STUDENT NUMBER

Letter

Figures

Words

Victorian Certificate of Education
2001

VCE VET INFORMATION TECHNOLOGY

Written examination

Friday 2 November 2001

Reading time: 3.00 pm to 3.15 pm (15 minutes)
Writing time: 3.15 pm to 4.45 pm (1 hour 30 minutes)

QUESTION AND ANSWER BOOK

Structure of book

Section	Number of questions	Number of questions to be answered	Number of marks
A	20	20	20
B	22	22	51
C	5	5	16
		Total	87

Materials
- Question and answer book of 20 pages.
- Answer sheet for multiple-choice questions.
- At least one pen, pencil and an eraser.

Instructions
- Write your **student number** in the space provided on this book.
- Check that your **name** and **student number** as printed on your answer sheet for multiple-choice questions are correct and sign your name in the space provided to verify this.
- All written responses must be in English.

At the end of the examination
- Place the answer sheet for multiple-choice questions inside the front cover of this book.

SECTION A – Multiple-choice questions

Instructions for Section A

Answer **all** questions. All questions should be answered on the answer sheet for multiple-choice questions, in pencil.

A correct answer scores 1, an incorrect answer scores 0. Marks will **not** be deducted for incorrect answers. No mark will be given if more than one answer is shown for any question.

Question 1

Text files in a database can be delimited or fixed-width.

Which of the following features best describes delimited data?

A. Each field occupies a set number of character positions in a record.

B. Each field is aligned in columns with delimited spaces between each field.

C. Each field is separated from the next only by commas or tabs.

D. Each field is separated from the next by a special character called a delimiter.

Question 2

Which one of the following statements about templates is **not** correct?

A. Templates are special files that contain macros and customised menus.

B. Existing templates cannot be changed and renamed.

C. Templates can be stored anywhere but are best kept in the Template directory.

D. Using templates ensures documents are presented in a consistent format.

Question 3

When two or more applications are opened, what is the application currently in use commonly called?

A. the active application

B. the foreground application

C. the selected application

D. the operational application

Question 4

Which of the following statements is **true** of a foreign key?

A. A foreign key may be duplicated.

B. A foreign key may be a different field type to the primary key it references.

C. A foreign key must have the same name as the primary key it references.

D. A foreign key must be unique.

Question 5

Which tool is the **least** appropriate for producing on-line documentation?

A. a tool that generates on-line tutorials

B. a tool that generates Windows Help files

C. a tool that generates word-processing documents

D. a web-based authoring tool

Question 6

'All documentation to be presented in A4 format' is an extract taken from which type of standard?

A.   an organisational standard

B.   an industry standard

C.   a project standard

D.   a template standard

Question 7

What does technical documentation describe?

A.   the organisational rules and guidelines

B.   the maintenance of a system

C.   the construction of the hardware and software that runs a system

D.   the information for the user on how to use the system

Question 8

What does a context diagram show?

A.   the process and inputs from, and outputs to, the external entities of a system

B.   the processes and dataflows to and from the external entities of a system

C.   the external entities of a system

D.   the processes, internal and external dataflows, and data stores of a system

Question 9

Which of the following is a possible hardware problem?

A.   bugs in software applications

B.   incompatibility between software and the operating system

C.   noisy disk drive

D.   faults in the operating system itself

Question 10

A librarian is downloading music files from the Internet. Changes to the registry files are occurring on the librarian's personal computer. The librarian reports that 'dialogue boxes are suddenly appearing all over the screen and that text automatically appears in the boxes'.

From this description, what is the most likely problem?

A.   the librarian's email account is full

B.   intermittent keyboard operation

C.   infection by a virus

D.   the Graphical User Interface (GUI) is running a self-test for dialogue box generation

Question 11

You are a Help Desk operator. A client has reported a problem which you are not sure how to solve. The client asks you when the problem will be fixed.

Which of the following is the **best** response to use in this situation?

