

Theo questions in practical tests

Evaluate the use of mail merge to produce these letters.

Give at least one advantage for using this mail merged letter

- eg letter could be reused with different recipients/future years
- The organization database can be used as a data source for mail merge
- The operative does not need details of recipients

Give at least one disadvantage of using mail merge for these letters

- it may take longer to set up mail merge than type to individuals
- It needs more advanced word processing skills

Answer the following:

- What is meant by phishing?
 - Unsolicited email to collect personal data
- How to identify a phishing attack?
 - Errors in text/act of asking for personal details/originators email address does not match company/generic addressee/unknown source
- How to protect yourself against phishing threats?
 - Spam filters/own alertness/do not click links or open attachments from unknown sources/never reveal personal details via email

Evaluate the design of your data entry form.

- Consistent layout or formatting
- Appropriate use of title
- Lack of instructions on filling in form
- No navigation buttons
- Should contain descriptive labels, not just field names
- Drop down list used to reduce data entry errors
- Inappropriate space for data added
- Unsuitable field lengths for this data
- Appropriate spacing between fields/appropriate use of white space
- Form fills available space/window
- Font size/legibility/colour schemes

Identify two ways of recognising spam sent by email.

- incorrect grammar/spelling
- plain text/absence of logos
- request for personal information
- suspicious attachments
- urgent/too good to be true
- links within the body of the message
- generic greetings
- mismatch of domain name

Identify two methods to help protect yourself from spam sent by email.

- use of spam/junk email filters
- block spam/black list
- use of spam/junk email folders
- only give email address to trusted sources
- safe senders list/white list
- delete or ignore message, never reply
- don't click links
- don't open attachments from suspicious sources

How to evaluate the features of a presentation that meet the needs of an audience.

- appropriate slide layout (title slide for slide 1)
- consistent layout/master slide
- appropriate formatting/layout applied
- not too many words per slide/bullet

Explain why you may choose a clustered bar chart.

- Suitable for comparative data
- Visually easy to compare differences
- Line graph not suitable as not continuously variable data
- Pie chart not suitable as shows data as a percentage of a whole, can't compare as on one data series
- Stacked bar chart – cumulative data, not comparative, not direct comparison

Point taken in account when evaluating the design of a data entry form.

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Answer the following:

Give one example of a strong password.

caseKr0yw3^

Identify three features which make this a strong password.

- mixed upper and lower case
- at least 1 number
- at least 1 symbol
- at least 8 characters long
- random characters
- not family names, dobs etc.

Identify three methods of preventing viruses.

- Ensure anti-virus software is installed and running
- Do not open email attachments from unknown sources
- Scan portable media before use
- Update you anti-virus software

Point taken in account when evaluating the suitability of mail merged document to an audience.

- Personalised to individual
- Emboldening, shading, bullets to make easier to read, headings emphasised
- Tick boxes/electronic version could automatically link to diaries
- Consistent font style, size and alignment
- Spelling errors – information, work, break in first paragraph

Identify three features that could be added to a data input form to make it easier to use.

- navigation buttons
- drop down menus
- radio buttons
- checkboxes
- self-explanatory field name
- user notes/help
- legible styles and sizes
- appropriate field spacing

Data in the Gender field is encoded displaying M for Male and F for Female. In your own words give two reasons for encoding data.

- File size smaller/saves memory/storage space
- Data entry faster
- Reduces data entry errors
- To make data less understandable/unreadable if data is intercepted
- More efficient normalisation

The telephone number of each student will be added in a new field. Identify the most appropriate data type for this field and in your own words give a reason for your choice.

- Alphanumeric/Text
- May contain additional character(s) such as dash/space/brackets/plus symbol
- Retains leading zeros (zero(s) on the left)
- Field would not be used for any calculations

A form has been created to enter data into the students table. • Evaluate in your own words the Gender and Payment_Type fields on this form.

Gender

- Remove additional radio button
- Missing label e.g. prefer not to answer
- Labels in full/displays all options
- Change of control type e.g. drop down list
- Easy method of data entry

Payment_Type

- Dimensions of control too long for data/position of field
- No drop down list/selection process
- Label font size/type
- More appropriate label

New Student Form

Roll_No:	<input type="text"/>	Birth_Date:	<input type="text"/>
First_Name:	<input type="text"/>	Gender:	<input type="radio"/> M <input type="radio"/> F <input type="radio"/>
Last_Name:	<input type="text"/>	Weeks:	<input type="text"/>
Acc_Code:	<input type="text"/>	Paid:	<input type="text"/>
Course:	<input type="text"/>		
Payment_Type:	<input type="text"/>		

A university are going to create an online facility to enable communication on a range of issues. They need to decide between using a blog and a forum.

