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**with a little help from your guide book**

**INFORMATION TECHNOLOGY for CSEC Examinations**

**by**

**Alan Wood and Howard Campbell**

**Hop on, we are ready to go! ­­**

**Section 1: Computer Fundamentals and Information Processing**

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| **All aboard** | **Content covered** | **Homework questions/Additional information** |
| **Stop 1** | Read Pages i-xi  Participate in class 1. Introduction to the course.  Homework: No homework this week.  Date completed ………. |  |
| **Stop 2** | Read Pages 2-4    Participate in class 2. Concepts of Information Technology.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.1  Which of the following BEST explain the concept of Information Technology?  (A) Mergers the study of Office Automation, Electronics and the Internet  (B) Merges the study of Desktop computers, supercomputer and mainframe computers  (C) Merges the study of Computer Science, Information and Communications Technology (ICT) and Office Automation  (D) Merges the study of Information and Communication Technology (ICT), Office Procedures and Data Processing  (1 mark) |
| **Stop 3** | Read Pages 4-9  Participate in class 3. Major types of computer systems.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.2  The Board of Directors of Caribbean Travel Services are aware of a range of computing devices ranging from supercomputers to embedded devices. Describe each of the FIVE major types of computer giving examples of what they may be used for?  (10 marks) |
| **Stop 4** | Re-read Pages 4-9  Practical Class 4. Major types of computer systems.  Homework: Write notes about your visit.  Date completed ………. | Visit an organization that uses different types of computer systems. |
| **Stop 5** | Read Pages 10-18  Participate in class 5. Explain the functions of the major hardware components of a computer system.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.3  Which of the following is NOT TRUE?  (A) ROM and RAM both store data  (B) ROM is more powerful than RAM  (C) RAM stores data temporarily only when the computer system is switched on.  (D) ROM stores (data encoded during its manufacture) permanently  (1 mark)  S.O. 1.3.a  List FIVE secondary storage devices?  (5 marks) |
| **Stop 6** | Read Pages 10-18  Participate in class 6. Explain how the major hardware components of a computer system interrelate.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.4  Clearly explain the IPOS cycle?  (4 marks)  S.O. 1.3.b  The value 1,073,741,824 is correctly known as  (A) Kilobyte  (B) Megabyte  (C) Gigabyte  (D) Terabyte  (1 mark) |
| **Stop 7** | Read Pages 18-20  Participate in class 7. Evaluate the relative merits of cloud storage and local storage.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.5  Describe FOUR advantages that cloud storage has when compared to local storage?  (4 marks) |
| **Stop 8** | Re-read Pages 18-20  Practical Class 8. Investigate cloud storage solutions  Homework: Write notes about your investigations.  Date completed ………. | Conduct research on Cloud Storage, online or from books and magazines. Your notes should include issues like price per Gigabyte, availability and speed of access. |
| **Stop 9** | Read Pages 20-29  Participate in class 9. Select appropriate input/output devices to meet the needs of specified applications.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.6.a  Select FIVE input devices that might be found at Caribbean Travel Service, a busy coach rental business operating throughout the Caribbean. Give an example of how each device is being used?  (10 marks)  S.O. 1.6.b  Name TWO output devices that produce hardcopy?  (2 Marks) |
| **Stop 10** | Read Pages 29-33  Participate in class 10. Explain the role of different types of software in computer operation. System software, Operating System, Utilities.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.7  Explain the role of the Operating System in the smooth operation of a computer system?  (4 marks)  S.O. 1.7  When a Caribbean Travel Service purchase new general-purpose software from a computer store this is known as  (A) Off the shelf  (B) Custom-written  (C) Download  (D) Customized  (1mark) |
| **Stop 11** | Re-read Pages 29-33  Practical Class 11. Using an operating system and Utilities.  Homework: Write notes about the Utilities you used.  Date completed ………. | Identify the Operating System running the computing device you are using. Can you find the available utility programs for: checking the disk drive, optimising the disk drive, checking the system has no viruses and checking the firewall. |
| **Stop 12** | Read Pages 33-37  Participate in class 12. Discuss the relative merits of the various types of user interface.  Homework: Answer this/these questions.  Date completed ………. | S.O.1.8  Describe ONE situation when a company might need to use a specialized keyboard?  (2 marks)  S.O. 1.8  Users can interact with a computer system using FOUR different interfaces. Describe each of the types of user interface?  (8 marks) |
| **Stop 13** | Read Pages 37-40  Participate in class 13. Evaluate the suitability of a given computer system for a specific situation.  Homework: Answer this/these questions.  Date completed ………. | S.O.1.9  A friend is looking to buy a new laptop computer for home use but is confused by the difference specifications. Explain to your friend the terms  a) Processing speed (CPU type and speed)  b) Memory (RAM)  c) Secondary storage (capacity and speed)  (6 marks) |
| **Stop 14** | Re-read Pages 37-40  Practical Class 14. Visit a computer store and compare system specifications.  Homework: Record the system specification of three different computer systems.  Date completed ………. | Your comparison should include factors such as: price, CPU (processor) type, number of cores, CPU speed, amount of installed memory, internal secondary storage capacity and external ports. |
| **Stop 15** | Read Pages 40-41  Participate in class 15. Troubleshoot basic computer hardware problems.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1. 10  Computer systems sometimes fail to work. Suggest a remedy for the following problems.  a) Nothing happens when the computer is turned on  b) The monitor displays no picture even though it is turned on  c) The output from a laser printer is very faint  d) A wireless mouse has stopped working  (4 marks) |
| **Stop 16** | Re-read Pages 40-41  Practical Class 16. Diagnosing computer problems. List the problems.  Homework: Write a description of the way you resolved the problems.  Date completed ………. | Your teacher will have created faults on computers for you to diagnose. |
| **Stop 17** | Read Pages 46-49  Participate in class 17. Distinguish between data and information.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.11  Data is BEST described as  (A) Text and numbers  (B) Raw unprocessed facts  (C) Personal information  (D) Readings from instrumentation  (1 mark)  S.O. 1.11  Name THREE different sources of data and information?  (3 marks) |
| **Stop 18** | Read Pages 50-53  Participate in class 18. Evaluate the reliability of information obtained from online sources.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.11  Give examples of how the following type of document might be used  a) Turnaround document  b) Human-readable form  c) Machine-readable form  (3 marks)  S.O. 1.12  Information on the World Wide Web is sometimes ‘Fake News’. Outline how you can evaluate the reliability of information obtained from online source?  (4 marks) |
| **Stop 19** | Re-read Pages 54-55  Practical Class 19. Find examples of UNRELIABLE data from online resources.  Homework: During this week monitor the news and note any unreliable data.  Date completed ………. | Look at several examples of data from online sources, or written sources provided by your teacher. Note down how reliable you think the information is on a score of 1 to 5. Justify the mark that you have given. |
| **Stop 20** | Read Pages 55-60  Participate in class 20. Differentiate between validation and verification of data.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.13  Validation and verification can be used during data entry. Clearly differentiate between validation and verification.  (2 marks) |
| **Stop 21** | Read Pages 55-60  Participate in class 21. Identify appropriate validation checks given a particular scenario.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.14  List FIVE different types of validation checks?  (5 marks) |
| **Stop 22** | Re-read Pages 55-60  Practical Class 22. Use a spreadsheet to apply different validation rules.  Homework: List the validation rules you used.  Date completed ………. | Use a spreadsheet application like Microsoft Excel or LibreOffice Calc. Create a validation rule to ensure that the data entered into a cell is an integer. In another cell ensure the data is between length 4 and 6 characters. Make sure you include a meaningful error message. |
| **Stop 23** | Read Pages 55-60  Participate in class 23. Methods of verification: double entry and proofreading (to identify and correct typographical and transpositional errors).  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.14  Clearly explain the advantages and disadvantages of double entry verification compared to proofreading verification.  (4 marks) |
| **Stop 24** | Read Pages 61-67  Participate in class 24. Select appropriate file organization for particular application File access methods: sequential, serial, direct and random.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.15  When data is written to a file sorted in alphabetical order the BEST file access method is  (A) Serial  (B) Sequential  (C) Direct  (D) Random  (1 mark) |
| **Stop 25** | Re-read Pages 61-67  Practical Class 25. Access methods races.  Homework: No homework this week.  Date completed ………. | Try the access method races given as activities from the book. |
| **Stop 26** | Read Pages 61-60  Participate in class 26 Application areas: archiving, payroll file, real time systems.  Homework: Answer this/these questions.  Date completed ………. | S.O. 1.15  Use an example to describe a real-time system?  (2 marks) |
| **Stop 27** | Read Pages 2-45  Participate in class 27. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 1 |
| **Stop 28** | Re-read Pages 2-45  Participate in class 28  End of Chapter 1 MCQ test.  Homework: Revision.  Date completed ………. | Check your answers and identify any areas of weakness identified in the test. |
| **Stop 29** | Re-read Pages 2-45  Participate in class 29. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 1 concentrating on areas of weakness identified in the test. |
| **Stop 30** | Re-read Pages 2-45  Participate in class 30.  End of Chapter 1 structured question test.  Homework: Revision  Date completed ………. | Check your answers to ensure that you scored full marks. |
| **Stop 31** | Re-read Pages 46-61  Participate in class 31 Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 2. |
| **Stop 32** | Re-read Pages 46-61  Participate in class 28. End of Chapter 2 MCQ test.  Homework: Revision.  Date completed ………. | Check your answers and identify any areas of weakness identified in the test. |
| **Stop 33** | Re-read Pages 46-61  Participate in class 29. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 2 concentrating on areas of weakness identified in the test. |
| **Stop 34** | Re-read Pages 46-61  Participate in class 34 End of Chapter 2 structured question test.  Homework: No homework this week.  Date completed ………. | Check your answers to ensure that you scored full marks. |

