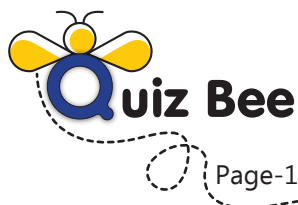# ANSWER KEY

Trackpad 402

Part B: Subject Specific Skills

1. Introduction to IT–ITeS Industry

Quiz Bee

Page-149

1. Offshore Outsourcing can be done in coastal countries as Offshore Outsourcing means to outsource services outside the company's own country.The main advantage may be better geographical area, political stability, skilled low-cost labour and better tax plans.
2. Business Process Management (BPM) is defined as a discipline that focuses on standards to manage and improve the business processes.
3. SPD stands for Software Products Development which refers to software available through sale, lease, rental or as a service for the IT-BPM industry.
4. Satyam Pitroda popularly known as Sam Pitroda.

Exercise

🔒 Unsolved

Section A: (Objective Type Questions)

A. 1. c   2. b   3. c   4. b   5. d

B. 1. Digital India   2. eSign Framework
    3. Public services   4. Insurance
    5. National Scholarship Portal
    6. National Digital Library of India (ndl.iitkgp.ac.in)

C. 1. True   2. False   3. False   4. True
    5. True   6. False

Section B: (Subjective Type Questions)

A. 1.

Domestic Outsourcing	Offshore Outsourcing
(i) It is outsourcing services within the same country but may be located in a different city or a state.	(i) It is outsourcing services outside the company's own country.
(ii) The main advantage is you get a skilled team in the same time zone, that shares the same language and culture.	(ii) The main advantage may be better geographical area, political stability, skilled low-cost labour and better tax plans.

2. Some of the most commonly outsourced services of BPO are customer Support services like call centres, human Resource Management like Recruitments, payroll Management like Salary generation, etc.

3. BPM helps a business to:

   • Control the chaos at different levels.

   • Create, analyse and improve the business processes.

4. Integrated-centric BPM is a type of BPM model that focuses more on using computer-based application programming interfaces.

5. Some of the jobs done in libraries using IT:

   a. Many organisations and schools have their own digital library helping their students and staff by providing online resources and books.

   b. The books can be tracked and made available using the barcode reader.

6. ECG, MRI, CAT, Cardiac Echo, X-Ray machine, ultrasound

7. The applications launched by the government of India that me and my family have used are as follows-

   (i) DigiLocker

   (ii) MyGov.in

   (iii) Swachh Bharat Mission Mobile app

   (iv) Wi-fi Hotspot

8. Different ways of communication like postal mails, telephones, mobiles, emails, video conferencing, online chats, social networking websites, instant messaging, Internet Relay Chat facilities can help us connect with our friends in another country.

9. Some of the main applications in business are:

   a. IT has increased the productivity of industries and reduced the time required to achieve the desired goal.

b. The presence of the Internet has opened the gates to the rest of the world for Indian companies.

B. 1. Any two implications of IT in the entertainment industry are as follows-

    a. Many games are created by using animated software. These games can either be played online, through apps or through dedicated video game machines.

    b. Amazon, Netflix, Disney Hotstar and many more are live streaming services that use information technology to sell their content to the customers on a subscription basis.

2. Multinational Companies are organisations that have centralised head offices in their home country to coordinate the global spread of their factories and branches in different countries. Many multinational enterprises are based in developed nations like the U.S.A. India is becoming their operational hub due to low investment in capital and labour wages are lowest. They have their clients spread out globally.

3. Any four important projects under Digital India are-

    a. DigiLocker

    b. MyGov.in

    c. eSign Framework

    d. National Scholarship Portal

4. Any four applications of IT in the banking industry are as follows-

    a. Banks can reach out to more customers easily and provide better services to them through IT.

    b. Back-end operations such as Data storage, retrieval and analysis, Customer Relationship management, report generation, etc. are done efficiently using IT.

    c. Banks are also helping the customers with an auto payment facility to pay off their monthly bills like mobile bill, electricity bill, credit card payments etc.

    d. The development of world-wide networks has significantly reduced the cost of global funds transfer. This has helped a business to flourish with minimum hidden charges in the banking transaction.

5. The prominent areas where IT is used in science and engineering are:

    a. Doctors and microbiologists use computers to do detailed analysis of chemical balance inside the human body and helps in the diagnosis of different types of diseases.

    b. Satellites are the backbone of communication. It is of great importance in astronomy and space technology.

1. a. Digital marketing is an emerging technology where an Internet is used to reach the consumers by attracting them through online promotions, advertisements and marketing.

    b. Through social media channels, technology helps a company to interact with their customers, talk to them, and engage for better grasp on customer preferences, their behavior and purchase trends.

c. E-mails, blogs, social networking sites, etc., can be used to get direct feedback and create a good word of mouth in the market.

2. a. Document-centric BPM

b. Human-centric BPM

c. Integration-centric BPM

d. Document-centric BPM

e. Document-centric BPM

2. Data Entry and Keyboarding Skills

Quiz Bee

Page-170

1. d.   2. a.   3. b.

