SUMMARY OF THE SYLLABUS FOR THE RE-EXAM IN COMP-B

Part One: MS Excel

Understanding Basic Terminology

- **Workbook**: Single Excel file containing one or more worksheets.
- **Worksheet**: Single report or tab in workbook.
- **Cell**: Intersection of row and column.
- **Cell Address**: Defined on column-by-row intersection.
- **Active Cell**: Cell currently displayed with a dark border.
- **Sizing**: Button at bottom right of active window when restored.
- **Row**: A horizontal series of cells labeled with number
- **Column**: A vertical series of cells labeled with the letters of alphabet

- Inserting Rows, Columns and Cells
  - To insert column or Row of selected column or Row:
    1. Select **Insert, Columns or Row**
    2. Press **CTRL+** (+) from **numeric keyboard**
    3. **Right-click** on selected **column** and then click on **Insert**

Entering Data in the Worksheet

- Three types of entries:
  - **Labels**
    - Text entries appear exactly as entered
    - Label wider than cell flows across adjacent cells
    - Default to left aligned
  - **Values**
    - Numeric values
    - Default to right aligned
  - **Formulas**
    - Composed of values, cell references, arithmetic operators or special functions
Lesson Three: Formatting Number

- To format a number
  - Click Format + Cell + Number tab
  - Right. click on the selected cells + Format Cell

Lesson Five: What Does Formatting Mean?

- Header/Footer Tab
  - You can apply header and footer to you worksheet by going to View in the menu bar

Chapter Two: Formulas, Functions and Charts

Lesson One: Working with Formulas

- Formula is simply calculation using numbers (or other types of data) using cell references
- Can be as simple as single cell reference, or complex as many cell references plus built-in functions
- Two ways to enter cell addresses into formula:
  - Type cell addresses directly
  - Point to cells
Some comments (Notes) can display in a worksheet:

#NAME
The text has been entered in a formula which is not allowed

#DIV/0
Formula contains reference divided by 0.

#VALUE!
Formula contains incorrect data reference.

#####
The column is not wide enough to display the number

#N/A
The value is not available

Common Built-In Functions

- =SUM Sums range of specified cells.
- =AVERAGE Averages specified cells (totals range and divides total by number of entries).
- =MIN Displays minimum value of specified cells.
- =MAX Displays maximum value of specified cells.
- =COUNT Counts number of non-blank cells in specified range.

Lesson Two: Working with Charts

- To create chart:
  - Select Insert, Chart
  - or
  - Click on (Chart Wizard) button from Standard toolbar
Part Two: MS PowerPoint

Lesson One: Getting Started

1. Slide
2. Placeholder
3. Outline Pane
4. Speaker’s Note

Lesson Two: Edit a Presentation

- To change background:
  - Select **Design, Background Style**
  - Right-click on blank area of slide, then select **Background**

- Inserting new slide
  - To insert new slide:
    - Select Insert, New Slide
    - Click on **New Slide** button on Formatting toolbar
    - Press **Ctrl + M**
    - At last placeholder, press **Ctrl + Enter**
    - Right-click on slide in Outline or Slides tab and click on New Slide

- Changing the Slide Layout
  - Select Format, Slide Layout

- Changing Slide Design
  - Select **Format, Slide Design**
  - Click on **Slide Design** button in task pane and click on **Slide Design**
For specific color design or design with animation, click on **Slide Design - Color Schemes** or **Slide Design – Animation Schemes** task pane.

### Lesson Three: Insert Object

- **To insert an object onto slide:**
  - Insert slide layout with object placeholder, then click on icon in placeholder
  - Select **Insert** any object
  - Click on **( any object picture )** button on Drawing toolbar

### Lesson Four: Master

- Four masters available:
  - **Slide Master** - affects all slides
  - **Title Master** – affects all title slides
  - **Notes Master** - affects appearance of Notes pages when viewed or printed
  - **Handouts Master** – affects how handouts

### Lesson Five: Organizing Presentation

- To **Rearranging the Slides**:
  - In Slide Sorter view, click on slide and drag to new location
  - In Outline tab, click on slide icon for slide to be moved and drag up or down to new location within tab
  - In Slides tab, click on slide to be moved and drag up or down to new location within tab

### Lesson Six: Animation Effects

- To **add animation**:
  - Select **Slide Show, Animation Schemes**
  - Display **Slide Design - Animation Schemes** task pane
• TO customize animation
  o Select Slide Show, Custom Animation
  o Display Custom Animation task pane
  o Right-click on placeholder and click on Custom Animation

• Lesson Seven: Slide Transitions

• To apply slide transition:
  o Select Slide Show, Slide Transition
  o Display Slide Transition task pane

Lesson Eight: Printing Presentation

  o To print presentation:
    ▪ Select File, Print
    ▪ Press Ctrl + P
    ▪ To print entire presentation, click on (Print) button on Standard toolbar
    ▪ Use Print what field to choose to print other items for presentation

Part Three: Getting Connected

• A network is the connection of two or more computers. A network can include PCs, PDAs, printers and any other computing device.