**Section 2: Computer Networks and Web Technologies**

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| **All aboard** | **Content covered** | **Homework questions** |
| **Stop 1** | Read Pages 71-73  Participate in class 1. Introduction to networking.  Homework: No homework this week.  Date completed ………. |  |
| **Stop 2** | Read Pages 73-75  Participate in class 2. Distinguish between types of network and mobile network.  Homework: Answer this/these questions.  Date completed ………. | S.O. 2.1  Which of the following networks is MOST suitable for connecting computing devices in government offices across a town?  (A) Local Area Network (LAN)  (B) Metropolitan Area Network (MAN)  (C) Wide Area Network (WAN)  (D) Mobile Network  (1 mark)  S.O. 2.1.a  Explain why a taxi company might choose to use a mobile network to communicate with its drivers.  (2 marks) |
| **Stop 3** | Read Pages 76-79  Participate in class 3. Overview of mobile networks and wireless network technologies.  Homework: Answer this/these questions.  Date completed ………. | S.O. 2.1.b  Mobile networks are usually 2G, 3G, 4G or 5G. What does the G stand for?  (A) Generation  (B) Great  (C) Google  (D) Giga  (1 mark)  S.O. 2.1  What is a Wi-Fi hotspot?  (1 mark) |
| **Stop 4** | Read Pages 79-82  Participate in class 4. Levels of privacy (intranet, extranet, Internet).  Homework: Answer this/these questions.  Date completed ………. | S.O 2.1  Clearly differentiate between an intranet and extranet.  (2 marks) |
| **Stop 5** | Read Pages 82-87    Participate in class 5. Transmission media and switch, router, modem.  Homework: Answer this/these questions.  Date completed ………. | S.O. 2.2.a.i  List THREE types of wired transmission media?  (3 marks)  S.O. 2.2.a.ii  List THREE types of wireless transmission media?  (3 marks)  S.O. 2.2.b  A device that connects two networks together is BEST described as  (A) Network adapter  (B) Network card  (C) Modem  (D) Router  (1 mark) |
| **Stop 6** | Re-read Pages 82-87  Practical Class 7. Visit a network installation.  Homework: Write a report on your visit.  Date completed ………. | Your report should include: types of networks seen, privacy levels, any mobile component, transmission media (wired and wireless) and hardware components. |
| **Stop 7** | Read Pages 88-89    Participate in class 7. Suitability of mobile networks to education and journalism.  Homework: Answer this/these questions.  Date completed ………. | Mr. King is a journalist for a local television station. Use examples to explain how his job changed when the company issued him a smartphone.  (4 mark) |
| **Stop 8** | Read Pages 88-89  Practical Class 8. Visit from a business person to talk about networks in commerce.  Homework: Write notes on the talk.  Date completed ………. | Be prepared to ask your speaker network related questions. For example: does your company have a public hotspot? Is the network wired, wireless or both? How many computing devices are connected to the network? |
| **Stop 9** | Read Pages 90-94    Participate in class 9. The interrelationship among key Web technology concepts.  Homework: Answer this/these questions  Date completed  ………. | S.O. 2.4  Match the terms with the correct definition.  1) World Wide Web  2) Download  3) Web Server  4) Hyperlink  5) Upload  6) File Transfer Protocol  a) Transferring a file to a remote computer  b) The agreed way two computer use to move files  c) A collection of documents accessible on the Internet  d) A method of navigating from one webpage to another  e) A remote computer that serves up web pages  f) Transferring a file from a remote computer  (6 marks) |
| **Stop 10** | Re-read Pages 71-96  Participate in class 10. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 3. |
| **Stop 11** | Re-read Pages 71-96  Participate in class 11 End of Chapter 3 MCQ test.  Homework: Revision.  Date completed ………. | Check your answers and identify any areas of weakness identified in the test. |
| **Stop 12** | Re-read Pages 71-96  Participate in class 12 Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 3 concentrating on areas of weakness identified in the test. |
| **Stop 13** | Re-read Pages 71-96  Participate in class 13 End of Chapter 3 structured question test.  Homework: No homework this week  Date completed ………. | Check your answers to ensure that you scored full marks. |

