



مدرسة القديسة مريم الكاثوليكية الثانوية - دبي
ST. MARY'S CATHOLIC HIGH SCHOOL, DUBAI

Theory

YEAR 10 – Computer Science (Week 4) 2021-2022

Subject	Computer Science
Class/ Section	Year 10 A-F
Week	19th September to 23rd September
Work send to students by	Google classroom
Total number of lessons per week	2
Unit/Topic	Unit 4: Computers Chapter 17 : Hardware
Key Vocabulary	platters, latency, cloud storage, virtualisation
Lessons 1,2–Live Zoom lessons along with face to face instruction for students present on a particular day Work will be assigned in Google classroom which will be matched to the students' ability.	<u>Specific Learning objectives</u> <ul style="list-style-type: none">➤ Understand and describe how data is stored on physical storage devices.➤ Understand the need for cloud storage. <u>Specific Intended Learning Outcomes</u> <p>Students will be able to</p> <ul style="list-style-type: none">➤ Demonstrate how data is stored on physical devices – Magnetic, Optical and Solid state.➤ Explain storing data in the 'cloud' and other contemporary secondary storage.
Tasks	Students will complete the Activity questions 1 to 5 on secondary storage.

**Assessment Criteria/
Essential questions**

An optical storage device writes data onto a CD or DVD.
Describe how data is stored physically on optical media.

Assessment objectives expected by the board with respect to the above question is listed below.

AO1: Demonstrate knowledge and understanding of secondary storage.

AO2: Apply knowledge and understanding of how data is stored in storage devices

Resources

Pearson Edexcel International GCSE(9-1) Computer Science Book
PowerPoint presentation

Resource video links:

- https://www.youtube.com/watch?v=H_M--weEzpA
- <https://www.youtube.com/watch?v=wI0upu9eVcw>
- <https://www.youtube.com/watch?v=0V8CaeDd4Kw>
- https://www.youtube.com/watch?v=0KIfGxp37E&list=RDQMG4B4IBn5BDo&start_radio=1
- https://www.youtube.com/watch?v=tyjqozrEPY&list=PLI-K7zZEsYLMOF_07IayrTntevxtbUxDL&t=8s

Practical

YEAR 10 – Computer Science (Week 4) 2021-2022

Subject	Computer Science
Class/ Section	Year 10 A-F
Week	19th September to 23rd September
Work send to students by	Google classroom
Total number of lessons per week	2
Unit/Topic	Unit 2 : Programming Chapter 8 : Data structures
Key vocabulary	array, index, record, field
Lessons 1,2–Live Zoom lessons along with face to face instruction for students present on a particular day Work will be assigned in Google classroom which will be matched to the students’ ability.	<u>Specific Learning objectives</u> <ul style="list-style-type: none">➤ Understand the need for, and understand how to use two-dimensional array.➤ Construct and use two-dimensional lists in Python programming language.
Tasks	<u>Specific Intended Learning Outcomes</u> Students will be able to <ul style="list-style-type: none">➤ Describe the structure of two-dimensional array and give examples of their use.➤ Create and use two–dimensional lists in Python programming language. Activities 2 & 3 on two-dimensional list will be posted in Google classroom. To encourage collaborative learning environment, students will be grouped in break out rooms to discuss and solve the questions.
Assessment Criteria/ Essential questions	International GCSE(9-1) - SAM (2017) – Q6. Assessment objectives expected by the board with respect to the above question is listed below.

Resources

AO1: Analyse problems in computational terms to make reasoned judgements.

AO2: Analyse problems in computational terms to design, program, test, evaluate and refine solutions.

Pearson Edexcel International GCSE(9-1) Computer Science Book
PowerPoint presentation.

Resource video links:

<https://www.youtube.com/watch?v=B5GhIXhDfoE>

<https://www.youtube.com/watch?v=mYBK8tQP2TY>