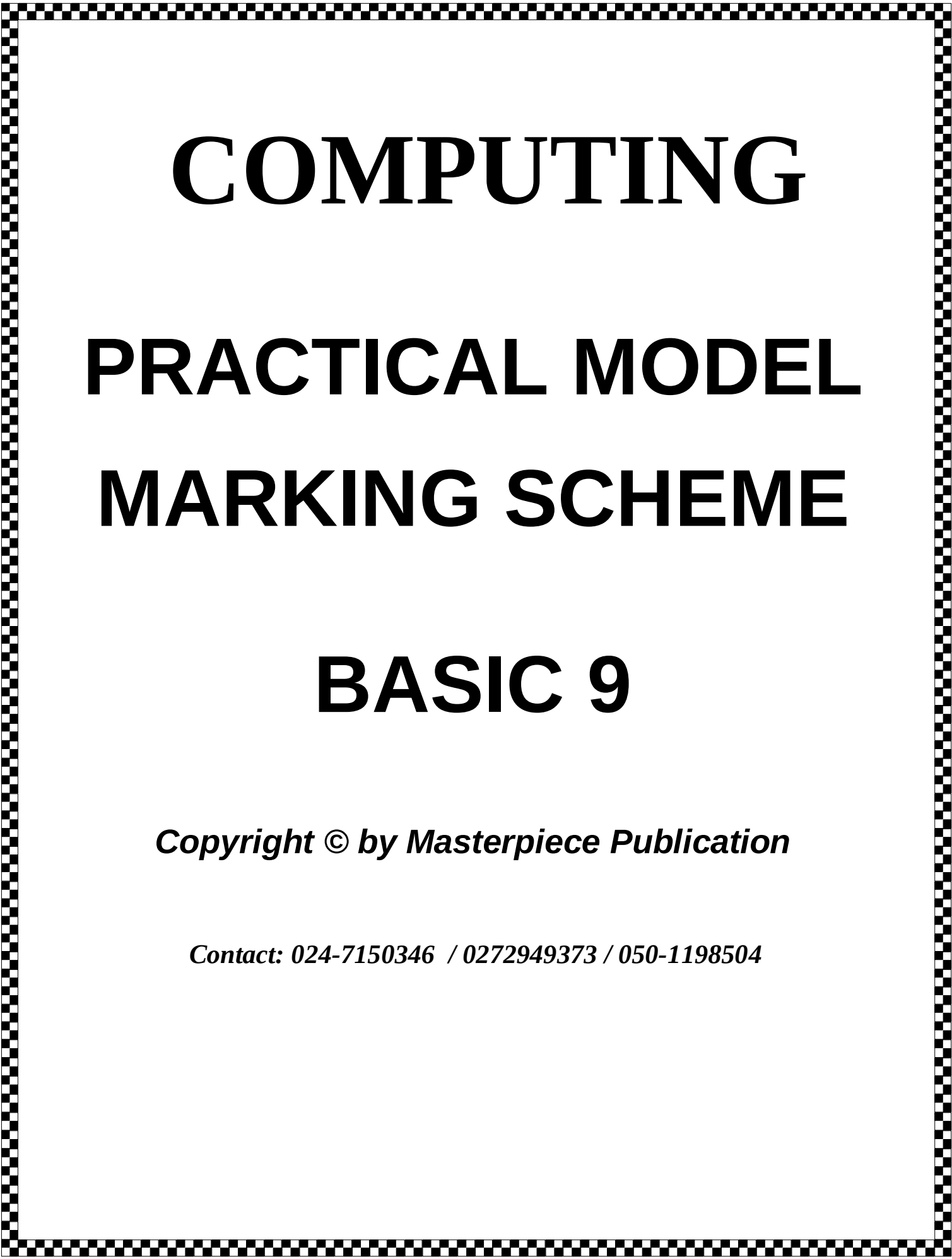


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COMPUTING

PRACTICAL MODEL

MARKING SCHEME

BASIC 9

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Contact: 024-7150346 / 0272949373 / 050-1198504