A. 'I am sorry, we do not have the resources to help with this type of problem. I am afraid your problem is of a low priority.'

B. 'I am not quite sure what to do. We are very busy at the moment. If you call back in a couple of days I will consult the other staff.'

C. 'I cannot give you an estimate at the moment, as I need to do some initial troubleshooting. I will call you back within the hour.'

D. 'I have no idea. I am not quite sure on the availability of the technical staff. Please give me a call back later in the day.'

Question 12

Which of the following is **not** a feature of a Graphical User Interface operating system?

A. multi-user

B. file management

C. multi-threading

D. HTML compliant

Question 13

What type of operating system runs on a single computer that can accommodate different users at the same time?

A. a single-user operating system

B. a multi-user operating system

C. a disk operating system

D. a peer to peer operating system

Question 14

What type of license agreement is an individual automatically agreeing to when they purchase a software product?

A. an end-user license

B. a multi-user license

C. a site license

D. a common-user license

Question 15

What is the purpose of a 'Product Key' during the installation of an operating system?

A. To identify the CD-ROM.

B. To unlock encryption files.

C. To identify pirated copies.

D. To secure the operating system against unauthorised use.

Question 16

A personal computer has virus protection enabled in its Basic Input/Output System (BIOS).

What must be done when upgrading a PC's operating system?

A.   Use a bootup disk to bypass the BIOS.

B.   Disable the virus protection in the BIOS.

C.   Reformat the hard disk to delete the virus protection.
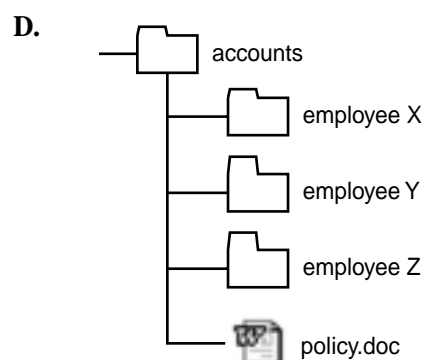
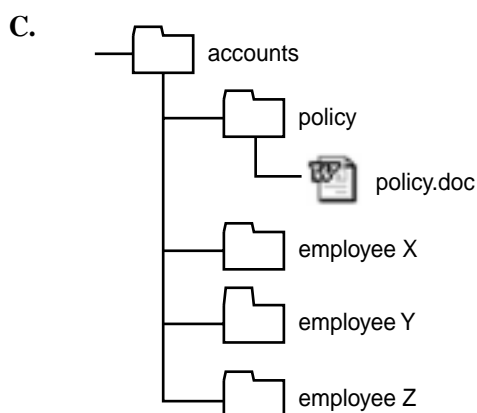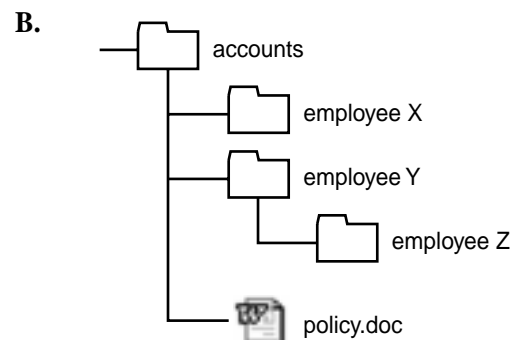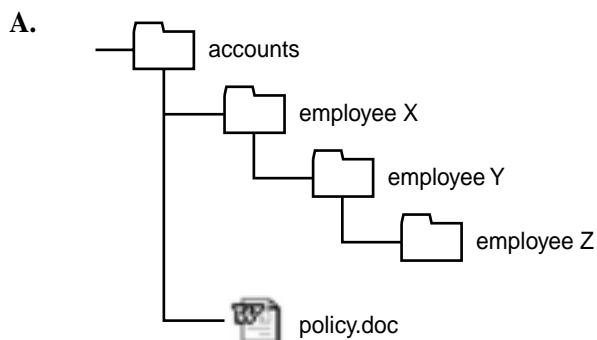D.   Use short-cut keys to bypass the BIOS.