Exercise

Unsolved

Section A: (Objective Type Questions)

A. 1. c   2. a   3. d   4. c   5. d

B. 1. Typing ergonomics   2. PrtScr   3. Num Lock

4. Mouse   5. ON   6. https://rapidtyping.com.

7. Student statistics 8. Virtual keyboard 9. Ctrl+O   10. Characters Per Minute

C. 1. True   2. False   3. True   4. False

5. True   6. True   7. True   8. False

Section B: (Subjective Type Questions)

A. 1. No it will not show in the error overview as this tab displays the errors that had occurred during the lesson.

2. There are five default courses available in Rapid Typing software.

3. Options which is present on the Title bar contains options like language, background, text color, themes, shortcut keys, layouts, etc. which can be customised.

4. The virtual keyboard helps us learn typing using the touch typing method, by using all the ten fingers.

5. The result window shows your performance in the current lesson in terms of:
   • Overall rating
   • Speed
   • Accuracy
   • Slowdown

6. These keys are used to toggle between the two functions given to a key. For example, Caps Lock, Num Lock and Scroll Lock.

B. 1. QWERTY keyboard layout is the most efficiently designed standard keyboard layout used in countries that use Latin-based alphabets. This layout is seen in most of the PC's, laptops, virtual keyboards, smart TV, smartphones, etc. The name of this layout comes from the first six alphabets on the left side of the keyboard.

2.

Num Lock Key	Caps Lock Key
(i) It toggles the use of numbers on the numeric keypad.	(i) It works as a toggle key to switch between the capital letters or small letters at the time of giving an input to the computer.
(ii) If it is ON, then the numbers can be used, otherwise the alternate functions of the keys are performed.	(ii) If the Caps Lock key is ON, then capital letters are printed and if it is OFF, then small letters are printed.

3. The function of the enter key are as follows-
   a. Send a cursor on a new line
   b. Create a blank line.
   c. Start a new paragraph
   d. Submit a form
   e. Activate a selected option.
   f. Complete a process like opening a URL entered in the address bar of a browser window.

4. On a computer keyboard, keys 'F' and 'J' have a small raised tangible mark as an identifier for the touch typist, so that the user can place his/her fingers on the home row keys correctly. These two keys are called the guide keys for the left and the right hands, respectively.

5. When an object is selected by pressing the left mouse button and then it is moved and released at some other location, the motion is called the drag and drop. This operation is used to move an item or copy an object.

6. The four main components of the Statistics panel in Student Statistics are:

- Statistics Toolbar: It has buttons for selecting courses, removing selected statistics and customising the statistics display options.

- Course Diagram/Statistics: This shows the common statistics of all the lessons, of the current course.

- Lesson Diagrams/Statistics: This shows the complete statistics of each character of the selected lesson in the course diagram.

- Lesson Statistics Table: This shows the statistics of the selected lesson in the course diagram.

7. a. WPM (Words Per Minute) is the number of words typed in one minute, period of time. It is calculated as: WPM= (Words without errors + Words with errors) / Time spent in minutes.

   b. CPM (Characters Per Minute) is the number of characters typed in a minute's period of time. It is calculated as: CPM = (Characters without errors + Characters with errors) / Time spent in minutes.

   c. KPM (Keystrokes Per Minute) is the number of keystrokes in a minute's period of time. It is calculated as: KPM = (Keystrokes without errors + Keystrokes with errors) / Time spent in minutes.

8. To download the software free of cost, type in: https://rapidtyping.com in the address bar of any browser window. After the download is complete, unzip the files in a folder and run rapidtyping.exe. It will display the following steps in the configuration wizard as shown below:

   Step 1: Select Win for windows keyboard or Mac for mac keyboard.

   Step 2: Select the keyboard type from the list as Desktop.

   Step 3: Select the layout type as 104 keys (standard layout).

   Step 4: Choose Enter key: flat and Numeric pad type (say 1), that matches with your physical keyboard.

   Step 5: Choose the scheme of fingers position as Two hands.

   Step 6: Change the scheme colours in case you want.

   Step 7: Click on OK to complete the configuration setting wizard.

   The main window of the software will appear.

9. Statistics Panel, this area consists of three parts: Statistics toolbar has buttons for choosing courses, removing selected statistics and customizing the statistics display options. Course diagram show the common statistics for all lessons of the current course.

10. After every lesson you complete, the Rapid Typing Tutor displays your achievement in the lesson by showing your result in a separate window as shown below:

   The text area displays the horizontal lines made up of different colours.

   - Green colour in the line shows good results.

   - Red colour in the line shows bad results.

- Yellow colour shows the time frame exceeded by you.

- Orange colour shows an incorrect character typed and time frame for typing correct character exceeded by you.

The result window shows your performance in the current lesson in terms of:

- Overall rating
- Speed
- Accuracy
- Slowdown

Below the coloured horizontal lines, there are three tabs in the result window:

- Next step: This tab helps you to either go to the next lesson or try again the same lesson.
- Detailed Statistics: This tab displays in detail, the performance in the current lesson, in terms of typing speed, accuracy and keystrokes.
- Errors overview: This tab displays the errors that had occurred during the lesson. This will help you to better understand, which letters are still hard for you to learn typing, through touch typing method.

Competency-based/Application-based questions:

1. a. Net speed

    Net WPM = WPM - (Words with errors / Time spent in minutes)

    = 5 – (6/30)

    = 4.8 wpm

   b. Gross speed

    WPM = (Words without errors + Words with errors) / Time spent in minutes

    = 150/30 = 5 wpm

   c. Accuracy percentage

    100% – ((Words with errors × 100%) / Total number of words)

    =100 – 600/150

    = 96%

    Student statistics is displayed in the form of tables and charts, that helps you to view your progress and motivates you to take another lesson.

