

# COMPUTER APPLICATIONS IN BUSINESS – 2013

[MODIFIED AS PER THE SYLLABUS OF BCH 4.3]

Name of the Course : B.Com. (Hons.) CBCS

Name of the Paper : Computer Applications In Business

Attempt All questions.

## PART A

Q. 1. State True/False. Give reasons for the following three: 10

- (a) ASCII-7 is capable of representing 128 unique characters.
- (b) An object in MS-Excel document can be embedded in MS-Word document.
- (c) SQL is short for static question language.

Find out:

- (d) Binary equivalent of Decimal number (325=?)
  - (e) Decimal equivalent of Binary number (10101010=?)
- Ans. (a) True. The given statement is true. ASCII is a 7-bit code and can accommodate 128 different characters.
- (b) True. This statement is true. MS-Word allows objects from various other programs including MS-Excel to be embedded in MS-Word document.
- (c) False. Structured Query Language is the short form of SQL.
- (d) Decimal to Binary 325

So we use repeated division method:

2	325	MSB
2	162 → 1	
2	81 → 0	
2	40 → 1	
2	20 → 0	
2	10 → 0	
2	5 → 0	
2	2 → 1	
	1 → 0	LSB

= 101000101

(e) Binary to Decimal so

101 01 010

$$\Rightarrow 1 \times 2^7 + 0 \times 2^6 + 1 \times 2^5 + 0 \times 2^4 + 1 \times 2^3 + 0 \times 2^2 + 1 \times 2^1 + 0 \times 2^0$$

$$\Rightarrow 128 + 0 + 32 + 8 + 2 = (170)_{10}$$

Q. 2. (a) What are CAAT tools and their types?

(b) What are the various types of audit programs? 10

Ans. (a) See Q. 1, Unit V. [Page 56

(b) Types of audit programs are: See Q. 2, Unit V. [Page 56

Or

(a) What are the uses of Audit softwares?

(b) Discuss briefly the advantages of CAATs. 10

Ans. (a) The uses of audit software are:

- (i) Calculation checks. Example, Program gives the total amount of

individual entries in purchases day book in a particular period. Auditors then agree this total amount to the amount posted in purchases ledger control account.

- (ii) **Detecting system violation rule.** Example, Program checks that no customer has balance above specified credit limit.
  - (iii) **Detecting unreasonable items.** Program checks that no customer has discount of 50%, or sales ledger balance (i.e., debtors balance) is more than the amount of sales made to that customer.
  - (iv) **New calculation and analysis.** Example, statistical analysis of inventory movements to identify slow moving items.
  - (v) **Selecting items for audit testing.** Example, obtaining a stratified sample of sales ledger balances to be used as a basis for a circularization of debtors.
  - (vi) **Completeness checks.** Example, checking continuity of sales invoices to ensure that they are all accounted for.
- (b) **Advantages of CAATs:** CAATs allows the auditor to –
- (i) Independently access the data stored on a computer system without dependence on the client;
  - (ii) Test the reliability of client software, i.e., the IT application controls (the results of which can then be used to assess control risk and design further audit procedures);
  - (iii) Increase the accuracy of audit tests; and
  - (iv) Perform audit tests more efficiently, which in the long-term will result in a more cost effective audit.

Q. 3. (a) How are cells formatted in MS Excel? Explain with the help of an example. 10

(b) What are the steps followed to change cell alignment and fonts in MS Excel?

Ans. (a) See Q. 18, Unit II.

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(b) Steps to change Cell Alignment: See Q. 19, Unit II.

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Or

(a) What are the various options of creating a new power point presentation?

(b) What are the different views that MS PowerPoint demonstrates?

Ans. (a) See Q. 20, Unit II.

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(b) See Q. 21, Unit II.

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Q. 4. (a) What is a Primary Key? Is it mandatory to have primary key for a table?

(b) What is meant by Queries? Explain the steps required with example. 10

Ans. (a) See Q. 11, Unit IV.

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(b) **Queries** are basically questions about the data in a database. A query consists of specifications indicating which fields, records and summaries you want to see from a database. Queries allow users to extract data based on the defined criteria. A simple query can be created by using SELECT Statement. The SELECT statement is used to select data from a database. The result is stored in a result table, called the result-set.

