

Candidate Marks Report

Series : 6 2018

This candidate's script has been assessed using On-Screen Marking. The marks are therefore not shown on the script itself, but are summarised in the table below.

Centre No :	Assessment Code :	R012
Candidate No :	Component Code :	01
Candidate Name :		

Total Marks :

In the table below 'Total Mark' records the mark scored by this candidate.

'Max Mark' records the Maximum Mark available for the question.

Answer all the questions.

1 You are working on a project and need to set milestones.

In which phase of the project life cycle would this task be carried out?

..... *Initiation phase* [1]

2 Fig. 1 below shows part of a Gantt chart.

A	Start date	Duration	1	2	3	4	5	6	7
Produce the deliverable product	12-Apr	3							
Carry out testing	14-Apr	4							

Fig. 1

What does Column A represent?

..... *Produce product is being created*
test is carried out [1]

3 Identify one software type that could be used to create a visualisation diagram.

..... *Desktop publishing* [1]

4 A food manufacturer is using a consumer panel to collect feedback on its new range of healthy snacks.

Give two advantages of using a consumer panel to collect this feedback.

1 *One advantage of using a consumer panel is that the feedback collected is accurate.*

2 *Ability to give to take*
..... [2]

5 Pharming is one type of threat that exists when collecting data online.

What is meant by the term pharming?

..... *Pharming is when the user is redirected to a fraudulent website from the original, real one.*

..... [2]



6 You are releasing a deliverable product to a client.

During which phase of the project life cycle does this task take place?

..... Evaluation [1]

7 A retailer shares information about new products with its store managers using Voice over Internet Protocol (VoIP).

Describe one advantage to the retailer of using VoIP to share this information.

The retailer's voice is heard which makes it easier to communicate as well as discussing other things about the information.

..... [2]

A project team has been set up to organise the installation of a cashless payment system in the school canteen over the summer holiday. The new payment system must be ready for the first day of term. The school has a total budget of £20 000 to set up the new system.

There will be two checkouts, each with a barcode scanner. A fingerprint reader will be used to identify each student at the checkouts. When a student wants to buy a meal, they will take the items to the checkout, sign in with their fingerprint and scan the food item barcodes.

The total cost will be calculated and displayed on a touch screen. The student will then confirm the purchase by touching the OK button. The student can also cancel their purchase if the meal costs too much. The system will generate a total bill at the end of each week. This is sent to each student's home by email.

8 (a) Identify one input into the initiation phase for this project.

..... User requirements [1]

(b) Identify one output from the planning phase for this project.

..... Project plan [1]

9 The project manager considers legislative implications during the initiation and planning phases.

Describe one legal implication that must be considered for this project.

Depends on the type of product being created and the assets being used.

..... [2]

Turn over



10 The team will follow the project life cycle to complete this project.

Discuss the advantages to the school of the project being completed using the project life cycle.

The people who are involved with the project can
then are aware of their roles and responsibilities
as the tasks are defined. Also, following the project
lifecycle provides a structured approach. If followed
properly, the product can be delivered to the school
on time. Furthermore the iterations can take place
between phases if there are omissions in the
information found at any point during the
project.

[8]



11. (a) Identify two constraints for this project.

1. Time Scale

2. budget

[2]

(b) For one of the constraints you chose in part (a), describe one step that could be taken to mitigate this.

Chosen constraint: Time Scale

Description: The project of a Gracenet device can be used with which
stages. Project lifecycle should be followed, phase by phase
in order for the product to be delivered to the school on time.

[2]



An athletics club, Progress Harriers, organises a monthly competition. The competition includes a variety of sporting events.

The results of the competition are posted on the club website and sent to all competitors as an email attachment.

Progress Harriers uses a database to store and process data such as event results, club event records and the contact details of each competitor. The database is stored on a laptop. The database is protected by a password.

At the start of each monthly competition, the laptop is used by club officials to record the names of the competitors in a database table.

During each competition, a desk is set up at the side of the events field where the competition is being held. The results of each sporting event are brought by club officials to the desk. This data on the position and time for each competitor is input into the database using the laptop.

12 Progress Harriers is concerned about the use of social engineering by cyber-criminals.

(a) What type of social engineering could take place during a competition?

..... *Shoulder surfing* [1]

(b) Explain **one** way Progress Harriers could mitigate against the threats from social engineering.

