• <b>What is on offer</b> - services shown on website</li> <li>• <b>Immediate contact</b> – contact us facility</li> <li>• <b>Promotion of services</b> – facilities available</li> <li>• <b>FAQ:</b> people can ask questions online</li> <li>• <b>Online booking system for hire of facilities;</b> certainty of pitches/rooms etc being booked</li> <li>• <b>Advertise/promote facilities:</b> public can see special events, facilities</li> <li>• <b>Invite feedback</b> - on facilities, ease of booking</li> <li>• <b>Identify regular bookings:</b> contact customer to offer special deals</li> <li>• <b>Online form to apply for membership:</b> Increase membership</li> </ul>	
Level	Mark	Descriptor
	<b>0</b>	No rewardable material
<b>1</b>	<b>1-3</b>	Candidates state 1 or 2 ways 1 way = 1 mark
<b>2</b>	<b>4-6</b>	Candidates attempt to explain 1 way, 1 way identified with extension = 4 marks. 2 ways + 2 extension = 6 marks
<b>3</b>	<b>7-9</b>	Candidates discuss ways with extensions. Include features of the website. Clearly related to customer relations

Question Number	Answer	Mark
<b>7(a)</b>	<p>One mark for identification, one mark for extension</p> <ul style="list-style-type: none"> <li>• <b>Use of keypad (1)</b> code needed to open doors/enter building (1)</li> <li>• <b>Swipe cards (1)</b> only allow entry to certain points (1)</li> <li>• <b>Fingerprint identification (1)</b> Only</li> </ul>	<b>(2)</b>

	recognised fingerprints accepted/not all rooms accept all fingerprints	
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Question Number	Answer	Mark
<b>7(b)</b>	Any three from: <ul style="list-style-type: none"> <li>• Use of passwords (1)</li> <li>• Restricted access on log-in (1)</li> <li>• Restricted access to files (1)</li> <li>• Limited user accounts (1)</li> <li>• Firewall (1)</li> </ul>	<b>(3)</b>

Question Number	Indicative Content	
<b>7(c)</b>	<ul style="list-style-type: none"> <li>• Individual must be aware why data is being kept – contact re bookings, events</li> <li>• Must be accurate and up to date – careful data entry</li> <li>• Must be kept secure – not disclosed</li> <li>• Not kept longer than necessary – review records, delete when members leave</li> <li>• Individuals have a right to see what data is being stored</li> <li>• Cannot be given to other parties without consent</li> <li>• Be aware of consequences of failure to comply – fines, personal data free to use by other parties</li> <li>• Not to be taken outside EU</li> </ul>	
Level	Mark	Descriptor
	<b>0</b>	No rewardable material
<b>1</b>	<b>1-2</b>	Candidates state 1 or 2 principles of act
<b>2</b>	<b>3-4</b>	Candidates state 1 or 2 principles of the Act with some explanation of why staff must comply
<b>3</b>	<b>5-6</b>	Candidates state 2 ways with clear explanations. May include consequences for leisure centre

Question Number	Answer	Mark
<b>8(a)</b>	One mark for identification, one mark for extension. Max 2 marks per benefit. <ul style="list-style-type: none"> <li>• <b>Will know how much is in stock (1);</b> can order (esp catering staff)(1);improves efficiency (1)</li> <li>• <b>Can set minimum stock levels; (1)</b> can reorder before run out of stock (1), less likelihood of running out of stock (1)</li> <li>• <b>Improve security of stock; (1)</b> actual and computerised stock levels may not tally, can investigate for possible theft (1)</li> <li>• <b>Can identifying slow moving/selling items (1)</b> not reorder/promotion/offer to clear stock</li> </ul>	<b>(4)</b>

Question Number	Indicative Content
8(b)	<p><b>Benefits</b></p> <p><b>General</b></p> <ul style="list-style-type: none"> <li>• Technology such as on-line training packs, web seminars, training pod-casts, interactive assessment, simulations of working situations, company DVDs</li> <li>• Range of media leads to more interesting training (so more attentive)</li> <li>• Training is consistent</li> <li>• Allow staff to improve/train at their own pace</li> <li>• New staff can be inducted at any time</li> <li>• Reduces need for 'training staff'</li> <li>• Training can take place in 'quiet' times of the day</li> <li>• Can work with colleagues for mutual support</li> <li>• Only need to learn what they need to know – may reduce time needed to learn package</li> </ul> <p><b>On-line</b></p> <ul style="list-style-type: none"> <li>• Can be accessed at any time</li> <li>• Could be interactive and provide feedback for user and company</li> <li>• Is easy to amend and update</li> <li>• Can make use of video and still images</li> </ul> <p><b>CD/DVD</b></p> <ul style="list-style-type: none"> <li>• Can be accessed at any time,</li> <li>• Can be used on any computer no internet connection needed</li> <li>• Inexpensive and easy to distribute.</li> </ul> <p><b>Video Conferencing</b></p> <ul style="list-style-type: none"> <li>• Allows for good interaction between participants</li> <li>• Virtual reality</li> </ul> <p><b>Podcasts</b></p> <ul style="list-style-type: none"> <li>• Easy to access</li> <li>• Portable carry on MP3 player/phone</li> <li>• Listen when able and when doing other jobs</li> <li>• Listen again for reinforcement</li> </ul> <p><b>Disadvantages</b></p> <p><b>General</b></p> <ul style="list-style-type: none"> <li>• Software/site licences may be expensive to purchase</li> <li>• Technology is impersonal may not pick up on staff problems</li> <li>• Can be lonely training alone and if there is a problem no personal support</li> </ul> <p><b>On-line</b></p> <ul style="list-style-type: none"> <li>• Requires internet access</li> <li>• At a set time and cannot be taken away to study I own time</li> </ul> <p><b>CD/DVD</b></p> <ul style="list-style-type: none"> <li>• Would be difficult to update or amend</li> </ul> <p><b>Video Conferencing</b></p> <ul style="list-style-type: none"> <li>• Fixed timings</li> </ul>

		<ul style="list-style-type: none"> <li>• Difficult to exchange documents</li> <li>• Difficult to revise</li> </ul> <p><b>Podcasts</b></p> <ul style="list-style-type: none"> <li>• Not interactive</li> <li>• No visual aids</li> </ul>
Level	Mark	Descriptor
	<b>0</b>	No rewardable material
<b>1</b>	<b>1-4</b>	Candidates produce an unstructured response, with some awareness of IT enabled training provisions. At least one benefit/disadvantage identified
<b>2</b>	<b>5-7</b>	Candidates attempt to produce a structured response which demonstrates understanding of either the advantages or disadvantages technological solutions. Limit to 7 marks if only benefits or disadvantages covered.
<b>3</b>	<b>8-10</b>	Candidates produce a structured, well thought out response and clearly demonstrate a good understanding of both the advantages and disadvantages of technology solutions.

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