- Evaluate in your own words the differences between a blog and a forum.

Recommend what you consider to be the most appropriate option for use by the university and explain your reasons.

- **Blog:** one person/organisation posting information, postings can be longer/more detailed
- Blog is a personal internet journal/diary - writer will type in observations on some topic
- Blog creator drives content, one person's thoughts, one author posts thought on a subject, blog posts
- typically longer, readers can comment on content, blog unmoderated
- **Forum:** a group sharing thoughts, discussions, comments are brief, user generated content, broader
- collection of thoughts, conversation between members of a group, several different thoughts on a
- subject, comments could be moderated to ensure content is appropriate for the university.

Why internet information may not be reliable?

- Identify in your own words two reasons why information found on the internet may not be reliable.
- Anybody can setup a website
- Internet is not regulated
- Commercial sites may be biased
- Wikis can be edited by non-experts

How to evaluate website content ?

- Give two methods in your own words of checking the reliability of information found on the internet.
- Check the website domain (.ac, .gov, .org, .edu) suffixes are usually reliable.
- Compare information from different sources / sites
- Check for bias / advertising / purpose of the site
- See if responsible bodies have endorsed the site
- If site has testimonials it is likely to be reliable
- Check date – if out of date is unlikely to be reliable
- Check author's credentials
- Check functionality of website

Describe in your own words two advantages of using relational tables rather than a flat file database.

- data only stored once/data does not have to be typed in twice – reduces/avoids data duplication
- quicker to enter/update/edit data
- fewer errors are likely
- reduces database storage space

How can companies use social networking as a means of communication to promote their business?

- release news/status updates about new cruises/destinations/products
- post images/videos of cabins/ships
- allow customers to ask questions about prices/durations
- request customer feedback to improve service/polls
- instant messaging can be used to announce for new product or service for customers.

A travel agency wants to distribute the newsletter, and plan to send a printed copy of this by post. Evaluate in your own words this method of distributing the information.

Advantages

- not everyone has a computer/internet, so may not see the newsletter if sent electronically
- can be read anywhere/not limited to where computer is
- can ensure sent to all customers listed
- can target people in an area

Disadvantages

- costs of ink/paper/printing
- cost of postage
- time delay (dated)
- difficult to update content
- not interactive
- no animation/sound/video
- environmental impact of printed copies

Mention four rules for using the internet safely.

- Only give personal details / account details to secure websites
- Install up to date anti-spyware/antivirus software
- Switch on firewall
- Always keep gaming friends “in game”
- Do not disclose your location
- Turn off webcam after use / cover camera
- Never accept (social media) contact requests from people you do not know
- Limit numbers of friends
- Set privacy to friends only
- Use an alias/nickname rather than real name
- Don't meet people you have only spoken to online
- Make sure websites being visited for transactions can be trusted (https or the padlock sign when using search engines)
- Only use websites recommended by teachers
- Never reply to spam emails
- Don't open attachments from unknown sources

Discuss the advantages and disadvantages of using mail merge to generate personalised letters to offer university places to 6,000 students.

Advantages

- Only 1 letter has to be typed; saving time
- Only the master letter / data source has to be proofread; therefore saving time.
- Data source may already exist which saves time
- Can select on any criteria which saves time creating it
- New data sources can be added/used year on year
- Faster than typing 6000 individual letters/sending 6000 individual emails

Disadvantages

- If errors are in the master letter then 6000 incorrect letters are sent
- If a fault is identified AFTER the mailmerge then all hard copy will be wasted; taking up time and money
- Slower checking/typing 6000 individual personalised letters than just one
- If there are errors in the data source then they may not be checked until after mail merge then the process becomes more difficult
- Higher level of staff skill/specialised training required

- a) Define the term data validation.
 - Checks if data is reasonable/sensible
 - Check to see if it satisfies certain criteria when input into a computer
- b) Name the most appropriate type of validation that would be used in the *Score* field.
 - Range check
- c) Identify the most appropriate validation criteria that would be used in the *Score* field, if the score out of 60.
 - Between 0 and 60 | $=0$ and ≤ 60 | >-1 and <61

Discuss in your own words the advantages and disadvantages to the applicants of using an online form rather than a manual way for this task.

