

Dawood Public School
Computer Studies
Course Outline for 2017-2018
Class VI

Course book- Right Byte 1
Fourth edition (Oxford University Press)

Month wise Distribution of Course Work

August	The Evolution of Computers
September	Spreadsheet
October	Input Devices
November	Revision
December	Mid-Term Examination
January	Output Devices Multimedia Presentation
February	Processing and Storage
March	Logo
April	Revision
May	Final Examination

Content	Learning Objectives
<p>The Evolution of Computer Definition of electronic computer. Types of computing devices:</p> <ul style="list-style-type: none"> • Analogue • Digital <p>The Generations of computer-1st till 5th. Classification of computers according to size:</p> <ul style="list-style-type: none"> • Supercomputer • Mainframe computer • Minicomputer • Microcomputer <ul style="list-style-type: none"> ➤ laptop ➤ smartphone ➤ tablet ➤ embedded computer <p>Places where computers are used.</p>	<p>Theory Objectives</p> <ul style="list-style-type: none"> • Define a computer as an automatic, digital, electronic and a data processing system • Describe how a computer processes data • Compare analogue devices and digital devices • List the advantages and limitations of: <ul style="list-style-type: none"> ➤ the first generation of computers ➤ the second generation of computers ➤ the third generation of computers ➤ the fourth generation of computers ➤ the fifth generation of computers • Differentiate between Super computers and Main frame systems • List the various kinds of microcomputers • Identify machines that are using an embedded computer • Highlight the importance of computers in various fields
<p>Tricky Terminology: analog devices, digital devices, embedded computer, microcontrollers</p> <p>Types of Questions:</p> <ul style="list-style-type: none"> ➤ Fill in the blanks ➤ True False ➤ Question Answer ➤ Multiple Choice <p>I.T Links:</p> <p>1. www.nortonsecurityonline.com/security-center/evolution-of-computers.html 2. www.telegraph.co.uk › Technology</p>	

Content	Learning Objectives
<p>Spreadsheet Understanding the spreadsheet. Data types in spreadsheet. Using functions in EXCEL.</p>	<p>Theory objectives</p> <ul style="list-style-type: none"> • Explain what is an electronic spreadsheet • Explain the following components of EXCEL worksheets: <ul style="list-style-type: none"> ➤ Active cell ➤ Worksheet ➤ Sheet tabs ➤ Workbook ➤ Cell • Identify Labels • Identify Values • State the purpose of formula bar <p>Practical objectives</p> <ul style="list-style-type: none"> • Insert the following functions of EXCEL in a spreadsheet: <ul style="list-style-type: none"> ➤ SUM ➤ PRODUCT ➤ AVERAGE ➤ IF ➤ Max ➤ Min • Use the following features: <ul style="list-style-type: none"> ➤ Auto fill ➤ Merge ➤ Center • Design a mark sheet for ten students and apply formula to calculate: <ul style="list-style-type: none"> ➤ maximum marks ➤ obtained marks ➤ percentage ➤ average ➤ remarks • Design a weekly/monthly household budget sheet and calculate: <ul style="list-style-type: none"> ➤ total expenses ➤ savings ➤ highest expense ➤ lowest expense • Prepare a stock list and calculate: <ul style="list-style-type: none"> ➤ the total items in stock ➤ stock sold ➤ stock left
<p>Tricky Terminology: worksheet, workbook, active cell, cell, electronic spreadsheet, auto fill, cell range, cell reference</p> <p>Types of Questions:</p> <ul style="list-style-type: none"> ➤ Fill in the blanks ➤ True False ➤ Question Answer ➤ Practical based tasks <p>Practical Task: Page No. 87 Part F; Lab exercise 1 and 2</p> <p>I.T Links: 2. https://www.webopedia.com/TERM/S/spreadsheet.html</p>	

Content	Learning Objectives
<p>Input Devices Input Devices are of the following types:</p> <ul style="list-style-type: none"> • Typing devices • Pointing devices • Digitizing devices • Scanning devices • Character and mark recognition devices • Image capturing devices • Audio based input devices • Voice Recognition systems • Musical instrument digital interface(MIDI) • Sensors • Biometric devices 	<p>Theory Objectives</p> <ul style="list-style-type: none"> • Describe the need for input devices • Select suitable input devices for a listed range of applications • Identify the various types of: <ul style="list-style-type: none"> ➤ typing devices ➤ pointing devices • Differentiate between mechanical, optical and cordless mouse • Explain the use of touch sensitive screen • Explain the application of touch sensitive screens • Describe the reason for using joysticks in playing games • Differentiate between digitizing and scanning devices • Describe the use of a digital art board • Describe a flatbed scanner • Differentiate between a flatbed scanner and a portable scanner • Explain the use of card readers in the following places: <ul style="list-style-type: none"> ➤ Schools ➤ Banks ➤ Departmental Stores • Differentiate between QR code reader and barcode reader • Differentiate between card readers and fingerprint readers • List the different character and mark recognition devices • Explain the application of the following: <ul style="list-style-type: none"> ➤ MICR scanner ➤ OMR scanner ➤ OCR scanner • Differentiate between the traditional camera and digital video camera • Differentiate between digital camera and web camera • Explain the applications of voice recognition systems • Explain the use of MIDI in music • Explain the use of sensors in different application • Explain the purpose of using RFID technology

Tricky Terminology:

portable hand-held device, flatbed scanner, pos terminal, biometric device, voice recognition