• Living online refers to process to connect to Internet and find information whenever needed

• A protocol is a rule or a standard applied to networks

• Ethernet is an example of a protocol that describes cables and network cards used to join computers in an office or a campus network.

• Each computer in a LAN has an IP address (Internet Protocol address) which identifies each computer.

• HTTP (hypertext transfer protocol) is another example. HTTP is the protocol (standard) for all the web pages used on computers and in the Internet.

• There are protocols for applications software which describe the way software like the Internet Explorer browser works with the Windows operating system.
<table>
<thead>
<tr>
<th>Type of standard (Protocol)</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Cabling</td>
<td>● Ethernet</td>
</tr>
<tr>
<td>● Application</td>
<td>● Internet Explorer, FireFox</td>
</tr>
<tr>
<td>● Transfer</td>
<td>● HTTP, FTP</td>
</tr>
</tbody>
</table>

- Types of networks:

1. **Peer-to-Peer Networks** (This is the kind of network for a home or a small office. In this, all the computers share each other's data and printers equally with all the other computers, No particular computer is in control of the network and it is possible for it to work with no network hub)

2. **Client - Server Networks** (Network server dedicated to controlling network traffic and managing resources):
   - Provides better performance and security
   - Server controls who can access what resources and when
   - Called central server as all files stored here
   - Can be any type of computer with server software installed
   - Users must be clearly identified with access rights
   a. **LAN** (is a network where all the computers are connected within the same building or the same campus. LANs are often small networks of just a few computers)
   b. **WAN** (is what you have when two or more LANs (or even just two computers) are joined together by a public network company. WANs are often very big networks. The connections between computers in a WAN might include satellites and undersea cables.)
- **Internet** is a global network of computers that provides a variety of resources and data to the people that use it.
- **Intranet** is a private LAN that uses the same set of network protocols as Internet but set up in an organization.
- **Extranet** uses Internet technology to allow companies to share information with another organization.

**What’s required to connect to a network:**

1. **Connection/Cabling Options:**
   - **Coaxial** (Wire with center wire surrounded with insulation and then grounded cover of braided wire.)
   - **Fiber Optics** (Made up of bundled glass or plastic fibers (threads) to transmit data.)
   - **Twisted pair** (Single wire that can handle multiple paths or channels)
   - **Wireless (WiFi):** Works with radio frequencies for data transmission. (Long distance)
   - **Bluetooth** (This is a modern network which will connect GSM phones over a distance of up to 10 meters.)
   - **Infrared** (Wireless option works with infrared light waves to transmit data. (TV remote). (Short distance))

**Advantages of Networking:**

1. Communicating
2. Sharing Devices
3. Sharing Information

**Disadvantages of Networking**

1. **Dependency** (Organization’s activities depend on network working continuously. So, if the network fails, all of the organization’s work will stop)
2. **Expensive** (Installation and maintenance)
3. **Security Risk** (Every person who logs into server must have:
   - Valid login id, per company’s standards
   - Valid password
4. **Loss of Autonomy** or Privacy (Obliged to work in network environment, Privacy may be a concern for confidential material)
5. **Viruses** (viruses specifically target servers)

   - **Internet Service Providers** (The Internet Service Provider (Omantel and Nawras in Oman) has all the high speed connections and servers needed to connect to a Network Access Point (NAP).)

   - **Components that are needed in order to connect your computer to the Internet:**

     1. **Modem** (Transmits data by converting analog to digital signal needed by computers. Measured in bits per second.)
     2. **Network Card** (Must be installed to connect to Internet.)
     3. Cables (Connects to ISP service; devices used depend on connection service.)
     4. **Internet Account** (The account signed up with ISP)
     5. **Web Browser** (Software program that allows you to search for items on the Internet)
     6. **Telecommunications Software** (Configures computer to connect to Internet (GSM, GPRS))

   - **Types of Internet Connections:**

     1. **Telephone Access (Dial-up access)**
     2. **TV Cable Access**
     3. **Digital Connections:**
        - ISDN
        - DSL/ ADSL
        - T1/ T3

   - **Intranet** (Private LAN in company using same network protocols as Internet)
   - **Extranet** (Uses Internet technology, Company shares information for e-commerce)