**Section 3: Social and Economic Impact of Information and Communications Technology**

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| **All aboard** | **Content covered** | **Homework questions** |
| **Stop 1** | Read Page 98  Participate in class 1. Introduction to Social and Economic Impact of Information and Communications Technology.  Homework: No homework this week.  Date completed ………. |  |
| **Stop 2** | Read Pages 99-103  Participate in class 2. Outline the concepts of computer security, cybersecurity and computer misuse.  Homework: Answer this/these questions.  Date completed ………. | S.O. 3.1  Computers have always been vulnerable to misuse. In recent years as more computers are networked together the need for computer security has increased. Use examples to explain each of the following computer security terms:  a) Vulnerability  b) Threat  c) Attack  d) Countermeasure  (8 marks)  S.O. 3.1  Give THREE examples of how an employee might misuse the computer systems at their place of employment.  (3 marks) |
| **Stop 3** | Read Pages 103-113  Participate in class 3. Assess the potential impact of computer system misuse.  Homework: Answer this/these questions.  Date completed ………. | S.O. 3.2  Which of the following is NOT a type of virus?  (A) Worm  (B) Caterpillar  (C) Trojan  (D) Browser Hijacker  (1 mark)  S.O. 3.2.a  Identity theft is becoming an increasing problem as more personal data is being stored on computers. What is identity theft?  (2 marks) |
| **Stop 4** | Read Pages 103-113  Participate in class 4. Assess the potential impact of computer system misuse.  Homework: Answer this/these questions.  Date completed ………. | S.O. 3.2.a  Mr. King, the social media specialist at Caribbean Travel Services, receives many emails. List FOUR checks that Mr. King might apply to differentiate between genuine emails and a phishing emails?  (4 marks)  S.O. 3.2.b  A local company has suffered theft of confidential plans. Outline TWO ways the company may be impacted by this theft.  (2 marks) |
| **Stop 5** | Read Pages 113-116  Participate in class 5 Describe suitable countermeasures to mitigate the effects of identified threats.  Homework: Answer this/these questions.  Date completed ………. | S.O. 3.3  Caribbean Travel Service needs to keep its server computers safe from unauthorised access. Discuss the physical measures that CTS could consider to protect their servers?  (6 marks)  S.O. 3.3  Match the terms with the correct definition.  1) Password  2) Encryption  3) Biometrics  4) Firewall  5) Antivirus  a) Monitors a network blocking dangerous content  b) Features such as a fingerprint, retina or voice  c) A test token that has to be entered to gain access  d) Detects and removes malware  e) Using a code so the data cannot be understood  (5 marks) |
| **Stop 6** | Read Pages 116-118  Participate in class 6. Assess the effect of automation on job security.  Homework: Answer this/these questions  Date completed ………. | S.O. 3.3  Good personal security practices can help you stay safe when using the Internet. Outline THREE practices that help maintain good online security.  (3 marks)  S.O. 3.4  John lost his job as a machine operator when a new computer controlled robotic system was installed. Kara has just started a new job as a Web Developer. Discuss the effects of automation on job security.  (6 marks) |
| **Stop 7** | Read Page 119  Participate in class 7. Describe the roles of various personnel in computer-related professions.  Homework: Answer this/these questions  Date completed ………. | S.O. 3.5  Caribbean Travel Services needs someone to manage their Twitter, Facebook, Instagram and WhatsApp accounts. Who should they employ?  (A) Software Engineer  (B) Network Administrator  (C) Social Media Specialist  (D) Computer Systems Analyst  (1 mark) |
| **Stop 8** | Read Pages 120-124  Participate in class 8 Assess the impact of information and communications technology on education, medicine, business, law-enforcement, recreation.  Homework: Answer this/these questions.  Date completed ………. | S.O. 3.6.a  St. Luago City school is considering allowing students to undertake some courses without physically attending the school.  i. Outline the equipment that each student will need to take part in the class from home?  (2 marks)  ii. Discuss the advantages and disadvantage that distance learning can have for the  a. Teacher  (4 marks)  b. Student  (4 marks)  S.O 3.6.b  St. Luago Hospital has installed a Local Area Network, connected to the Internet, throughout the hospital. Explain how this network might be used to by the doctors to improve the quality of healthcare they provide.  (5 marks) |
| **Stop 9** | Re-read Pages 98-126  Participate in class 9. Revision.  Homework: Revision for test  Date completed ………. | Revision of Chapter 4. |
| **Stop 10** | Re-read Pages 98-126  Participate in class 10. End of Chapter 4 MCQ test.  Homework: Revision.  Date completed ………. | Check your answers and identify any areas of weakness identified in the test. |
| **Stop 11** | Re-read Pages 98-126  Participate in class 11. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 4 concentrating on areas of weakness identified in the test. |
| **Stop 12** | Re-read Pages 98-126  Participate in class 12. End of Chapter 4 structured question test.  Homework: No homework this week.  Date completed ………. | Check your answers to ensure that you scored full marks. |