Types of Questions:

- Fill in the blanks
- True False
- Question Answer
- Multiple Choice

I.T Links:1. <https://www.techwalla.com/articles/list-of-input-devices-on-a-computer>2. <https://www.tutorialspoint.com › Computer Fundamentals › Computer - Input Devices>**November 2017****Revision for Mid Term Examinations****December 2017****Mid Term Examinations****January 2018****Chapter 3: Output Devices****Chapter 9: Multimedia Presentation****Pages 24-31****Pages 88-101**

Content	Learning Objectives
<p>Output Devices</p> <p>Output devices are of the following types:</p> <ul style="list-style-type: none"> • The monitor • The printer • The plotter • The speaker • Multifunctional devices 	<p>Theory Objectives</p> <ul style="list-style-type: none"> • Explain the importance of the output function • Describe the role of output devices • Differentiate between CRT and LCD monitors • Differentiate between LCD and HDTV • State the purpose of data projector • Differentiate between impact and non impact printers • Categorize given list of printers as impact and non impact • Differentiate between ink jet and laser printer • Differentiate between dot matrix and laser printer
<p>Multimedia Presentation</p> <p>Power Point is a multi-media presentation software. Components and features of a Power Point presentation:</p> <ul style="list-style-type: none"> • Insert Text • Clip Art • Diagrams • Audio files • Video files • New slides <p>Understanding a multimedia system. Interactive uses of multimedia.</p>	<p>Theory Objectives</p> <ul style="list-style-type: none"> • List the components and features of multimedia presentation • List the hardware requirements of a multimedia system • Identify various forms of data that can be inserted on a slide • List the application areas of multimedia presentation • Differentiate between three presentation views <p>Practical objectives</p> <ul style="list-style-type: none"> • Insert titles and subtitles in slide • Insert pictures and smart art • Apply custom animation • Apply slide transition • Command different slide shows • Apply design templates to the slides

Tricky Terminology:

pixel, speech synthesizer, fax machine, internet telephony, multifunctional devices, interactive, slide transition, template, placeholder, slide layout

Types of Questions:

- Fill in the blanks
- True False
- Question Answer
- Multiple Choice

Practical Task:

Page No. 101 Part G

I.T Links:

1. <https://www.techopedia.com/definition/3538/output-device>
2. study.com/academy/lesson/computer-output-devices-monitors-speakers-printers.html
- <https://4h.unl.edu/documents/Multimedia%20Presentation.pdf>

February

Chapter 4: Processing & Storage

Pages 24-31

Content	Learning Objectives
<p>Processing and Storage Function of CPU/Processor. Microprocessor Components of CPU</p> <ul style="list-style-type: none"> • Main Memory • Firmware • Backing storage <p>Definitions</p> <ul style="list-style-type: none"> • ALU • CU • MU <p>Categories of secondary storage devices:</p> <ul style="list-style-type: none"> • Hard Drive • Optical Drive • CD (CD-R , CD-ROM, CD-RW) • DVD(DVD-ROM) • Flash Drive(Solid state drive) • USB • Smart card 	<p>Theory Objectives</p> <ul style="list-style-type: none"> • List the components of the system unit • Describe the processing function • Explain the importance of memory • List the different types of memory and storage devices • State the purpose for the following in a system unit: <ul style="list-style-type: none"> ➤ Ports ➤ Circuits ➤ expansion cards ➤ expansion slots ➤ motherboard ➤ microprocessor • Differentiate between RAM and ROM • Differentiate between primary and secondary storage • Compare the features of various storage devices
<p>Tricky Terminology: microprocessor, flash drive, smart card, ports and circuits</p> <p>Types of Questions</p> <ul style="list-style-type: none"> ➤ Fill in the blanks ➤ True False ➤ Question Answer ➤ Multiple Choice <p>I.T Links:</p> <ol style="list-style-type: none"> 1. https://sites.google.com/site/computertechcomputerbasics/home/processing-storage 2. https://link.springer.com/10.1007/978-1-4020-5614-7_691 	

Content	Learning Objectives
<p>Logo Starting Logo</p> <ul style="list-style-type: none"> • The Graphics window • The Commander window • Entering Commands • Programming in Logo • Ending Logo 	<p>Theory objectives</p> <ul style="list-style-type: none"> • Explain the importance of commands or primitives to control a computer • Define syntax and explain its importance • Explain the advantages and use of procedures • Identify Logo as an educational programming language • Explain the function of Graphics • Identify the use of commander window and turtle <p>Practical objectives</p> <ul style="list-style-type: none"> • Use appropriate commands to create shapes in a Logo environment • Create a procedure to draw an Olympics circle • Create a procedure to draw star shape • Demonstrate ability to edit procedures • Demonstrate ability to save procedures • Demonstrate ability to load procedures
<p>Tricky Terminology: primitive, procedure</p> <p>Types of Questions:</p> <ul style="list-style-type: none"> ➤ Fill in the blanks ➤ True False ➤ Question Answer ➤ Multiple Choice <p>Practical Task: Pg No. 114 -Q 5 and 6</p> <p>I.T Links:</p> <ol style="list-style-type: none"> 1. www.instructables.com/id/How-to-use-MSW-Logo/ 2. webhost.bridgew.edu/hburgiel/COMP203/procedures.html 	

April 2018
Revision for Final Term Examination

May 2018
Final Term Examination