**Part Four: Using the Internet**

   - **Web server** host or store company’s or person’s web site
- **Website** is a collection of pages containing information.
- **Web browser** is a software program that used to serve and access websites.
- **Webpage** is a single page of a website.
- **World Wide Web** is a collection of all websites hosted by all web servers connected to the Internet.
- **Hypertext** refers to the technique of accessing web pages using hyperlinks.
- **HTML** is called hypertext markup language used to create WebPages.
- **Web Page Elements**:

![Diagram of a web page with various elements labeled]

- URL
- Picture
- Field
- Button
- Advertisement
- Status Bar
- Hyperlink
• Uniform Resource Locator (URL):

http://www.netscape.com

Server Protocol  Domain Name

• Looking at Web Pages

Links: Text or graphics enable you to navigate to other pages with more information on corresponding topics

Field: Forms with fields or blank spaces where you can enter information

Button: Interactive graphic that performs action when clicked
• Customizing the Web Browser:
  • To customize Internet Explorer, select Tools, Internet Options

• Identifying Common Web Browser Errors:
  ✓ Typing Web address incorrectly or using wrong country domain.
  ✓ Cannot read screen due to different language or font or color scheme too difficult to see items
  ✓ Could be page is slow to download or if interrupted during download
  ✓ Pop-up usually appears as separate window with advertising

• Ergonomics studies humans in workplace

• A computer virus is a computer program that can copy itself and infect a computer:

• The Risks of Computing
  ✓ Protecting Your Data or Computer:
    - Theft
    - Damage
    - Data Loss
    - Backups
    - Power

• Preventing Personal Injuries
  ✓ Work surface should be stable and resting flat
  ✓ Monitor and keyboard should be directly in front of you
  ✓ Top of monitor should be about 2-3" above your eyes
  ✓ Reduce glare or reflection on screen
  ✓ Place documents in document holder next to monitor
✓ When seated, position arms so wrists are straight and flat, and arms close to body
✓ Keep feet flat on floor or use foot rest
✓ Take regular breaks to move about, stretch, and give eyes rest
✓ Guidelines also apply to notebook and handheld mobile devices
✓ Always test ergonomic products to determine its validity
✓ Ensure there is research to support value of product

• **Types of Viruses:**
  - **Boot Sector:** Infects system when read from infected boot disk; virus writes to master boot sector which loads into computer’s memory
  - **Program or File:** Part of file used to start program which loads into computer’s memory.
  - **Macro:** Looks like macro file that runs in specific program, but actually attaches to default settings which infects every new or open file in that program.
  - **Multipartite:** Similar to boot sector or program except it generally infects both areas. Two most common malicious program types:
    - **Worms:** Duplicates and sends to anyone in recipient’s contact list.
    - **Trojan Horses:** Remains “hidden” and harmless until triggered by action.

**Part Five: E-mail Fundamentals**

• E-mail most popular means of communicating from one computer to another

• Advantages of using e-mail :
  - Speed
  - Paper Trail
  - Sharing Information
- Easy Access
- Collaborating with Others
- Cost Savings

- Internal & External E-mail

- The structure of an e-mail address:

  - **jsmith@ccilearning.com**
    - Mailbox Name: **jsmith**
    - Domain Category: **ccilearning.com**
    - Name of Organization

- E-mail Message Components:
  - Addressing:
- **To** (Destination address)
- **Cc** (Carbon Copy address, or recipient who gets copy for information purposes only.)
- **Bcc** (Blind Carbon Copy used when want or need to hide recipient receiving copy)

- Subject Line (Identifies topic (title) of message)
- Body (Where you type actual message)
- Attachments (Can attach files to message)

- **E-mail Options:**
  - Create (Blank form to enter all necessary message components)
  - Reply (Address of sender goes in To field and Re: added in Subject line)
  - Reply All (Reply sent to all who received original message)
  - Forward (Send copy of received message to third person for further action)

- **Spamming** refers to the process of sending unsolicited e-mail sent to many recipients

**Common E-mail Problems**

- **Messages Not Being Sent or Received** (If no messages being sent or received:
  - Could be that mail server at ISP not connecting to your system or vice versa
- **Problems with Attachments** (The attachment is large)
- **Inbox Overflow** (Inbox may be full or currently unavailable)
- **Delivery Failures** Two types of delivery failures:
  - E-mail address doesn’t exist at that domain
  - Problem with mail server for that domain
- **Responding in Haste** (Avoid tendency to rush off e-mail).
  - Can result in text not being clear
  - Reply might have been different if given time
- Watching for Potential Viruses in E-mails (Many viruses designed to spread when attachments opened):
  - May have file extension like “.exe” or “.bat”
  - Picture or text files can contain viruses
  - Word processing documents generally virus-free but can contain macro virus