**Section 4: Word-Processing and Web Page Design**

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| **All aboard** | **Content covered** | **Homework questions** |
| **Stop 1** | Read Pages 128-129  Participate in class 1. Introduction to word-processing.  Homework: No homework this week.  Date completed ………. |  |
| **Stop 2** | Read Pages 129-131  Participate in class 2. Create a document from a range of source.  Homework: Answer this/these questions.  Date completed ………. | S.O. 4.1  When creating a document using content from a range of sources the BEST way to describe combining documents is  (A) Importing text  (B) Exporting text  (C) Typing text  (D) Getting text  (1 mark)  S.O. 4.1  In addition to text list THREE other objects that may be included in a word-processing document?  (3 marks) |
| **Stop 3** | Re-read Pages 131-133  Practical Class 3. Create a document from a range of source.  Homework: If possible, practice creating documents.  Date completed ………. | Importing text (combining documents). Typewritten text, images and other objects. |
| **Stop 4** | Read Pages 133-139  Participate in class 4. Use appropriate document formatting features.  Homework: Answer this/these questions.  Date completed ………. | S.O. 4.2  Differentiate between left justification, right justification, centre justification and full justification.  (4 marks)  S.O. 4.2  To add a reference at the end of a document the CORRECT word-processing feature to use is  (A) Header  (B) Footer  (C) Footnotes  (D) Endnotes  (1 mark) |
| **Stop 5** | Re-read Pages 133-139  Practical Class 5. Use appropriate document formatting features.  Homework: If possible, practice formatting features.  Date completed ………. | Font types and sizes, colour, underline, bold, italics, superscript and subscript, tab stops, bullets and numbering, line spacing, justification (left, right, centre, full), highlight, uppercase, word wrap, page size, margins, page and section breaks, page numbers, headers, footers, footnotes and endnotes. |
| **Stop 6** | Read Pages 140-146  Practical Class 6. Use appropriate editing features to structure and organize a document.  Drag and drop, search and replace and tables.  Homework: Answer this/these questions.  Date completed ………. | S.O. 4.3  Describe the steps you would need follow to in a word-processing program of your choice to layout text in three columns.  (2 marks)  S.O. 4.3  Tables in word-processing include a feature to merge cells. Name FOUR other features you might use to improve the presentation of a table in a document.  (4 marks) |
| **Stop 7** | Read Pages 146-151  Participate in class 7. Use the review feature. Appropriately use features that allow the protection of a document.  Homework: Answer this/these questions.  Date completed ………. | S.O. 4.4  You have been asked to check a word-processing document and notice several mistakes. Outline TWO features available in most word-processing programs that you could use to identify improvements that could be made to the document before returning it to the original author.  (4 marks)  S.O. 4.5  The main disadvantage of password protecting a word-processing document is  (A) The size of the document increases  (B) If you forget the password it can’t be opened  (C) The document cannot be copied  (D) Passwords must be changed regularly  (1 mark) |
| **Stop 8** | Re-read Pages 146-151  Practical Class 8. Use the review feature of a word-processor to enhance a documents readiness. Use features that allow the protection of a document.    Homework: If possible, practice review features.  Date completed ………. | Spell and grammar check, thesaurus, word count, language setting, comments and track changes.  Automatic save and backup copy, edit-restrictions – password protection. |
| **Stop 9** | Read Pages 151-152  Practical Class 9. Generate table of contents for a document.    Homework: Answer this/these questions.  Date completed ………. | S.O. 4.6  You have been asked to create the company end of year report which has 12 sections. Describe the steps needed to create an automatic table of contents in a word-processing program you are familiar with.  (3 marks) |
| **Stop 10** | Read Pages 152-154  Participate in class 10. Use the mail merge feature in the preparation of a document for a variety of situations.  Homework: Answer this/these questions.  Date completed ………. | S.O. 4.7  Use the example of inviting 25 of your friends to your birthday party to explain the mail merge feature available in many word-processing application programs. Clearly describe how each invitation is personalised for each recipient.  (6 marks) |
| **Stop 11** | Re-read Pages 152-154  Practical Class 11. Use the mail merge feature in the preparation of a document for a variety of situations.  Homework: If possible, practice mail merge  Date completed ………. | Creation of primary documents and data files in mail merge application. |
| **Stop 12** | Read Pages 152-159  Practical Class 12. Create a fillable electronic form for online use.  Homework: Answer this/these questions.  Date completed ………. | S.O. 4.8  List FOUR content controls you may find on a fillable electronic form created using a word-processing document.  (4 marks) |
| **Stop 13** | Read Pages 161-164  Participate in class 13 Create a simple web page using a variety of design features, create a home page with hyperlinks.  Homework: Answer this/these questions  Date completed ………. | S.O. 4.9  Caribbean Travel Service are developing a new website. List FIVE aspects that a Web Developer will need to consider when planning a new website.  (5 marks)  S.O. 4.10  The start-up page of a web site is BEST described as  (A) The navigation page  (B) The start page  (C) The company page  (D) The home page  (1 mark)  S.O. 4.11  Explain clearly what hyperlinks are and why hyperlinks are needed on every webpage.  (3 marks) |
| **Stop 14** | Re-read Pages 165-172  Practical Class 14. Create a simple web page using a variety of design features, create pages with hyperlinks.  Homework: If possible, practice creating web pages.  Date completed ………. |  |
| **Stop 15** | Read Pages 172-180  Participate in class 15. Evaluate a website for accuracy, user friendliness and effective display.  Homework: Answer this/these questions  Date completed ………. | S.O. 4.12  Describe a methodology to verify that all hyperlinks in a website work correctly.  (2 marks) |
| **Stop 16** | Re-read Pages 177-180  Practical Class 16. Evaluate a website for accuracy, user friendliness and effective display.  Homework: Record your test findings.  Date completed ………. | Verifying that all hyperlinks are working correctly.  Use a test audience. |
| **Stop 17** | Re-read Pages 121-180  Participate in class 17. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 5 and 6. |
| **Stop 18** | Re-read Pages 121-180  Participate in class 18. End of Chapter 5 and 6 MCQ test.  Homework: Revision.  Date completed ………. | Check your answers and identify any areas of weakness identified in the test. |
| **Stop 19** | Re-read Pages 121-180  Participate in class 19. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 5 and 6 concentrating on areas of weakness identified in the test. |
| **Stop 20** | Re-read Pages 121-180  Participate in class 20. End of Chapter 5 and 6 structured question test.  Homework: no homework this week  Date completed ………. | Check your answers to ensure that you scored full marks. |