2. Some good ergonomic postures are as follows-

    a. The neck and the back should be relaxed and straight.

    b. Your feet should be flat on the ground. In case your feet do not touch the ground then put a proper footrest.

    c. The monitor should be placed at arm's length distance, or 20 to 30 inches away.

    d. Eyes should be at a level with the top line of the screen.

3. The different stages of touch typing are as follows-

Stage 1

It begins by learning to keep the fingers of both the hands on the Home Row keys followed by learning the keys of the lower rows, upper rows, number rows and special characters keys. This skill is learnt by feeling the keys with less movement of the eyes and each finger has to operate, only the key allotted to it.

Stage 2

In Stage 2 we learn to memorize the frequently used syllables and practice them for a few days by typing the words containing these syllables.

Stage 3

In Stage 3 we learn to type short stories from books or articles from the newspaper or any other piece of data, to get used to the above learned technique.

Stage 4

And finally in Stage 4 we learn the touch typing technique, however, we may be still lacking in perfection. So this final stage is the perfection stage where we practice the actual text, to perfect the skills acquired to increase your speed of typing with minimum errors.

4. The different functions of different clicks of the mouse are as follows-
   • Single click: Clicking the left mouse button once is used to select an option or an object.
   • Double click: Clicking the left mouse button twice executes or opens an object.
   • Right click: Clicking the right mouse button once performs the additional tasks in different programs.
   • Scroll: The mouse wheel rolls the mouse to scroll up and down on the screen.
   • Hover: This movement is used to move the pointer over an object and remain there without clicking it. In some programs, it helps you to read the tooltip text.
   • Drag and drop: When an object is selected by pressing the left mouse button and then it is moved and released at some other location, the motion is called the drag and drop. This operation is used to move an item or copy an object.
   • Select: Clicking the left mouse button while holding down the shift key helps to select a portion of the text. This may be done either to highlight the text or to perform some other operation on the selected block.

3. Digital Documentation

Quiz Bee

Page-198

1. Status bar is located at the bottom of the OpenOffice Writer interface.

2. Standard Toolbar has buttons to basic standard functions like open and save.

3. WYSIWYG stands for What You See Is What You Get.

4. The Zoom Slider with a Zoom Percent allows you to view the document in a scalable mode i.e. if you wish to enlarge the screen to see the picture and the document in enlarged version then this scale is highly helpful.

Quiz Bee

Page-238

1. Merging means combining two or more cells to form a single cell.

   Splitting cells means dividing one cell into two or more cells.

2. Preview Next : It displays the right page of the current page opened in Page Preview.

3. Special characters like ¶, ↔, µ, etc., which cannot be typed by using the keyboard can easily be added by selecting Insert → Special Character. It will open a window with special characters available in OpenOffice Writer.

4. To delete one or more rows, perform the following steps:

   Step 1: Place the cursor or select the row you want to delete.

   Step 2: Right-click on the row and select the Rows → Delete from the shortcut menu

   OR

   Select the Table → Delete → Rows.

Exercise

Unsolved

Section A: (Objective Type Questions)

A. 1. c　　　　2. b　　　　3. a　　　　4. c　　　　5. c
    6. c　　　　7. b　　　　8. c　　　　9. a　　　　10. b

   11. This ques is wrongly printed in book. The correct one is:

       The automatically flow of text on the new line is called word wrap.

       b

   12. c

B. 1. Formatting　　2. Cell　　　3. Save　　　4. Page Preview　　5. Picture

C. 1. False　　　　2. False　　　3. True　　　4. True　　　　5. False

Section B: (Subjective Type Questions)

A.
1. Find and replace. The shortcut command used for it is: Ctrl+F

2. This Question given in book is wrong. Replace the question by:

   Ques-What is character formatting?

   Ans- Character Formatting includes manipulation of size, colour, position and attributes of character.

3. Two documents that are essential for mail merge are as follows:

   a. Main Document

   b. Data Source

4. Any three important features of word processor are-

   a. Easy Typing and Word Wrapping Feature

   b. Saved, Stored and Retrieved when Required

   c. Spelling and Grammar Check

5. A word processor is an application software which is commonly used to create, edit, format, and print a document. It can help us create letters, applications, resumes, articles, poems, booklets, advertisements, invitations, and many more things.

6. The steps to undo a task are as follows-

   Step 1: Click on Edit → Undo option from the menu bar.

   OR

   Click on the Undo button present on the standard toolbar. This button has a drop-down arrow to allow you to undo multiple previous actions.

   Step 2: Just click and hold the arrow key, a list of all the separate actions performed will appear. You can select as many actions as you want to undo.

7. The various software available for word processing are:

   Office 365 Word, Microsoft Word, OpenOffice Writer, Word Pad, LibreOffice Writer and Google Docs.

8. The two different ways of using spell check are as follows-

   a. AutoSpellCheck

   This works as an indication that we need to rectify the spelling error. When we type a word, it is automatically checked, and in case there is a spelling error, it displays a wavy red line under the word.

   b. Spelling and Grammar

   This checks the document or selection and opens the Spelling dialog box if any misspelled words are found. The suggested correct words list gets displayed in the dialog box.

9. We can remove the existing format on the text by doing the given steps:

Step 1: Select the text.

Step 2: Click on Format, then select the Default Formatting option from the menu bar.

<div align="center">OR</div>

Right-click to open the shortcut menu and select the Default formatting option. After the existing formatting is removed you can apply a fresh new format as per your need.