Question 17

Which of the following statements about a strategic business plan is **not** correct?

A.   A strategic business plan is used to set the business direction of an organisation.

B.   A strategic business plan includes the actions an organisation will take to achieve its goals.

C.   A strategic business plan is part of long-term planning by an organisation.

D.   A strategic business plan is used mainly to support technological solutions to business problems.

Question 18

The Accounts Manager has requested that a directory for accounts be created with subdirectories for employees X, Y and Z. The accounts policy statement should be stored in the root of the accounts directory.

Which of the following directories shows the correct file structure?

A.

- accounts
  - employee X
    - employee Y
      - employee Z
  - policy.doc

B.

- accounts
  - employee X
  - employee Y
    - employee Z
  - policy.doc

C.

- accounts
  - policy
    - policy.doc
  - employee X
  - employee Y
  - employee Z

D.

- accounts
  - employee X
  - employee Y
  - employee Z
  - policy.doc

Question 19

An organisation is interested in the effect of varying interest rates on its profit.

Which is the **best** system for the organisation to use to analyse this data?

A. a transaction processing system

B. a decision support system

C. a management information system

D. an expert system

Question 20

Functionality is a selection criteria for new technology.

What is functionality measured against?

A. the gains a business may expect

B. the business problem it is being used to solve

C. the future trends of the business

D. the risk factors identified

END OF SECTION A

SECTION B – Short-answer questions

┌───┐
│   **Instructions for Section B**   │
│   │
│   Answer **all** questions in the spaces provided.   │
│   │
└───┘

Question 1

List **three** advantages of customising a toolbar in a software application.

1. _____

2. _____

3. _____

3 marks

Question 2

Tyler's Toy Store has set up a database with the following two tables, Customer and Toy.

Customer	**Toy**
fldCustomerID	fldToyID
fldCustFirstName	fldToyName
fldCustLastName	fldToyDescription
fldCustAddress	fldToyPrice
fldSuburb	fldStockOnHand
fldPostcode	
fldPhoneNumber	

Tyler would like to produce a letter template to inform customers of the arrival of the latest toys in stock. Tyler has decided to use a mail merge. He has already identified three fields (shown below).

What are the remaining **three** essential merge fields required to successfully create this letter?

Field 1. fldToyName

Field 2. fldSuburb

Field 3. fldPostcode

Field 4. _____

Field 5. _____

Field 6. _____

3 marks

Question 3

a. What is a disk cache?

_____

_____

_____

b. What is the main purpose of disk caching?

_____

_____

_____

$1 + 1 = 2$ marks

Question 4

a. What is a macro?

_____

_____

b. Briefly describe **two** different ways to create a macro.

  i. _____

  _____

  ii. _____

  _____

c. Name **two** different ways to select and run a macro effectively.

  i. _____

  _____

  ii. _____

  _____

$1 + 2 + 2 = 5$ marks

Question 5

Briefly describe **two** of the three types of support resources listed below.

•   Instructional Manual

•   Training Material

•   Policy and Procedure Document

i.
_____

_____

_____

ii.
_____

_____

_____

2 marks

Question 6

What is the major function of a wizard in installing and using software applications?

_____

_____

_____

1 mark

Question 7

What is the main purpose of a process in a system flow chart?

_____

_____

_____

_____

3 marks

Question 8

What is the main purpose of a Data Dictionary?

_____

_____

_____

_____

_____

1 mark

Question 9

For maintenance purposes, when changes are made to a system where are they recorded?

_____

1 mark

Question 10

A snapshot of a network printer queue, often used in troubleshooting printing problems, is shown below.

List **three** important pieces of information that can be deduced from the data presented in the figure above.