**Section 5: Spreadsheet**

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| **All aboard** | **Content covered** | **Homework questions** |
| **Stop 1** | Read Pages 182-183  Participate in class 1. Introduction to spreadsheets.  Homework: No homework this week.  Date completed ………. |  |
| **Stop 2** | Read Pages 183-186  Participate in class 2. Explain the purpose of a spreadsheet. Use appropriate terminologies.  Homework: Answer this/these questions.  Date completed ………. | S.O. 5.1  What is the purpose of a spreadsheet program?  (2 marks)  S.O. 5.2  Match the terms with the correct definition.  1) Workbook a) A cell that contains text  2) Worksheet b) A rectangle of cells  3) Cell range c) A cell that contains a number  4) Label d) A single page of a workbook  5) Value e) A file created by a spreadsheet  6) Formula f) A cell that contain a calculation  (6 marks) |
| **Stop 3** | Read Pages 186-194  Participate in class 3. Use basic pre-defined system functions. Create advanced arithmetic formulae.  Homework: Answer this/these questions.  Date completed ………. | S.O. 5.3  VLOOKUP is a powerful function in a spreadsheet program. Describe the VLOOKUP function.  (2 marks)  S.O. 5.4  What is the correct order when a spreadsheet program performs an arithmetic calculation?  (A) Bracket, division, multiplication, addition, subtraction  (B) Addition, subtraction, multiplication, division, brackets  (C) Multiplication, division, subtraction, addition, brackets  (D) Brackets, addition, subtraction, division, multiplication  (1 mark) |
| **Stop 4** | Read Pages 186-194  Practical Class 4. Use basic pre-defined system functions. Create advanced arithmetic formulae.  Homework: Record the functions you used.  Date completed ………. | Including; sum, average, date, max, min, count, counta, countif, vlookup, pmt, if  Try the spreadsheet ‘functions’ activities from the book. |
| **Stop 5** | Re-read Pages 194-199  Participate in class 5. Replicate (copy) formulae into other cells. Manipulate columns and rows.    Homework: Answer this/these questions.  Date completed ………. | S.O. 5.5  Spreadsheets have two types of addressing. Clearly explain the difference between absolute and relative addressing paying particular attention to the effect when formulae are copied to another cell.  (10 marks)  S.O. 5.6  Which of the following is NOT true?  (A) New columns can be added to a spreadsheet  (B) Complete rows can be deleted  (C) A primary key can be added to a workbook  (D) Rows and columns in a spreadsheet can be modified  (1 mark) |
| **Stop 6** | Re-read Pages 194-199  Practical Class 6. Replicate (copy) formulae into other cells. Manipulate columns and rows.  Homework: Record the effects of relative and absolute addressing.  Date completed ………. | Relative addressing, absolute addressing, naming of ranges.  Try the spreadsheet relative and absolute addressing activities from the book. |
| **Stop 7** | Read Pages 200-210  Participate in class 7. Manipulate data in a spreadsheet.  Homework: Answer this/these questions.  Date completed ………. | S.O. 5.7  Describe how to apply sorting to data in a workbook making reference to; primary field, secondary field, ascending and descending.  (6 marks)  S.O. 5.7  Filtering data can be a useful way to view data in a workbook. Explain the difference between simple filtering and filtering with complex criterion.  (6 marks) |
| **Stop 8** | Re-read Pages 200-210  Practical Class 8. Manipulate data in a spreadsheet.  Homework: write notes on the effects of sorting and filtering.  Date completed ………. | Numeric data formatting (currency, accounting, percentage, comma, decimal places).  Sorting data (primary field, secondary field, ascending vs. descending order).  Filtering data (multiple criteria, complex criterion).  Complete the formatting, sorting and filtering activities from the book. |
| **Stop 9** | Read Pages 210-215  Participate in class 9. Perform charting operations.  Homework: Answer this/these questions.  Date completed ………. | S.O. 5.8  i) The CEO of Caribbean Travel Services wants a summary of the revenue of each of the four depots this month. What type of chart will BEST show this data? Justify your answer.  (2 marks)  ii) The CEO now wants to see how these values have varied over the past twelve months. What type of chart will BEST show this data? Justify your answer.  (2 marks) |
| **Stop 10** | Re-read Pages 210-215  Practical Class 10. Perform charting operations.  Homework: Record the charts you used.  Date completed ………. | Labelling charts: graph titles, labels on axes, data labels.  Try the charting activities from the book. |
| **Stop 11** | Read Pages 215-219  Practical Class 11. Manipulating one or more worksheets.  Homework: Answer this/these questions.  Date completed ………. | Linking of two or more worksheets to solve problems.  S.O. 5.9  Using a spreadsheet program you are familiar with to show how cells in one worksheet can be included in a formula in another workbook.  (2 marks)  Try the linking workbooks activities from the book. |
| **Stop 12** | Re-read Pages 182-219  Participate in class 12. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 7. |
| **Stop 13** | Re-read Pages 182-219  Participate in class 13. End of Chapter 7 MCQ test.  Homework: Revision.  Date completed ………. | Check your answers and identify any areas of weakness identified in the test. |
| **Stop 14** | Re-read Pages 182-219  Participate in class 14. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 7 concentrating on areas of weakness identified in the test. |
| **Stop 15** | Re-read Pages 182-219  Participate in class 15. End of Chapter 7 structured question test.  Homework: No homework this week.  Date completed ………. | Check your answers to ensure that you scored full marks. |