10. To count the total number of words:

Click on Tools menu > Word count

B. 1. Text editor provides the ability to add, change, and remove characters from a file. Some text editor software in the market are textpad, notepad, etc.

Word processor has numbers of options onto which you can format the text or document. Some word processing software in market are Office 365 Word, Microsoft Word, etc.

2. The various ways of changing a case of the text in a document are as follows-

a. Sentence Case: This option enables you to keep the first alphabet of every sentence in upper case.

b. Lower Case: This option enables you to keep every alphabet of the sentence in lower case.

c. Upper Case: This option enables you to keep every alphabet of the sentence in upper case.

d. Capitalize Every Word: This option enables you to keep the first alphabet of each word in a sentence in upper case and remaining in lower case.

e. Toggle Case: This option enables you to change the upper case alphabet to lower case and vice versa.

3. The default extension of the file saved is ODF Text document .odt.

To save a new document you can do any of the following:

• Choose File → Save

• Choose File → Save as

• Click the Save icon on the standard toolbar

• Press Control + S

These actions will open the save as dialog box, from which you can enter the filename, verify the filetype and destination location, and click Save .

To save a current document with the same filename, choose File → Save.

4. Thesaurus is a special tool that provides synonyms (different words with the same meaning) and antonyms (words with the opposite meaning) for the selected word. The steps to use are:

Step 1: Click on the Tools bar, then select the Language option. After that, select the Thesaurus option.

<div align="center">OR</div>

Right-click on a word to open the shortcut menu and select the Synonyms option from the menu after that select the Thesaurus option.

Step 2: Select a suitable word from the list of Alternatives. The word will appear in the Replace with text box.

Step 3: Click on Replace button.

5. Do it yourself

6. The Find and Replace option is used to locate a specific text in a document and in case required it can be replaced also. The steps to use it are as follows-

Step 1: Click on Edit → Find & Replace option or press Ctrl + F using keyboard. The Find & Replace dialog box appears.

Step 2: Type the text you want to find in the Search for box.

Step 3: To replace the text with different text, type the new text in the 'Replace with' box.

Step 4: You can check 'the Match case' check box if you want to match the word with uppercase/lowercase.

Step 5: You can check the 'Whole words only' check box if you want to search for the whole word and not a part of any other word.

Step 6: Since both the above are checkbox then you can select both the options together, it will search for the whole word only and will match the specified case also.

Step 7: When you have set up your search, click on 'Find button' to search for the first occurrence of the word or click on the 'Find All' button to select all the occurrences of the specified searched word in the given document.

Step 8: After the text is found we have a choice of replacing it with a new word only at the first match by selecting the 'Replace' button or replacing all the matches with the new word by clicking the 'Replace All' button.

7. Selecting any text is required for performing actions like cut, copy, move, colour change, size change, etc. on it. The text selection can be done for non-consecutive text as well as vertical block of text.

To select a paragraph,

Step 1: place the cursor before the starting of the paragraph.

Step 2: Click the left mouse button and drag it till the end of the paragraph.

The paragraph is selected.

8. Margin is the distance of the text from the edges of the paper. There are four types of margins:

a. Left Margin: the distance of the text from the left edge of the paper.

b. Right Margin: the distance of the text from the right edge of the paper.

c. Top Margin: the distance of the text from the top edge of the paper.

d. Bottom Margin: the distance of the text from the bottom edge of the paper.

9. Do it yourself

10. The Save with a password option is selected in the Save As dialog box in case you want to assign a password to open a file. After this option is selected then a dialog box appears where you give a password which can be used at the time of opening a file.

11. Do it yourself

Competency-based/Application-based questions:

1. a. John can insert images in his document that are stored in the hard disk or external storage such as Pen drive, CDs or in google drive.

   b. Using the Graphics mode in the Picture Toolbar will give the images a grayscale effect.

   c. He can use objects like squares, rectangles, arrows, callouts, etc. by using the Drawing toolbar which is present in the toolbars option of the View menu and the Special Character option of the Insert menu.

   d. To group few objects together:

   Step 1: Select few objects from Drawing Tool bar.

   Step 2: Select the Selection Tool from Drawing tool bar. Drag the mouse over the objects to select them together.

   Step 3: Right click on it and select the Group option. The objects will be grouped together.

2. a. The steps to write the chemical formula (subscript) are as follows:

   Step 1: Select the text.

   Step 2: Click on the Format menu and select the Character option from the options. 'Character' dialog box will appear on the screen.

   Step 3: Click on the Position tab.

   Step 4: Select the Subscript option from the Position section. The selected text will appear below the baseline.

   b. This option lets you repeat the last change made in the document.

   Click on Edit → Undo option from the menu bar.

   OR

   Click on Undo button present on the standard toolbar.

   c. The Save with a Password option present in the Save As dialog box will save his document with a password at the end.

   d. The Find and Replace option will help him replace the word 'hello' with 'bye'.

   e. The non-printing character for enter key is ¶.

3. a. The university should use the Mail Merge feature of Word Processor to accomplish this task.

b. Two advantages of Mail Merge are:

(i) It is the process of merging a Main Document with the Data source file to create form letters that can be invitations, letters, mailing labels, or printing certificates for several people.

