

CHAPTER TEST ANSWERS

Chapter 5 Approaches to problem solving

Section A

Multiple-choice questions

- 1 You can tell a project from a normal daily task because it:
B has a finite lifetime.
- 2 A milestone in a project is:
C a point of major progress.
- 3 The type of chart used to plan projects in Computing is a:
B Gantt chart.
- 4 In a project, what is 'slack time'?
D The amount of time a task can run overtime before affecting later tasks
- 5 In a project, what is 'lag time'?
A An enforced delay before a task can begin
- 6 In a project, what is the 'critical path'?
B The series of tasks from beginning to end with no slack in them
- 7 What is a 'contingency plan'?
A Pre-planned responses to problems and disasters
- 8 How much slack does the 'CEO's Report' task have?
C 2 days
- 9 What do the symbols after days 7, 10 and 15 represent?
D Milestones
- 10 The arrows in the diagram mean that:
B the task at the end of the arrow is dependent on the task at the start of the arrow.
- 11 Keeping track of file versions is important so that:
A a team can tell which version of a document is the latest.
- 12 An ethical dilemma occurs when:
C you have doubts about which is the best, most morally appropriate course of action.

- 13 A website's architecture may be designed using:
- B** a site map.
- 14 A possible problem of using icons in webpages is that:
- D** their meaning may be unclear to users.
- 15 An example of consistency in a website is:
- A** putting a link to the homepage in the same place on every page.

Section B

Short-answer questions

- 1 Referring to the screenshot on page 5, identify five examples of the use of navigation.

Answer: Any five of the following are acceptable.

- The horizontal menu under the search box
- The menu (Personal ... About Us) under the box at the top
- The vertical menu (Help me select an account ... Calculators and tools) on the left
- Icons in the middle of the page, and links under the icons
- Vertical menu on the right hand side
- Text link to download Adobe Reader

- 2 a Identify one way the webpage above protects the information of users.

Answer: Responses will vary; examples may include the LOG ON button or the link to 'Security information' link.

- b Comment on the appropriateness of the choice of graphics used for the sections for 'Businesses', 'Corporates', 'Large Corporates' and 'Based outside Australia'.

Answer: Responses will vary. Be flexible in your marking. Look for critical evaluation.

- c Identify two facilities on the page that are not promotional, but provide helpful services so visitors can use the site more effectively.

Answer: Any two of the following: Search box, Help link and Contact us link

- 3 Websites are now the norm for a business of any size.

- a Explain three ways that having a public website makes a business more efficient.

Answer: Any three of the following, though you should accept any reasonable, sensible answers.

- Less time is needed to contact possible customers.
- Less effort needed to answer questions that can be addressed on the website, such as through FAQs.
- Less data-entry time needed if customers enter their own data online to make a purchase.
- Quicker contact with customers using email or messaging.

- b** Explain two ways that having a public website makes a business more effective.

Answer: Any two of the following, though you should accept any reasonable, valid answers that are non-efficiency criteria.

- Data entry is more accurate if the client enters data themselves, rather than the business retyping information from handwritten forms.
- You can make the business look attractive and appealing using corporate branding with a well-made, colourful website.
- The information provided is more up-to-date (timely) than that provided in printed publicity.

- 4 a** Identify three factors that web and app designers must consider when producing websites that may be viewed on mobile devices such as smartphones or tablets.

Answer: Any three of the following are acceptable.

- Smaller screen size means some details may need to be left out in the smaller rendering (1 mark).
- Controls may need to be larger for the touchscreen (1 mark).
- Text needs to be large and visible (1 mark).
- Slower download speeds mean images and media need to be reduced in size or omitted (1 mark).
- Short battery life means sites need to download and respond quickly (1 mark).

- b** Identify two examples of how a website can be designed with tolerance.

Answer: Any two of the following are acceptable.

- Allowing multiple attempts to enter a password (1 mark)
- Auto-correcting spelling errors (1 mark)
- Letting people cancel or go back to a previous step (1 mark)

- 5 a** Distinguish between using checkboxes (tickboxes) and radio buttons for data entry.

Answer: Checkboxes allow the user to tick one, all, none or any number of the options in the list (1 mark). Radio buttons allow one, and *only* one, option to be ticked (1 mark).

- b** In a database, you want users to enter their date of birth. Suggest an efficient way of getting a valid date. Justify your choice.

Answer: A calendar control would be best (1 mark), because it enforces the selection of dates that exist; for example, offering February 29 in leap years (1 mark). In addition, users do not have to worry about the date format; for example, 29 Feb 2000 or 29.2.2000, because the calendar control will handle this for them (1 mark).