Advantages

- Less potential errors as the user is only entering their own data whereas university staff will be bulk entering data
- Easier to correct errors on an online form than a paper form
- No need to remember to take the form to the interview as the data is entered by the applicant online
- Easier for disabled people to use/accessibility tools can be used

Disadvantages

- Not all applicants can complete an online form because they do not have a computer device/software
- Not all applicants can complete an online form because they do not have the IT Skills
- Not all applicants can access an online form because they do not have internet connectivity
- Increased risk of data loss as the data can be transmitted electronically
- Increased risk of unauthorised access to personal data as data transmitted electronically
- Possible data protection issues as the data is stored in digital form

- **(a)** Describe what is meant by data verification.
 - checking accuracy of data entered exactly matches original source
- **(b)** Name **two** methods of data verification and for **one** of these methods explain how it could be used with this database.
 - Double (data) entry
 - Visual (verification/check)

Many jobs are now being replaced by IT systems.

- Evaluate in your own words the effects of IT on potential employment for these apprentices.

- Fewer jobs available as taken over by Reduction in manual workers
- Creation of new ICT jobs
- Increase in jobs in writing software/programs
- Increase in jobs relating to maintenance of robots and IT equipment
- Increase in jobs relating to web designers/advertising
- Increase in computer engineers/project managers/systems analysts
- People need to be trained in new technology
- Tend to work in a cleaner/safer working environment
- People may not have full time/permanent jobs (part time jobs/compressed hours/job sharing)
- Working from home/remote/workers do not need to be in a fixed location/near factory

- **(a)** The *Customers* table contains a primary key. Explain why the *Last_Name* field would not be appropriate as a primary key.
 - data not unique/people may have the same last name
- *When adding data to a field in the Customers table, it would be easier for a user to select data from a list.*
- **(b)** Identify another advantage of selecting data from a list.
 - Speeds up data entry/reduces data entry errors

Evaluate in your own words the use of the cloud to backup data compared to using tape drive system.

- **Benefits of cloud**

- access to files and data anywhere at any time vs access to tape physical location
- reduced hardware/software costs as there is no hardware
- only pay for the storage you use, on a tape system you have to buy a brand new tape
- access to data on cloud is faster than tape as tape uses sequential access when cloud uses direct access
- storage capacity may be unlimited on the cloud vs capacity of storage limited on tape

- **Drawbacks of cloud**

- concerns over security of data, don't know where data is stored, tape systems are more secure
- ownership of data, data on tapes is fully owned by you
- need internet access to be accessed or updated rather than tapes
- pay monthly subscription to cloud storage provider/ongoing cost

- **(a)** What does the file extension .csv stand for?
 - Comma Separated Value(s)
- **(b)** Outline **two** characteristics of a csv file.
 - saves in text format
 - allows for the saving data in an organised way
 - uses a character (e.g. comma) to separate
- **(c)** Explain **one** example when a csv file would be used.
 - import/export/transfer data between applications
 - Import data into a spreadsheet / database

Recommend two changes that could be made to improve the efficiency and ease of use of your database. Justify your choices.

Changes:

- use data validation
- encoding of data,
- shorter field names
- appropriate use of drop down fields/radio buttons
- navigation buttons

Reasons:

- helps to reduce data entry errors,
- reduces storage capacity/memory required
- reduces processing time
- to improve speed of data entry
- to minimize or eliminate duplication of data

A travel agency is planning to publish the annual report data on its company wiki. Evaluate the suitability of a wiki to share this type of data.

Disadvantages:

- Anyone can edit, delete or modify the content
- Could make data unreliable
- Accessibility – computer/internet needed

Advantages

- Allows the company report to be seen by many people
- Saves distribution/printing/time costs
- Eco-friendly (rather than printed reports, which use papers, liquid ink/dry ink)

Recommendations

- Should be presented in a non-editable format
- Include a link to the published report on the company website

- **(a)** Explain why styles are used.
 - consistent format/layout
 - to give a corporate image/brand recognition
 - saves time editing/formatting (if a paragraph style is altered)
- **(b)** State the purpose of spell check software and identify **two** limitations of its use.

Purpose:

- to identify potential data entry errors
- to assist user to reduce errors

Limitations:

- only checks against words in its dictionary/may not recognise technical names/abbreviations or words in another language/may not recognise proper nouns/names
- spell checking does not ensure that correct spelling is used for context/does not eliminate the need for proofreading
- cannot check text in imported images