(ii) This process is automated by sending bulk mail to several people in a fraction of the time.

c. The three files created in this process are:

(i) Main Document   (ii) Data Source   (iii) Merged File/Form Letter

4.   a. The Mail Merge feature of the OpenOffice document will help her create and send 200 invitations in a few minutes.

b. The three files created in this process are:

(i) Main Document

(ii) Data Source

(iii) Merged File/Form Letter

c. We can start with the steps using the Mail Merge Wizard option of the Tool menu.

d. Two advantages of Mail Merge are-

(i) It is the process of merging a Main Document with the Data source file to create form letters that can be invitations, letters, mailing labels, or printing certificates for several people.

(ii) This process is automated by sending bulk mail to several people in a fraction of the time.

e. The extension of the file created would be .odt.

5.   Inserting page number feature will be used.

4. Electronic Spreadsheet

Quiz Bee

Page-268

1.   J12   2. P10   3. AE26   4. AM15

Quiz Bee
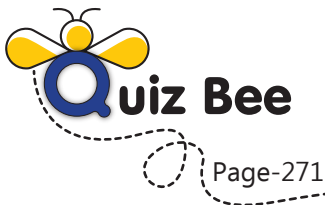
Page-271

1.   A1   2. AMJ   3. AMJ1048576   4. 1
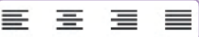
a. 146   b. 24   c. 17.67   d. 8

The default alignment of the data in a cell can easily be changed by using the alignment tools ≡ ≡ ≡ ≡ (left, center, right and justified) present on the formatting toolbar or by using the Format menu.

The cell number given in the question is wrong. The correct question is:

Complete the following spreadsheet. Use Fill Handle wherever possible to automate the data entry. G2 should be the sum of the values from C2 to F2. Drag the Fill Handle to copy this formula till G6. H2 should be the average of the values from C2 to F2. Copy this formula till H6 using the Auto Fill feature.

	A	B	C	D	E	F	G	H
1		City	Rainfall June, 21	Rainfall July, 21	Rainfall Aug, 21	Rainfall Sep, 21	Total	Average
2	1	Delhi	125	150	135	89		
3	2	Gurugram	119	152	135	75		
4	3	Noida	108	152	127	66		
5	4	Faridabad	99	145	123	68		
6	5	Ghaziabad	99	148	125	73		
7								

Ans.

	A	B	C	D	E	F	G	H
1		City	Rainfall June, 21	Rainfall July, 21	Rainfall August, 21	Rainfall September, 21	Total	Average
2	1	Delhi	125	150	135	89	499	124.75
3	2	Gurugram	119	152	135	75	481	120.25
4	3	Noida	108	152	127	66	453	113.25
5	4	Faridabad	99	145	123	68	435	108.75
6	5	Ghaziabad	99	148	125	73	445	111.25
7								

Exercise

Section A: (Objective Type Questions)

A. 1. c   2. b   3. a   4. a   5. d
    6. d   7. b   8. a   9. a   10. b
    11. a   12. d   13. c

B. 1. Name Box   2. Input Line   3. Cell Address   4. Column
    5. Status Bar

C. 1. False   2. False   3. True   4. False   5. True
    6. True   7. False

Section B: (Subjective Type Questions)

A. 1. Any two operations performed on data in a spreadsheet are:

    Formula: An expression that begins with an "=" sign is called a formula in a spreadsheet. It can have a value, cell address or function.

    Function: It adds a formula to the current cell.

2. It is advantageous to use an electronic spreadsheet as it stores numeric data in an organised form so that the calculation and analysis of the data can easily be done.

3. The three types of referencing methods in a spreadsheet are:
    a. Relative Referencing
    b. Absolute Referencing
    c. Mixed Referencing

4. Spreadsheet: The electronic spreadsheet program is used for storing numeric data in an organised form so that the calculation and analysis of the data can easily be done.

    Worksheet: A file in the OpenOffice Calc is known as a worksheet. The default name of the worksheet is "Untitled1". Initially, it has three sheets (or sheet tabs) and more can be added or subtracted later as per the need.

    Sheet: A sheet is a single page that contains its own collection of cells to help you organize your data.

5. The Autofill feature helps us fill a predictable series automatically in a range of cells using the fill handle. This series could be a sequence of digits, months, days, time, etc. It can also be used to copy a formula to a continuous range of cells, thus saving our time and effort of writing long and complex formulae again and again.

6. a. 0

   b. =C20-D20

   The reason for answer 0 is both the cells are empty.

7. The various types of chart are:

   Column Chart: It displays the data with categories represented by a vertical rectangle. It helps in comparing a number of items and trend analysis.

   Line Chart: It displays the data series plotted as a separate line. It helps to show the changes or trends over time and can handle more categories and data points without becoming cluttered.

   Bar Chart: It displays the horizontal bars with the axis values. It helps to show changes over time or differences in size, volume, or amount.

   Pie Chart: It displays a circular chart cut by radii into segments, with each slice of pie showing the size or percentage of that slice relative to the whole pie.

   XY Scatter Chart: It displays the chart which has a Horizontal (x) value axis and a Vertical (y) value axis. It helps to show and compare numeric values like scientific, statistical, and engineering data.

8. A3=2, B3=3, C3=1

   D3 = A3+B3/C3

   D3 = 2+3/1 = 5

   a. A3=5

      D3 = 5+3/1 = 8

   b. D3 = 2/1 = 2

9. Yes more than one mathematical operators are included in a formula. For example:

=10+2*4^2/2

B.   1. **Row Range:** The selection of cells done row-wise horizontally will form a row range. In the given figure, the row range starts from cell D5 to cell H5. It is represented as D5:H5.

