CANDIDATE NAME	

CENTRE NUMBER		CANDIDATE NUMBER	

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS
- Answer **all** questions.
- Use a black or dark blue pen.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- You may use an HB pencil for any diagrams, graphs or rough working.
- Calculators must **not** be used in this paper.

INFORMATION
- The total mark for this paper is 70.
- The number of marks for each question or part question is shown in brackets [ ].

This document has **12** pages. Any blank pages are indicated.

1 Contrast the characteristics of local area networks (LANs) and wide area networks (WANs).

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.... [6]

2 Two impacts on individuals of the use of social networking are ideological polarisation and stereotyping.

(a) Ideological polarisation is the separation of political attitudes into extremes.

Describe ways in which the use of social networking may lead to the ideological polarisation of individuals.

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(b) Stereotyping is having a set idea of what a person or group of people is like even though that idea may be wrong.

Describe ways in which the use of social networking may lead to the stereotyping of individuals.

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(c) Many businesses now use social networking for marketing their products.

Justify the use of social networking by businesses for marketing products.

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3 A digital photograph has been taken by a photographer who stores versions of it as separate files using different image resolutions. The image will be used in advertisements that will appear in printed magazines, on posters, on TV and on web pages.

Analyse the need for different resolutions of the image.

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4   Evaluate the use of a Virtual Private Network (VPN) when using the internet.

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5 On-screen input forms are used by office workers to enter data into computer systems. A well-designed input form will collect good-quality input so that good-quality output can be produced.

Explain how a well-designed on-screen input form helps prevent users from making mistakes when entering data.

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6 Microwave transmission is used to send data between devices at different locations.

(a) Explain how microwaves are used to transmit data between devices.

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(b) Describe **four** ways that microwave transmission is used in communication systems.

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7 The `prompt()` method is used in JavaScript to provide a popup dialog box for users to interact with web pages.

(a) Explain how the result of the user interaction from `prompt()` is used by a programmer to collect the input from a user.

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(b) Explain **two** limitations of using the `prompt()` method of user interaction.

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8 Online tutorials are a method of providing training courses to learners.

Explain how online tutorials can be used to train learners.

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9   RGB and CMYK are two systems that are used to produce colour in graphic design.

Compare, by describing similarities and differences, the use of the RGB and CMYK colour systems in graphic design.

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10 A new computer application has been developed to replace the current application that is in use by a company.

Describe how the new application will be evaluated.

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12

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