1. _____

2. _____

3. _____

3 marks

Question 11

The General Manager is developing a Disaster Recovery Plan and has asked for your input. The organisation's IT department is located on the third floor of a multistorey building. The IT server room houses the servers, uninterruptible power supply, switches, routers and the Main Distribution Frame. With a floor-to-ceiling window facing north, and little ventilation, the server room heats up quickly during the day.

Current practice is as follows:

*   Backup tapes are stored in the server room.
*   The server room has a single door entry point which is self-locking; the Network Administrator has the only key.
*   On hot days the temperature exceeds 40°C in the server room.
*   The server room is untidy and used to store consumables such as toner cartridges and printer paper.

a.   Threat of fire in this area is a major concern for the General Manager.

List **three** consequences to the organisation of such an event.

1. _____

_____

2. _____

_____

3. _____

_____

b.   List **three** improvements to current practice that should be recommended to the General Manager.

1. _____

_____

2. _____

_____

3. _____

_____

3 + 3 = 6 marks

Question 12

List **two** advantages of keeping computer magazines as a reference source.

1. _____

_____

2. _____

_____

2 marks

Question 13

A client is experiencing unusual problems installing and configuring a new software application. The software has been written to industry standards. You need to check the files provided on the disk with the software distribution.

a. Which file is it **best** to check first?

_____

b. List **one** piece of information that this file should contain.

_____

1 + 1 = 2 marks

Question 14

The Board of Directors at Zentronix has developed policies that put the needs of the company above all else. The company is planning to expand its base of operations by opening offices in key Asian cities and this proposed expansion is supported by the majority of company shareholders.

While on duty at 8 am as the Help Desk operator for Zentronix, you receive three calls for support in quick succession. Prioritise the calls by placing the numbers 1 to 3 in the boxes provided (1 is a high priority, 3 is a low priority).

[ ] The Managing Director's assistant cannot access the Internet – she wishes to purchase a personal present.

[ ] The Board of Directors has requested the setup of a video conferencing link with the company's Asian office, scheduled for 11 am.

[ ] The Administration Manager has requested the installation of a toner cartridge for the HP 4 LaserJet printer in the Marketing department. Two network printers service this area.

1 mark

Question 15

A software company performs a backup of its server every Friday night. Between Monday and Thursday only new files and files altered since the last backup are backed up.

On Wednesday the Accounts Manager cannot open the company's monthly balance sheet file. The file is corrupt.

Explain a possible procedure you could use to recover the file.

_____

_____

_____

_____

_____

_____

_____

2 marks

Question 16

A travel agency of four staff has upgraded from its manual system to a computer system. All four staff have had little experience with computers. The agency has a limited budget to spend on training.

For this company, list **two** advantages of using group training.

1. _____

2. _____

2 marks

Question 17

A Network Administrator is concerned because the anti-virus software being used by the company failed to detect and eradicate a virus. The log of events has not been viewed in three months, the last update was six months ago, and the user license agreement has expired.

List **two** concerns that arise from this situation.

1. _____

_____

2. _____

_____

2 marks

Question 18

The table below outlines the system requirements for an operating system and provides specifications for a company's existing personal computer. The operating system software comes on a bootable CD-ROM.

The company wants to upgrade its operating system.

Operating system minimum requirements	Company's PC specifications
• Pentium 150 MHz	• Pentium 233 MHz
• 64 MB RAM	• 32 MB RAM
• Custom install 400 Mb of free hard disk space	• 4.2 Gb HDD with 3 Gb of free hard disk space
• VGA monitor or higher	• SVGA monitor
• CD-ROM drive	• Zircom 16 bit Ethernet adapter

What **two** upgrades must be made to the company's PC to successfully migrate to the new operating system?

1. _____

_____

2. _____

_____

2 marks

Question 19

A computer has **three** primary areas of memory management. List them.

1. _____

2. _____

3. _____

3 marks

Question 20

List **three** functions of all operating systems.