Column Range: The selection of cells done column-wise vertically will form a column range. In the given figure, the column range starts from cell C3 to cell C10. It is represented as C3:C10.

2. a. A1=20, B1=3

Formula= A1+B1*2^3

= 20+3*2^3

= 20+24 = 44

b. –40

c. The formula copied to in cell E3 will be =$B3+D3.

3. She can use the Column chart to compare the data diagrammatically. Any two types of charts are:

a. Column Chart

It displays the data with categories represented by a vertical rectangle. It helps in comparing a number of items and trend analysis.

b. Bar Chart

It displays the horizontal bars with the axis values. It helps to show changes over time or differences in size, volume, or amount.

4. An expression that begins with an "=" sign is called a formula in a spreadsheet. It can have a value, cell address or function. The equal sign indicates that the following part after the equal sign is a formula and not just a name or number. A formula can be directly entered in a cell or by typing it in an Input line of the formula bar. An expression without an equals "=" sign is treated as text and no calculations will be done. For example, A1+B1+10 will not give any answer because it is not preceded by an "=" sign.

5. The Autofill feature helps us fill a predictable series automatically in a range of cells using the fill handle. The steps to use it are as follows:

Step 1: Type in the cells the first two numbers of the series, i.e., 11 and 22.

Step 2: Select the two cells you just typed in.

Step 3: Move the cursor to the bottom right corner of the selection, you will see that the cursor changes to a thin plus sign (+). This thin plus sign is called a fill handle.

Step 4: Click and hold the left mouse button and drag the fill handle over the cells you want to fill. Here, drag the fill handle to the right (or down) to fill in the series.

6. A new workbook displaying the active worksheet 'Sheet1' is the default name of the worksheet. A sheet can easily be renamed by using the given steps:

Step 1: Double click on the sheet tab. It will open the Rename Sheet dialog box.

Step 2: Delete the existing sheet name and type a new name.

Step 3: Press the Enter key.

7. Using a cell address in a formula or a function is known as a cell reference. The dollar sign ($) is used in front of a column name and a row number to make it an absolute cell referencing like A10, F12, etc.

8. **Min():** It returns the minimum value out of the given values. Let us find the minimum price of an article in the given worksheet.

	A	B	C	D	E	F
1						
2						
3			MY SHOPPING LIST			
4						
5		Article	Quantity	Price Per Unit	Amount	
6		Trousers	2	3500	7000	
7		T-Shirts	3	2000	6000	
8		Shoes	3	4200	12600	
9		Socks	4	1500	6000	
10		Jeans	2	5000	10000	
11		Total	14	16200	41600	
12						
13		Max. Quantity Purchased		4		
14		Min. Price of an Article		1500		
15		Average Price of an Article		3240		
16		Count of the Article Purchased		5		
17						

=min(D7:D11)

OR

=min(D7;D8;D9;D10;D11)

OR

=min(D7:D9;D10:D11)

OR

=min(D7:D10;D11)

Competency-based/Application-based questions:

1. a. Pg Dn   b. Ctrl + F2   c. Shift + Ctrl + F5

   d. Ctrl + F2   e. End

2. a. 3000   b. drag the fill handle   c. 8300   d. Blazer

   e. T-Shirt   f. 5840   g. 9

h.

Chart Title
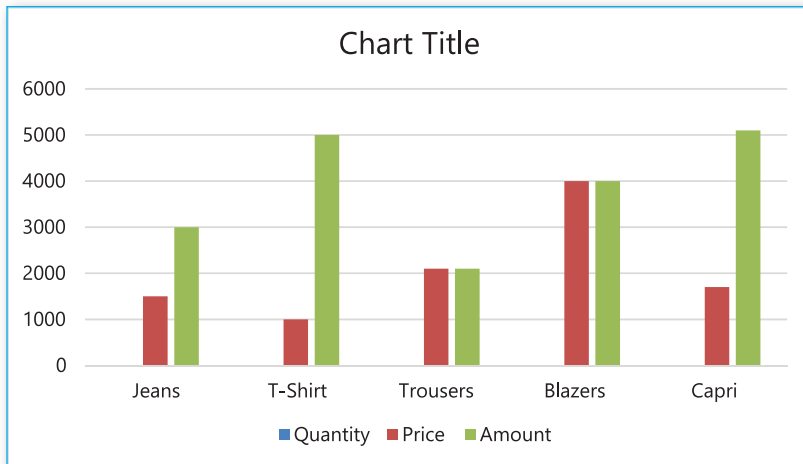
3. a. The shopkeeper can use the function Min() to find the lowest quantity of the item in the stock.

b. The function Sum() can be used to add the price of the total stock.

c. The function Average() can be used to find the average price of the stock.

d. The function Max() can be used to find the highest price stock.

4. **Step 1:** Type in the cells the first two numbers of the series, i.e., 1 and 2.

   Step 2: Select the two cells you just typed in.

   Step 3: Move the cursor to the bottom right corner of the selection, you will see that the cursor changes to a thin plus sign (+). This thin plus sign is called a fill handle.

   Step 4: Click and hold the left mouse button and drag the fill handle over the cells you want to fill. Here, drag the fill handle to the right (or down) to fill in the series.

5. a. Same as the answer of Q4

   b. Align Center Horizontally: It aligns the selected text to the center of the cell.

   c. **Step 1:** Select a cell and right click on it. A dialogue box opens up

   Step 2: Under numbers tab, in Format code write the desired format of birthdate you want. Click the tick mark. The desired format will get inserted.

   d. The extension of a file in Calc is .ods

6. a.

