**PAKISTAN INTERNATIONAL SCHOOL BURAIDAH, AL-QASSIM. SAUDI ARABIA.**
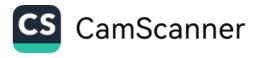


# COMPUTER SYLLABUS

# CLASS VII

# PAKISTAN INTERNATIONAL SCHOOL, BURAIDAH
## SYLLABUS BREAKUP

## Class: 7th    Subject: Computer Science

Number of Teaching Weeks in First Term: (1 - 14)
Number of Teaching Weeks in Second Term: (15 - 28)

**Name of Text Book: Computer WHIZ-7**

| Week No. | Chapter No. | Day | Topic | Book Page Numbers |
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| 1 | Chapter # 1 Emerging Technologies | Day 1 | Progression Techniques Reading | 1 |
| | | Day 2 | First Generation: Vacuum Tubes, | 2 |
| | | Day 3 | Second Generation: Transistors | 2 |
| | | Day 4 | Third Generation: Integrated Circuits | 2 |
| 2 | Chapter # 1 Emerging Technologies | Day 1 | Fifth Generation: Artificial Intelligence, Emerging Technologies | 3 |
| | | Day 2 | Robotics, Robot | 4 |
| | | Day 3 | Types of Robots | 4 |
| | | Day 4 | Types of Robots | 5 |
| 3 | Chapter # 1 Emerging Technologies | Day 1 | Artificial Intelligence | 5 |
| | | Day 2 | Self Driving Cars | 5 |
| | | Day 3 | 3D Printing | 6 |
| | | Day 4 | Virtual Reality | 6 |
| 4 | Chapter # 1 Emerging Technologies | Day 1 | Augmented Reality, 3D Holographic Imaging | 7 |
| | | Day 2 | Open Source, Cloud Computing | 7 |
| | | Day 3 | Exercise | 8 |
| | | Day 4 | Exercise | 9 |
| 5 | Chapter # 2 Hardware Components | Day 1 | Test in Unit # 1 | |
| | | Day 2 | Computer Hardware | 10 |
| | | Day 3 | Internal Hardware Components | 11 |
| | | Day 4 | ROM, Hard Disk Drive (HDD) | 11 |

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| 6 | Chapter # 2 Hardware Components | Day 1 | Solid State Drive (SSD), Optical Drive, Heat Sink, | 12 |
| | | Day 2 | Graphics Processing Unit (GPU), Network Interface Card (NIC) | 12 |
| | | Day 3 | External Hardware Component | 13 |
| | | Day 4 | Input Devices | 13, 14 |
| 7 | Chapter # 2 Hardware Components | Day 1 | Input Devices | 14 |
| | | Day 2 | Output Devices | 14, 15 |
| | | Day 3 | Different I/O Ports of a Computer System | 15 |
| | | Day 4 | Types of Ports | 16 |
| 8 | Chapter # 2 Hardware Components | Day 1 | Types of Ports | 17 |
| | | Day 2 | Types of Ports | 18 |
| | | Day 3 | How do PCIe slots work? | 18 |
| | | Day 4 | What is a PCI card?, What is PCIe lane? | 19 |
| 9 | Chapter # 3 Word Processing and Representation | Day 1 | Exercise | 19, 20 |
| | | Day 2 | Test in Unit # 2 | |
| | | Day 3 | Word Processors, MS Word | 21 |
| | | Day 4 | MS Word Interface | 22 |
| 10 | Chapter # 3 Word Processing and Representation | Day 1 | Learning MS Word | 23 |
| | | Day 2 | Learning and Practicing MS Word | 24, 25 |
| | | Day 3 | Learning and Practicing MS Word | 26, 27 |
| | | Day 4 | Learning and Practicing MS Word | 28, 29 |
| 11 | Chapter # 3 Word Processing and Representation | Day 1 | Learning and Practicing MS Word | 30, 31 |
| | | Day 2 | Learning and Practicing MS Word | 32, 33 |
| | | Day 3 | Learning and Practicing MS Word | 34, 37 |
| | | Day 4 | Learning and Practicing MS Word | 38, 39 |

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| 12 | Chapter # 4 Communication in the Digital World | Day 1 | Exercise | 39, 40 |
| | | Day 2 | Internet and Web | 41 |
| | | Day 3 | Email, Creating Email Account, Verification and Authentication | 42, 43 |
| | | Day 4 | Using Email | 44, 45 |
| 13 | Chapter # 4 Communication in the Digital World | Day 1 | Using Email | 46, 47 |
| | | Day 2 | Exercise | 48, 49 |
| | | Day 3 | Test in Unit # 3 | |
| | | Day 4 | Test in Unit # 4 | |
| 14 | | Day 1 | Revision of Unit # 1 | |
| | | Day 2 | Revision of Unit # 2 | |
| | | Day 3 | Revision of Unit # 3 | |
| | | Day 4 | Revision of Unit # 4 | |
| 15 | Chapter # 5 Algorithmic Thinking and Problem Solving | Day 1 | Problem Solving Process | 50 |
| | | Day 2 | Computational Thinking, Decomposition, Pattern recognition | 51 |
| | | Day 3 | Abstraction, Algorithm | 52 |
| | | Day 4 | Algorithm and Flow Charts | 53 |
| 16 | Chapter # 5 Algorithmic Thinking and Problem Solving | Day 1 | Coding | 54 |
| | | Day 2 | Debugging and Testing | 55 |
| | | Day 3 | Control Flow, Loop statement | 56 |
| | | Day 4 | Exercise, Work station | 57, 58 |
| 17 | The Number System | Day 1 | Test in Unit # 5 | |
| | | Day 2 | Data, Information | 59 |
| | | Day 3 | The Number System, Decimal Number System | 60 |
| | | Day 4 | Binary, Octal and Hexadecimal Number System | 61 |

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| | | Day 3 | Binary Coding Scheme | 64, 65 |
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| 19 | Chapter # 7 Fundamentals of Programming | Day 1 | Test in Unit # 6 | |
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| | | Day 4 | Code Blocks, Script Editor, Sprite Control, | 70 |
| 20 | Chapter # 7 Fundamentals of Programming | Day 1 | Sprite and Sprite Operations | 71 |
| | | Day 2 | Sprite Operations | 72 |
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| 21 | Chapter # 7 Fundamentals of Programming | Day 1 | Programming Concepts | 76 |
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| 22 | Chapter # 8 Digital Citizen Ship | Day 1 | Test in Unit # 7 | |
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| 23 | Chapter # 8 Digital Citizen Ship | Day 1 | Security, Rights and Responsibilities, Health and Wellness | 83 |
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| | | Day 3 | Importance of Copyrights and Plagiarism | 84 |
| | | Day 4 | Piracy and Media Bias | 84 |

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| | | Day 4 | Tips for Protecting against Data Security Threats | 87 |
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| 26 | Chapter # 9 Entrepreneurial Design Thinking | Day 1 | Design Thinking | 91 |
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| | | Day 3 | Prototype, Test | 92 |
| | | Day 4 | Business Plan, Importance of Business Plan | 93 |
| 27 | Chapter # 9 Entrepreneurial Design Thinking | Day 1 | Importance of Business Plan, Value Proposition | 94 |
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| | | Day 3 | Creating Instagram Ad, Payment and Transaction | 96, 97 |
| | | Day 4 | Exercise | |
| 28 | | Day 1 | Test in Unit # 9 | |
| | | Day 2 | Test in Unit # 8 | |
| | | Day 3 | Test in Unit # 7 | |
| | | Day 4 | Test in Unit # 6 | |