QUESTION 1

- a) Microprocessor or Central Processing Unit (CPU)
- b) * Arithmetic Logic Unit * Registers * Control Unit
- c) * Arithmetic Logic unit (ALU): The ALU is used to perform the arithmetic and logic operations in the computer.
* Registers: It is used to store any temporary data that is needed by the arithmetic logic unit.
* Control unit: The control unit is used to direct the flow of data into and out of the microprocessor.
- d) * Washing machines * Microwave cookers * Dishwashers
* Electric kettles * Fridges * DVD players
* Smart television * Hairdryers * Electric toothbrushes
* Central heating systems * Burglar Alarm system * External Security lights
- e) * Cache * Register

QUESTION 2

- a) A – Integrated Circuit (IC) B – Vacuum tube C – Transistor
- b) A – Third Generation B – First Generation C – Second Generation
- c) Uses of part labelled **C** include;
* It is used as amplifiers
* It is used as switches
* It is used as oscillators
- d) * Calculators * Television * Computers * Radio * Watches
* Cameras * Traffic lights * Microwave ovens * Smartphones * Tablets etc.

QUESTION 3

	Name	Function
a)	Heatsink	This is used to cool the microprocessor and keep it from overheating.
b)	Motherboard	It is the main circuit board that contains the primary components of the computer.
c)	Random Access Memory (RAM)	It is a temporary storage place for data or instructions for the CPU to process.
d)	Power Supply	This is used to supply electric power to a computer system by converting alternating current to direct current.
e)	Read Only Memory (ROM)	It is used to permanently store start up instructions for the computer.

QUESTION 4

a) A – Laptop Computer B – Desktop Computer

b) Differences between A and B

- * A is small in size but B is large in size
- * A has limited number of internal hard disk but B has multiple internal hard disk
- * A has a smaller number of ports but B has a greater number of ports
- * A is portable but B is usually fixed in one place
- * A run on both battery and main power supply but B runs only on the main power supply.
- * A has inbuilt keyboard and touchpad but B uses external keyboard and mouse
- * A has low power consumption but B has high power consumption

c) Characteristics of fifth generation computers

- They use Ultra Large-Scale Integration (ULSI) microprocessors
- They use artificial intelligence software
- They have parallel processing capability
- They consume less power and generate less heat
- They have better speed and accuracy and are reliable.
- They are small in size and therefore portable
- They have huge storage capacity
- They understand natural human language

QUESTION 5

a) Computer system or Computer or Desktop computer system

b) **I** – Printer **II** – Monitor **III** – System unit / Chassis **IV** – Speaker
 V – Keyboard **VI** – Mouse pad **VII** – Mouse

c) **II** - It is used to display information on a screen for the user.
 III - It is the enclosure that contains the main electronic parts of a computer and protects them from the outside elements
 V - It is used to input characters into the computer system.
 VII - It is used to issue command and for drawing on the computer system.

QUESTION 6

a) Wireless Keyboard

b) * It is easy to move around when using it
 * It has ergonomic features that makes it comfortable to use
 * It will help to maintain proper distance when using the computer
 * It will prevent the cluttering of wires or cables

c) * Optical Mark Reader * Optical Character Reader * Barcode Scanner
 * Optical Mark Reader * Magnetic Ink Character Reader

d) * Bluetooth * Infrared * Wifi

e) It is a USB dongle which is connected system unit to enable the keyboard communicate with the computer system.

QUESTION 7

Name	Function
I) Barcode Reader	It is used to scan printed barcodes into the computer system.
ii) Radio Frequency Identification (RFID) Reader	RFID reader is a device used to wirelessly scan data that is stored on special tag or chips.
III) Optical Mark Reader (OMR)	It is used to read or scan pencil marks on papers that have multiple choice answers
IV) Optical Character Recognition (OCR)	It is used to read or scan individual characters of printed text into a computer system.
V) Magnetic Ink Character Recognition (MICR)	It is used to read text that has been printed with magnetized ink.

QUESTION 8

Input device	Manual or Automatic
a)	Manual
b)	Manual
c)	Automatic
d)	Manual
e)	Automatic
f)	Automatic
g)	Manual
h)	Automatic
i)	Manual
j)	Manual

QUESTION 9

	Name	Function
I	Plotter	It is used to print graphical output on paper.
II	Projector	It is used to project text, images, or video onto a screen and appear larger.
III	Printer	It is used to transfer digital data onto a physical medium such as paper.
IV	Speaker	It is used to produce audible sound from the computer.
V	Headset	It is used to listen to audio sound privately from a computer