	A	B	C	D	E	F
1	Name	Basic	HRA	DA	PF	Net Salary
2	Surinder	50000	20000	32500	600	101900
3	Kanika	56000	20000	34000	600	109400
4	Aashish	35000	15000	23750	400	73350
5	Harjit	45000	15000	26250	500	85750
6	Abhijit	60000	25000	40000	700	124300
7	Jyoti	75000	30000	48750	700	153050
8	Amita	25000	10000	16250	300	50950
9	Max Net Salary					153050

b.

F
Net Salary
101900
109400
73350
85750
124300
153050
50950
153050

c. 153050

d.
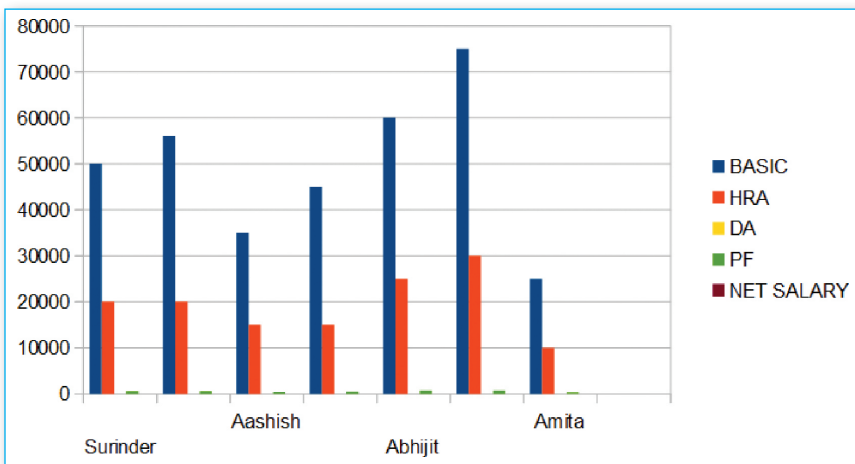
5. Digital Presentation

Page-328

1. A presentation can have the given elements:

   a. Title, Subtitle

   b. Text box to write text with bullets and numbering

   c. Audio

   d. Charts/Graphs

e. Video and animations

f. Shapes, Diagrams,3D Objects

g. Tables

2. The steps to save the presentation are as follows:

Step 1: Click on File menu from the Menu bar.

Step 2: Select the Save option.

OR

Click on the Save button on the Standard toolbar.

Step 3: Specify the location by selecting the folder and subfolder and giving the name of the file.

Step 4: Click on the Save button. The extension of the presentation saved is .odp.

3. Empty presentations helps you create a presentation from the beginning.

Exercise

Unsolved

Section A: (Objective Type Questions)

A. 1. a   2. c   3. c   4. b   5. d

6. b   7. c   8. a   9. c   10. d

B. 1. False   2. False   3. True   4. True

5. True   6. True   7. False   8. False

Section B: (Subjective Type Questions)

A. 1. The speed of a presentation can be Fast, Medium or Slow.

2. a. Save As feature will help him saving a professional presentation without devoting much time.

b. Ketan should use the Slide Transition feature to set how a slide appears and disappears on screen when he runs the slide show.

3. In Slide Sorter View, the user can view more than one slide in a small size on the screen. The number of slides that gets accommodated on the screen depends on the monitor and the percentage of Zoom. The slide number appears at the bottom, towards the right corner of each slide. The user can also rearrange the order of slides which are numbered according to the sequence of the presentation.

4. The F5 function key is used to run a slide show.

5.

Custom Animation	Slide Transition
(i) Animation of the different elements like charts, images, text, bullets, etc. of the slide is called custom animation.	(i) A Slide Transition describes the effects on the slides when one slide follows the next in a presentation during a slide show.
(ii) We use Normal View to apply custom animation on the elements.	(ii) Slide transitions can be added to the slides in the Normal View and Slide Sorter View.

6. odp is the extension of OpenOffice presentation.

7. The Slide Master feature is used to add the logo of the company at the bottom right corner of all the slides.

8. The slide pane contains thumbnails of the slides of a presentation in sequence of display. If any one of the slides in this pane is clicked, that particular slide opens in the workspace.

9. The important points to be considered while making an effective presentation are:

a. On one slide maximum of 4–5 lines with fewer words and appropriate font size should be written.

b. The font size of the content should be big enough for the audience to read.

c. Correct use of grammar and language

d. The tools like images, drawings, callouts, tables and graphs should be used to enhance the visual effects of the presentation.

e. Avoid using dark colours throughout and a lot of colour variants in a presentation.

f. Too many videos and animations will reduce the impact of the presentation.

B. 1. a. slide sorter view   b. Automatically after

c. custom animation

2. a. The Notes Page view displays two sections—the upper section has a miniature of the slide, and the lower section has an area for writing notes on the slide.

b. It gives you an idea of how many slides will fit on a page when a printout is taken.

c. The user can view more than one slide in a small size on the screen.

3. a. To open Slide Master,

Click on View → Master → Slide Master.

b. The steps to add a slide transition are:

Step 1: Select the slides on which the transition is to be applied. In case you want to apply the transition to all the slides then do not select any slides.

Step 2: Select the Slide Show → Slide Transition option from the menu bar.