**Section 6: Database Management**

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| **All aboard** | **Content covered** | **Homework questions** |
| **Stop 1** | Read Pages 221-222  Participate in class 1. Introduction to database management.  Homework: No homework this week.  Date completed ………. |  |
| **Stop 2** | Read Pages 222-223  Participate in class 2. Explain the concepts of a database.  Homework: Answer this/these questions.  Date completed ………. | S.O. 6.1  Caribbean Travel Services keeps records about its employees, its assets and its suppliers. Explain why a DATABASE is MORE suitable than a SPREADSHEET to store and manipulate these records.  (4 marks) |
| **Stop 3** | Read Pages 223-225  Participate in class 3. Use terminology commonly associated with a database.  Homework: Answer this/these questions.  Date completed ………. | S.O. 6.2  Match the terms with the correct definition.  1) Record  2) Primary key  3) Secondary key  4) Candidate key  5) Foreign key  a) appears in a table where it doesn’t really belong  b) a possibility of becoming a primary field  c) contains data about individual item, or entity  d) a field whose values are not unique  e) a field whose values are unique    (5 marks)  S.O. 6.2  List FOUR database data types.  (4 marks) |
| **Stop 4** | Read Pages 225-232  Practical Class 4. Create a database.  Homework: If possible, practice creating a database.  Date completed ………. | Try the creating databases activities from the book. |
| **Stop 5** | Read Pages 225-232  Practical Class 5. Populate database tables with data.  Homework: If possible, practice populating database tables.  Date completed ………. | Try the populating database tables activities from the book. |
| **Stop 6** | Read Pages 133-135  Practical Class 6. Establish primary keys. Establish relationships: show the joins between tables (one-to-one and one-to many).  Homework: Answer this/these questions  Date completed ………. | S.O. 6.3  i) Use examples to clearly explain the difference between a one-to-one relationship and a one-to-many relationship.  (4 marks) |
| **Stop 7** | Read Pages 236-239  Participate in class 7. Manipulate data in a database, forms and sub-forms.  Homework: Answer this/these questions.  Date completed ………. | S.O. 6.4.a  Many database systems allow the database designer to create Forms and Sub-forms. Suggest reasons why a database designer might use forms and sub-forms to improve the user experience.  (4 marks) |
| **Stop 8** | Re-read Pages 236-239  Practical Class 8. Manipulate data in a database, forms and sub-forms.  Homework: If possible, practice forms and sub-forms.  Date completed ………. | Use of form wizard only  Select suitable fields  Use of sub-form  Try the forms activities from the book. |
| **Stop 9** | Read Pages 239-245    Participate in class 9. Manipulate data in a database, queries.  Homework: Answer this/these questions.  Date completed ………. | S.O. 6.4  Queries are a powerful database feature. Use an example to explain what it means to query a database?  (2 marks)  Try the queries activities from the book. |
| **Stop 10** | Re-read Pages 239-245  Practical Class 10. Manipulate data in a database, queries.  Homework  If possible, practice queries.  Date completed ………. | More than one query  Use of select  Try the queries activities from the book. |
| **Stop 11** | Re-read Pages 239-245  Practical Class 11. Manipulate data in a database, queries.  Homework: Answer this/these questions  Date completed ………. | Use of calculated field  Two or more fields involving the use of relational and logical operators  Try the queries activities from the book.  S.O. 6.4.b  Clearly explain how to create a calculate field query based on two tables using a database system of your choice.  (6 marks) |
| **Stop 12** | Read Pages 246-249  Participate in class 12. Manipulate data in a database, reports.  Homework: Answer this/these questions.  Date completed ………. | S.O. 6.4.c  Describe the sorting, grouping, statistical and summary features available when creating a report.  (10 marks) |
| **Stop 13** | Re-read Pages 246-249  Practical Class 13. Manipulate data in a database, reports.  Homework: If possible, practice creating reports.  Date completed ………. | Use of report wizard  Use of sorting, grouping, statistical and summary features, for example count, sum and average  Try the reporting activities from the book. |
| **Stop 14** | Re-read Pages 246-249  Practical Class 11. Manipulate data in a database, reports.  Homework: If possible, practice creating reports.  Date completed ………. | Report generated to screen, printer and file  Renaming of report title |
| **Stop 15** | Read Pages 221-249  Participate in class 15 Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 8. |
| **Stop 16** | Read Pages 221-249  Participate in class 16 End of Chapter 8 MCQ test.  Homework: Revision.  Date completed ………. | Check your answers and identify any areas of weakness identified in the test. |
| **Stop 17** | Read Pages 221-249  Participate in class 17 Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 8 concentrating on areas of weakness identified in the test. |
| **Stop 18** | Read Pages 221-249  Participate in class 18 End of Chapter 8 structured question test.  Homework: No homework this week.  Date completed ………. | Check your answers to ensure that you scored full marks. |