1. _____

2. _____

3. _____

3 marks

Question 21

The cost of overseas phone calls has dropped dramatically in the last few years. The introduction of a new technology, and its widespread acceptance and use, has caused a drop in the cost of calls.

What is the name of this new technology?

_____

1 mark

Question 22

What is meant by the term user resistance?

_____

1 mark

CONTINUED OVER PAGE

END OF SECTION B
TURN OVER

SECTION C – Case study

Rochelle Williams is the owner of a theatrical booking agency called Actors Management. She represents one hundred and forty actors. Film producers, play producers and advertising producers call her with outlines of the type of actor they are looking for and the type of work they wish the actor to perform. Rochelle records the producers' requirements in a notebook. With the help of her assistant, Sang Truyen, Rochelle selects suitable actors and negotiates their fees. The producers constantly ask Rochelle and Sang for actors' biographies.

An actor's biography includes a history of all the work the actor has performed and their training history. It also includes a photograph of the actor. Copies of the photographs are stored alphabetically by name. They are usually ordered from the photographic reproduction studio in lots of twenty. The actors are charged for the reproductions, which are expensive. The actors frequently complain that their photos are being sent to producers when they have little likelihood of getting the job. The producers do not return the photos. Actors may work on many different projects at the same time. Bill is Rochelle's administration assistant. It is Bill's job to keep the actors' histories up to date.

Each time an actor is booked for work, Rochelle or Sang record the details of the booking onto an individual weekly job sheet. The job sheet has the actor's name, shows the week ending, and is divided into seven boxes representing each day, Monday to Sunday, and the date. The details include the time and duration of the booking, the fee payable and the billing details. If the job is a play or film that runs for many weeks or months, Rochelle or Sang must fill out a weekly job sheet for the length of the booking to ensure that an actor is not double-booked.

At the end of each week, the job sheets for the past week are sent to Toula in accounts, who goes through each sheet and produces an invoice for each job on behalf of the actor. The invoices are sent to the various producers for payment.

Currently, all the systems are manual. The manual systems used are accurate and reliable, but require much attention to detail, and the biographies in particular are very time consuming and repetitive. Bill often complains that he has to produce the same layout and details each time he creates a new or updated biography. To update a biography, he must retype all the actor's old details and add the new details. As many actors are submitted for each job, he often has thirty to forty biographies to check and update each week. Bill also complains that the stock of photographs is not monitored and when he requires an actor's photo he finds that there is no stock. It can take up to two weeks to get the photo stock replenished.

Rochelle has decided to computerise her booking and biography systems. She has decided on two systems. She has been advised to use word processing to update the biographies for Bill and a database to keep track of the job details for the actors. She is planning three workstations; one for herself, one for Sang and one for Bill.

Question 1

Describe the **critical** aspects of hardware and systems software considerations that need to be addressed by Actors Management.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

4 marks

Question 2

Why would it benefit Actors Management to convert their manual biography system to a word-processing package?

_____

_____

_____

_____

_____

_____

_____

4 marks

Question 3

Actors Management is considering integrating the computerised booking system with the computerised biography system.

**a.** Explain **two** advantages of this approach.

_____

_____

_____

_____

_____

_____

_____

b. Explain **two** types of systems considerations that must be taken into account to enable this to happen.

_____

_____

_____

_____

_____

_____

2 + 2 = 4 marks

Question 4

Complete the system flow chart for Actors Management's computerised system by writing in the labels for the blank elements **A** and **B**. Select from the following labels.