..... *prevent*
..... *They could only use passwords*
..... *install anti-virus software*
.....
.....
..... [3]



13 (a) Identify **one** physical prevention measure and **two** logical prevention measures that Progress Harriers can take to protect its data.

Physical ^{place} Put the computer into a locked room.....

Logical 1 Put a firewall in place.....

Logical 2 Encrypt the data.....

[3]

(b) For **one** of the logical prevention measures you chose in part (a), describe how it would protect the data.

Chosen logical prevention measure Encryption of data.....

Description ~~Encryption of data would make the data become unreadable which prevents from accessing. This scrambles the data which makes it become unreadable to hackers.~~

[2]



14 Progress Harriers uses a database to process data about the competition results.

(a) Describe one feature of a database that could help Progress Harriers enter data into its database.

One feature is
.....
..... [2]

(b) Describe one feature of a database that could help Progress Harriers generate useful information from its database.

One feature of a database that could help them generate useful information is a query. A query can be used to find specific information without having to waste time observing the whole database. [2]

(c) Explain two reasons why Progress Harriers would use a database rather than a spreadsheet to record event results, club event records and the contact details of each competitor.

1 This is because a database is more efficient and as the specific information can be obtained by querying it.

2 Includes all of the different data types that could be needed when the data is input.

[6]



15. When a club record is broken at a competition, a 'Club Record Certificate' is produced. The competitor name, event name and date from the database are merged into a Desk Top Publishing (DTP) certificate template.

(a) What presentation method is this?

..... [1]

(b) Explain **two** advantages for Progress Harriers of using this method to create certificates.

1. *Info about the competitor is not merged up or information missing for anybody else's.*

.....

2

.....

.....

[4]



A large, international charity collects data relating to its 500 000 donors (those who give money to charity). The data includes donor names, contact details and if the donor pays on a monthly basis.

The charity promotes the use of Green energy including the use of energy efficient home appliances such as TVs and lighting. Donors are encouraged to install solar panels on the roofs of their homes.

The charity collects data on the public's opinion of the charity using the following:

- surveys through the charity website;
- sending questionnaires by email and/or through the post;
- social media;
- external sources such as market research conducted on the street by other companies.

Market research is carried out on a weekly basis using surveys and questionnaires. The data from this market research is shared with other fundraisers.

The data from the surveys and questionnaires is processed at the charity's head office and then stored on local servers. The charity uses the website to advertise the charity work it carries out and to sell branded clothing and gifts.

The charity has asked an IT security company to review the IT systems it has in place to identify the impact and consequences of potential cyber-security attacks.

16 The market researchers show presentations of the charity's work to the people they talk to on the street. Potential donors are then asked to fill in an online questionnaire.

(a) (i) Identify a suitable hardware device that could be used to complete the online questionnaire.

Tablet

..... [1]

The data from each completed questionnaire is automatically sent to the charity's head office.

(ii) Identify a suitable connectivity requirement for the hardware device you chose in part (a)(i).

Wifi-connection

..... [1]

(b) Explain **one** implication **to the charity** of having bias in the questionnaire.

.....

 [3]



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17 The charity has a database containing the details of its donors.

(a) Identify **two** data types that could be used to store this information.

1 ~~Alphanumeric~~ Alphanumeric

2 Date/Time

[2]

(b) For **one** of the data types you chose in **part (a)**, justify your choice.

Chosen data type ~~Alphanumeric~~ Date/Time

Justification The date of Birth of the donor is stored in the database

[2]



18 The charity collects data about its 500 000 donors.

Discuss the different ways in which the charity could use this data.

The charity could use the data by sending
in it with packages of food to needy people
so that they know who sent it.



[10]

19: State **two** types of environmental vulnerabilities that could affect the stored data.

1. ^{Natural disasters} ~~Earthquakes~~ could destroy the devices ^{containing} ~~containing~~ the stored data

2

[2]

20 Explain the **financial** disruption that may occur to the charity after a cyber-security attack.

The banking details of the money that the charity has in its bank account could get stolen. The charity will lose money as the details will be taken by the attacker.

[3]



21 The charity collects data on the use of solar panels by its donors with their permission. A Green energy supplier has asked the charity to share this data with them.

Explain **two** reasons why the charity should say 'No' to this request.

1 The data could be misused which could lead to identifying theft. Outcomes are they debts could be seen up ~~passport~~ ~~in~~.

2 Under the Data Protection Act, it is against to only use data for its intended purpose.

[6]

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