**Section 7: Problem Solving and Program Design**

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| **All aboard** | **Content covered** | **Homework questions** |
| **Stop 1** | Read Page 252  Participate in class 1. Introduction to problem solving and program design.  Homework: No homework this week.  Date completed ………. |  |
| **Stop 2** | Read Pages 253-255  Participate in class 2. Outline the steps in problem-solving.  Homework: Answer this/these questions.  Date completed ………. | S.O. 7.1  Outline the FIVE steps in problem-solving  (5 marks) |
| **Stop 3** | Read Pages 255-257    Participate in class 3. Use the divide-and-conquer approach to decompose large everyday problems into its significant components.  Homework: Answer this/these questions.  Date completed ………. | S.O. 7.2  One way to approach solving a complex problem is to use the divide-and-conquer method. Use and example to describe the divide-and-conquer method of problem solving?  (5 marks) |
| **Stop 4** | Re-read Pages 255-257  Practical Class 4. Use the divide-and-conquer approach to decompose large everyday problems into smaller parts.  Homework: Answer this/these questions.  Date completed ………. | Try the divide-and-conquer activities from the book.  S.O. 7.2  What is the BEST definition of decompose as it relates to problem solving?  (A) to break down into a set of simpler components  (B) to make manure  (C) to split down the middle  (D) to write music  (1 mark) |
| **Stop 5** | Read Pages 257-265    Participate in class 5. Define a problem by decomposing its significant components.  Homework: Answer this/these questions.  Date completed ………. | S.O. 7.3  i) A great way to start problem solving is to draw an IPO chart. What are the THREE essential parts of an IPO chart?  (3 marks)  ii) Caribbean Travel Services know the annual distance covered by each of their 85 buses but they want to calculate the total and average distance covered. Draw an IPO chart to start to solve this problem.  (3 marks) |
| **Stop 6** | Re-read Pages 257-265  Practical Class 6. Define a problem by decomposing its significant components.  Homework: Practice creating IPO charts.  Date completed ………. | The components are: input, process and output. A defining diagram (IPO chart) may be used to delineate the components.  Try the decomposition activities from the book. |
| **Stop 7** | Read Pages 265-267    Participate in class 7. Distinguish between variables and constants. Data types: integer, floating point (real), character, Boolean, string.  Homework: Answer this/these questions.  Date completed ………. | S.O. 7.4  Match the example to the correct data type.  1) ‘Hello’ a) integer  2) 14 b) floating point/real  3) Yes c) character  4) ‘X’ d) Boolean  5) 3.142 e) string  (5 marks) |
| **Stop 8** | Read Pages 267-268    Participate in class 8. Explain the concept of algorithms.  Homework: Answer this/these questions.  Date completed ………. | S.O. 7.5  Caribbean Travel Services are thinking of purchasing a rectangular plot of land for a new bus depot. Each bus needs 50 square meters of land. Write an algorithm to read in the length and width of a plot of land and output the maximum number of buses that can be accommodated.  (5 marks)  S.O. 7.5  An algorithm needs to be unambiguous. In terms of problem solving what does this mean?  (2 marks) |
| **Stop 9** | Read Pages 268-272    Participate in class 9. Represent algorithms in the form of pseudocode.  Homework: Answer this/these questions.  Date completed ………. | S.O. 7.6  Clearly describe THREE types of loop?  (6 marks) |
| **Stop 10** | Re-read Pages 268-272  Practical Class 10. Represent algorithms in the form of pseudocode.  Homework: Practice writing pseudocode.  Date completed ………. | Use of read, input, store, write, print, output, display, conditional branching (if-then, if-then-else, nested conditions), loops (for, while, repeat)  Try the pseudocode activities from the book. |
| **Stop 11** | Re-read Pages 268-272  Practical Class 11. Represent algorithms in the form of pseudocode.  Homework: Practice writing pseudocode.  Date completed ………. | Use of relational operators: <, >, =, <=, >=, <>.  Logical operators: AND, OR, NOT. Use of truth tables.  Arithmetic operators: \*, /. +, -, MOD, DIV.  Try the pseudocode activities from the book.  S.O. 7.6  Which relational operator does the ‘<>’ symbol represent?  (A) Greater than  (B) Not equal to  (C) Equal to  (D) Less than or equal to  (1 mark) |
| **Stop 12** | Read Pages 268-272    Participate in class 9. Represent algorithms in the form of flowchart.  Homework: Answer this/these questions.  Date completed ………. | S.O. 7.6  Match the flowchart symbol to its correct meaning.  1) a) decision    2) b) process  3) c) directional arrow  4) d) start/end  5) e) input/output  (5 marks) |
| **Stop 13** | Re-read Pages 268-272  Practical Class 13. Represent algorithms in the form of flowchart.  Homework: Practice drawing flowcharts.  Date completed ………. | Use of input/output, decision and process  Try the flowchart activities from the book. |
| **Stop 14** | Re-read Pages 272-275  Practical Class 14. Represent algorithms in the form of flowcharts.  Homework: Practice drawing flowcharts.  Date completed ………. | Use of relational operators: <, >, =, <=, >=, <>.  Logical operators: AND, OR, NOT. Use of truth tables.  Arithmetic operators: \*, /. +, -, MOD, DIV.  Try the flowchart activities from the book. |
| **Stop 15** | Read Pages 276-280    Participate in class 15. Test algorithms for correctness.  Homework  Answer this/these questions  Date completed ………. | S.O 7.7  Explain why it is important to thoroughly test an algorithm before moving on to implementing a program.  (2 marks)  S.O. 7.7  Draw a trace table to test the following algorithm with test values 4, 7, 9, 3 2.  WRITE ‘max finder program’  max = 0  FOR counter = 1 TO 5  WRITE ‘Please give next number’  READ number  IF number > max THEN  max = number  ENDFOR  WRITE ‘The maximum number entered is ‘  WRITE max  (6 marks) |
| **Stop 16** | Re-read Pages 276-280  Practical Class 16. Test algorithms for correctness.  Homework: Practice desk checking/dry running.  Date completed ………. | Desk checks/ dry run: construction and use of trace tables to verify results. Trace tables consist of variable names (identifiers) as column headings and values in the cells, one row for each pass.  Try the desk checking/dry running activities from the book. |
| **Stop 17** | Read Pages 252-280  Participate in class 17. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 9. |
| **Stop 18** | Re-read Pages 252-280  Participate in class 18. End of Chapter 9 MCQ test.  Homework: Revision.  Date completed ………. | Check your answers and identify any areas of weakness identified in the test. |
| **Stop 19** | Re-read Pages 252-280  Participate in class 19. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 9 concentrating on areas of weakness identified in the test. |
| **Stop 20** | Re-read Pages 252-280  Participate in class 20. End of Chapter 9 structured question test.  Homework: No homework this week.  Date completed ………. | Check your answers to ensure that you scored full marks. |