- weekly job sheets
- update job details
- display query results
- calendar
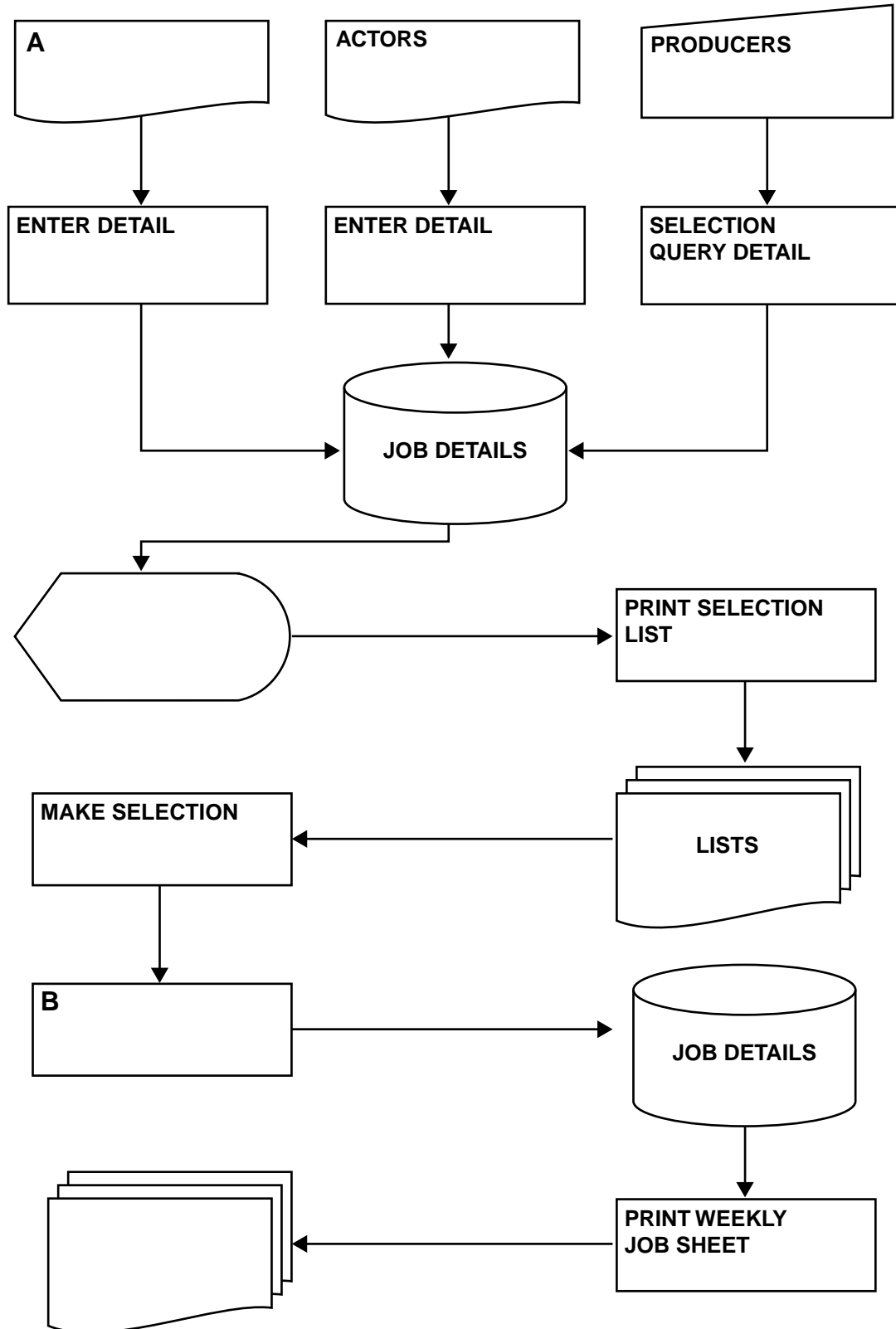
Question 5

Actors Management has purchased a flatbed scanner. However, the Plug 'n' Play function of the operating system does not recognise the hardware.

a. What type of software is needed to install the device?

_____

b. In the Actors Management case study, what is the purpose of a flatbed scanner?

_____

_____

_____

_____

_____

1 + 1 = 2 marks

END OF QUESTION AND ANSWER BOOK

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The Place To Be