OR

Click on the Slide Transition icon in the Slides pane of the Normal View or Slide Sorter view. Slide Transition pane appears.

Step 3: Choose the desired transition effect. In this case, we have selected the Wipe Left effect.

Step 4: When you select any transition effect from the Slide Transition pane, some properties get active under the following two sections:

• Modify Transition

• Advance Slide

Step 5: Click on the Slide Show button. The slide transition effect appears on the slide.

c. The steps to run a presentation are as follows:

Click on the Slide Show icon on the Presentation toolbar.

OR

Click on View → Slide Show.

d. The steps to open Slide Sorter View are as follows:

Step 1: Click the View tab

Step 2: Click the Slide Sorter button. Then, we can open Slide Sorter View.

e. The steps to add an image to a slide are as follows-

Step 1: Click on Insert → Picture → From File option. The Insert Picture dialog box appears.

Step 2: In the Insert Picture dialog box, select the file from the folder and subfolder containing the picture file.

Step 3: Click on the Open button to place the picture on the current (selected) slide. The picture is now displayed on the slide with green resizing handles around it.

f. The steps to apply an animation effect are:

Step 1: Select the desired slide in the Normal View.

Step 2: Select the text or object you wish to apply a custom animation. Let us choose an image. This will select the image with green handles on its edges.

Step 3: Click on Slide Show → Custom animation option from the menu bar.

OR

Right-click on the image to open and select the 'Custom animation' option from the context menu. The Custom Animation pane appears in the right-hand side.

Step 4: Click on the Add button under the Modify effect section.

Step 5: It will open another window as shown. This window contains five categories of animations which are as follows-

- Entrance

- Emphasis

- Exit

- Motion Paths
- Misc Effects

Step 6: Select the desired animation. In this case, we have selected Circle animation from the Entrance category.

Step 7: Click on the OK button.

Step 8: Once you click on the OK button. The properties of the selected animation gets active in the Custom Animation pane.

g. The steps would be the same as the steps to open Slide Master.

4. The advantages of using a presentation are:

a. A presentation is a method of communication for the purpose of sharing ideas and information through visuals.

b. Good presentation skills will help you create presentations with innovative ideas and will make them interesting for the audience.

5. a. Alt+ F4   or   Ctrl+Q   b. Ctrl + [c. CTRL + SHIFT + P

d. Ctrl+U   e. Ctrl+E   f. Ctrl+B

g. Shift+Tab   h. Ctrl+O   i. F1

j. Ctrl+Alt+Shift+G

6. a. In slide view, you can see your presentation in different views. These views help you to focus on the content of the slide through different aspects whereas in slide sorter view the user can view more than one slide in a small size on the screen. The number of slides that gets accommodated on the screen depends on the monitor and the percentage of Zoom.

b.

Custom Animation	Slide Transition
(i) Animation of the different elements like charts, images, text, bullets, etc. of the slide is called custom animation.	(i) A Slide Transition describes the effects on the slides when one slide follows the next in a presentation during a slide show.
(ii) We use Normal View to apply custom animation on the elements.	(ii) Slide transitions can be added to the slides in the Normal View and Slide Sorter View.

c. Grouping helps you to select multiple shapes together whereas to ungroup the shapes and work as separate ungrouping option is used.

d. A presentation is a method of communication for the purpose of sharing ideas and information through visuals whereas a page in a presentation is known as a slide. When you run your Slide Show, then the slides appear one at a time on a screen.

e. We need to write points in our slides. If the sequence of the points is important, then use numbering otherwise use bullets.

7.   Perform the following steps to insert a picture from a file:

Step 1: Click on Insert → Picture → From File option. The Insert Picture dialog box appears.

Step 2: In the Insert Picture dialog box, select the file from the folder and subfolder containing the picture file.

Step 3: Click on the Open button to place the picture on the current (selected) slide. The picture is now displayed on the slide with green resizing handles around it.

<div align="center">or</div>

Perform the following steps to draw a shape:

Step 1: Click on the Basic Shapes icon from the Drawing toolbar. All the available shape tools appear.

Step 2: Click and drag it till the point the shape needs to be drawn.

Step 3: Release the button and see the selected shape with the default setting visible on the slide. The shape drawn will have green handles around with properties displayed on the right side of the screen in the Property pane. You can use the property window to change the properties.

8.   a. Each slide created in a presentation has a notes page. Select the slide on which you wish to add notes. The Notes Page view displays two sections—the upper section has a miniature of the slide, and the lower section has an area for writing notes on the slide.

There is a text box just below the slide. Click on 'Click to add notes' and type the notes here.

b. Perform the following steps to do so:

Step 1: Click on the Format menu.

Step 2: Select the Bullets and Numbering option. The Bullets and Numbering dialog box appears with Bullets tab selected.

Step 3: Select the desired bullet style.

Step 4: Click on OK button.

c. The steps to group multiple shapes are as follows:

Step 1: Click on the selection tool and draw a rectangle around the multiple shapes to be grouped. You can also select multiple shapes by clicking them all while the shift key is pressed.

Step 2: You will notice green resizing handles around all the shapes. Now select Format → Group → Group or right-click on the group to open the context menu → select Group.

Competency-based/Application-based questions:

1. a. Custom animation
   b. Slide master
2. To run a slide show :
   Click on View tab > Slide show
   The shortcut key to run slide show is F5.
3. a. charts
   b. By adding transition effects to the slides
   c. Import table
   d. Print preview
   e. Avoid excess content