**Section 8: Program Implementation**

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| **All aboard** | **Content covered** | **Homework questions** |
| **Stop 1** | Read Page 283  Participate in class 1. Introduction to program implementation.  Homework: No homework this week.  Date completed ………. |  |
| **Stop 2** | Read Pages 284-285    Participate in class 2. Distinguish between low-level and high-level programming languages.  Homework: Answer this/these questions.  Date completed ………. | S.O. 8.1  Correctly categorise the following as either high level or low level languages.  a) ‘C’  b) Assembler  c) Machine code  d) Pascal  e) Visual Basic  (2 marks)  S.O. 8.1  Binary code is a sequence of ‘1’s and ‘0’s. Which of these uses binary code.  a) Pascal  b) Visual Basic  c) ‘C’  d) Machine code  (1 mark) |
| **Stop 3** | Read Pages 285-291    Participate in class 3. Describe the sequence of steps in implementing a program.  Homework: Answer this/these questions.  Date completed ………. | S.O. 8.2  Put the following into the correct order of program development.  a) translate and/or link  b) maintain  c) create source code  d) execute/run program  (4 marks) |
| **Stop 4** | Read Pages 297-321    Participate in class 4. Create source code.  Homework: Practice creating source code.  Date completed ………. | Try the creating source code activities from the book. |
| **Stop 5** | Re-read Pages 297-321  Practical Class 5. Create source code (using a development environment).  Homework: If possible, practice entering source code.  Date completed ………. | Enter the source code you created in the previous class into a development environment. |
| **Stop 6** | Re-read Pages 297-321    Participate in class 6. Translate and/or link. Execute/run program. Maintain program.  Homework: Answer this/these questions.  Date completed ………. | S.O. 8.2  In some more complex programs, the programmer needs to ‘compile and link’ the source code. When is it necessary to link the source code to the operating system?  (2marks) |
| **Stop 7** | Re-read Pages 297-321  Practical Class 7. Translate and/or link. Execute/run program.  Homework: If possible practice compiling and executing programs.  Date completed ………. | Use a development environment to compile source code and run the resulting program or interpret and run the source code you entered in the previous practical class. |
| **Stop 8** | Read Pages 291-292    Participate in class 8. Perform checks and test on programs to verify correctness.  Homework: Answer this/these questions.  Date completed ………. | S.O. 8.3  Use examples to differentiate between syntax errors, logic errors and runtime errors.  (6 marks) |
| **Stop 9** | Re-read Pages 291-292  Practical Class 9. Perform checks and test on programs to verify correctness.  Homework: Practice testing a program.  Date completed ………. | Test the programs you created in previous classes, using test data, to ensure that they create the correct results. |
| **Stop 10** | Read Page 295    Participate in class 10. Declare variables and constants using elementary data types.  Homework: Answer this/these questions.  Date completed ………. | S.O. 8.4  Which of the following is the correct data type to hold the value of pi (3.142)?  (A) string  (B) integer  (C) real/double/float  (D) Boolean/logical  (1 mark) |
| **Stop 11** | Re-read Page 295  Practical Class 11. Declare variables and constants using elementary data types.  Homework: If possible, practice using variables and constants.  Date completed ………. | Try the using variable and constants activities from the book. |
| **Stop 12** | Read Pages 296-299    Participate in class 10. Translate algorithmic statements into high-level language syntax.  Homework: Answer this/these questions.  Date completed ………. | S.O. 8.5  Identify and give examples to demonstrate the use of the LOGICAL operators.  (6 marks)  S.O. 8.5  The IF…THEN…ELSE structure can be used to make decisions in programming. Use an example to demonstrate the correct use of IF…THEN…ELSE in a programming language of your choice.  (4 marks)  S.O. 8.5  Write a program in the programming language of your choice, using a loop, to print out the numbers from 1 to 10.  (4 marks) |
| **Stop 13** | Re-read Pages 296-299  Practical Class 13. Translate algorithmic statements into high-level language syntax.  Homework: Practice creating high level language programs.  Date completed ………. | Assignment statements; input/output operations using standard input/output (reading data entered via keyboard, displaying and reading on monitor).  Try the using input and output activities from the book. |
| **Stop 14** | Re-read Pages 274-275  Practical Class 14. Translate algorithmic statements into high-level language syntax.  Homework: Practice using logic and relational operators.  Date completed ………. | Syntax for logic and relational operators. |
| **Stop 15** | Re-read Pages 309-313  Practical Class 15. Translate algorithmic statements into high-level language syntax.  Homework: Practice using if-then-else statements.  Date completed ………. | Syntax for conditional branching (for example, if-then, if-then-else, nested if-then-else or case). |
| **Stop 16** | Re-read Pages 299-309  Practical Class 16. Translate algorithmic statements into high-level language syntax.  Homework: Practice for loops.  Date completed ………. | Syntax for iteration, for loops |
| **Stop 17** | Re-read Pages 299-309  Practical Class 17. Translate algorithmic statements into high-level language syntax.  Homework: Practice while loops.  Date completed ………. | Syntax for iteration while loops |
| **Stop 18** | Re-read Pages 299-309  Practical Class 18. Translate algorithmic statements into high-level language syntax.  Homework: Practice repeat-until loops.  Date completed ………. | Syntax for iteration repeat loops. |
| **Stop 19** | Re-read Pages 296-322    Participate in class 19. Problem-solving and program design revision.  Homework: Practice problem solving and algorithm writing.  Date completed ………. | Problem 1. |
| **Stop 20** | Re-read Pages 296-322  Practical Class 20. Translate algorithmic statements into high-level language syntax.  Homework: Practice creating high level language programs.  Date completed ………. | Problem 1. |
| **Stop 21** | Re-read Pages 296-322  Practical Class 21. Perform checks and tests on program to verify correctness. Execute/run program.  Homework: If possible, practice compiling, executing and testing.  Date completed ………. | Program 1. |
| **Stop 22** | Re-read Pages 296-322    Participate in class 22. Problem-solving and program design revision.  Homework: Practice problem solving and algorithm writing.  Date completed ………. | Problem 2. |
| **Stop 23** | Re-read Pages 296-322  Practical Class 23. Translate algorithmic statements into high-level language syntax.  Homework: Practice creating high level language programs.  Date completed ………. | Problem 2. |
| **Stop 24** | Re-read Pages 296-322  Practical Class 24. Perform checks and tests on program to verify correctness. Execute/run program.  Homework: If possible, practice compiling, executing and testing.  Date completed ………. | Problem 2. |
| **Stop 25** | Re-read Pages 296-322    Participate in class 25. Problem-solving and program design revision.  Homework: Practice problem solving and algorithm writing.  Date completed ………. | Problem 3. |
| **Stop 26** | Re-read Pages 296-322  Practical Class 26. Translate algorithmic statements into high-level language syntax.  Homework: Practice creating high level language programs.  Date completed ………. | Problem 3. |
| **Stop 27** | Re-read Pages 296-322  Practical Class 22. Perform checks and tests on program to verify correctness. Execute/run program.  Homework: If possible, practice compiling, executing and testing.  Date completed ………. | Problem 3. |
| **Stop 28** | Read Pages 322-325    Participate in class 28. Effectively document programs. Internal documentation.  Homework: Answer this/these questions.  Date completed ………. | Features of internal documentation (use of mnemonics, variable names, use of comments, indentation, effective use of white space).    S.O. 8.6  Describe the FOUR features of internal documentation.  (4 marks) |
| **Stop 29** | Re-read Pages 322-325  Practical Class 29. Effectively document programs.  Homework: Practice internal documentation.  Date completed ………. | Features of internal documentation: variable names, use of comments, indentation, effective use of white space  Check that all the programs you have written in previous classes include good internal documentation. |
| **Stop 30** | Re-read Pages 322-325    Participate in class 30. Effectively document programs. External documentation.  Homework: Answer this/these questions.  Date completed ………. | S.O 8.6  Which of the following is the BEST description of the external documentation?  (A) Help information  (B) User manual  (C) Screen tips  (D) Tutorial video  (1 mark) |
| **Stop 31** | Re-read Pages 322-325  Practical Class 31. Effectively document programs. External documentation.  Homework: Practice creating external documentation.  Date completed ………. | Features of external documentation (user manual)  Try to create the external documentation, user manual, for the programs you have written in previous classes. |
| **Stop 32** | Re-read Pages 283-325  Participate in class 32. Revision  Homework: Revision for test.  Date completed ………. | Revision of Chapter 10. |
| **Stop 33** | Re-read Pages 283-325  Participate in class 33. End of Chapter 10 MCQ test.  Homework: Revision.  Date completed ………. | Check your answers and identify any areas of weakness identified in the test. |
| **Stop 34** | Re-read Pages 283-325  Participate in class 34. Revision.  Homework: Revision for test.  Date completed ………. | Revision of Chapter 10 concentrating on areas of weakness identified in the test. |
| **Stop 35** | Re-read Pages 283-325  Participate in class 35. End of Chapter 10 structured question test.  Homework: No homework this week.  Date completed ………. | Check your answers to ensure that you scored full marks. |