For example, SELECT column\_name(s) FROM table\_name and SELECT \* FROM table\_name.

Attempt any two of the following:

(a) Explain the different Tab options in MS-Word.

(b) What is the difference between Formula and Function in MS-Excel? What are the steps involved to insert a function in the MS-Excel?

(c) What is the use of Animation Pane in MS-PowerPoint?

Ans. (a) Using Tabs is often the best way to control exactly where text is to be placed. By default every time we press the *tab key*, the insertion point moves *half an inch* to the right. By adding *tab stops* to the ruler, we can change the size of the *tabs*, and even have more than one type of alignments in a single line.

The Tab selector is above the vertical ruler on the left.

The types of Tab stops include:

- (i) **Left Tab**  left aligns the text at the tab stop.
- (ii) **Centre Tab**  centres the text around the tab stop.
- (iii) **Right Tab**  right aligns the text at the tab stop.
- (iv) **Decimal Tab**  aligns the decimal numbers using the decimal point.
- (v) **Bar Tab**  draws a vertical line on the document.
- (vi) **First line Indent**  inserts the indent marker on the ruler and indents the first line of text in a paragraph.
- (vii) **Hanging Indent**  inserts the hanging indent marker and indents all lines other than the first line.

We can also remove a tab stop just by dragging it off the Ruler.

(b) See Q. 3(Or)(b), 2012.

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(c) **Slide Show Animation.** See Q. 24, Unit II.

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### PART B

Q. 5. Explain RAND function of MS-Excel. If some data is to be generated between 1 and 100, how will you write the formula? 5

Ans. Rand X function generates a random number between 0 and 1. Its syntax is = RAND() with no arguments but one must still enter empty parentheses after the function name. The result changes with each sheet recalculation.

For example, if RAND () is entered in any cell the output will be any number, between 0 and 1 such as 0.543217.

To generate a random real number between a and b,  $RAND () * (b - a) + a$   
Random number between 1 and 100 can be generated by:

$$= RAND () * (100-1) + 100$$

Q. 6. (a) Calculate HRA for the following by using If condition as given below:

	A	B	C
1	Designation	Salary	HRA
2	Manager	33,000	
3	Manager	43,000	
4	Trainee	9,000	
5	Trainee	11,000	
6	Supervisor	22,000	

Salary	HRA on Salary
<10,000	10%
10,000-25,000	15%
25,001-35,000	20%
>35,000	25%

(b) Write the syntax of the following functions:

- (i) **RANDBETWEEN** (ii) **SLOPE**  
 (iii) **ROUNDUP** (iv) **PPMT**  
 (v) **IF**

5+10

Ans. (a) Calculate HRA using if condition as given below:

Insert in cell C2 = IF (B2 < 10,000, 0.10\*B2, IF (B2<25,000, 0.15\*B2, IF(B2<35,000, 0.20\*B2, 0.25\* B2))).

This formula will then be copied on to range C3:C6.

(b)(i) **RANDBETWEEN**. Syntax: =RANDBETWEEN(bottom, top), where bottom is the smallest and top is the largest integer, inclusive. The result changes with each sheet recalculation.

(ii) **SLOPE**. Syntax: SLOPE (known Y's, known X's)  
 Known Y's is an array or cell range of numeric data points.  
 Known X's is the set of independent data points.

(iii) **ROUNDUP FUNCTION** rounds a number up, away from 0 (zero). Its syntax is =ROUNDUP(number,num\_digits). Where, Number is any real number that is to be rounded up. Num\_digits is the number of digits to which number is to be rounded up. If num\_digits is less than 0, then number is rounded up to the left of the decimal point.

For example, =ROUNDUP(3.2,0) rounds 3.2 up to zero decimal places and output is 4.

=ROUNDUP(76.9,0) rounds 76.9 up to zero decimal places and output is 77.

=ROUNDUP(3.14159, 3) rounds 3.14159 up to three decimal places and output is 3.142.

=ROUNDUP(31415.92654, -2) rounds 31415.92654 up to 2 decimal places to the left of the decimal and answer is 31500.

(iv) **PPMT**. See Q. 17, Unit III.

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(v) **IF**. It returns one value if a condition you specify evaluates to *True* and another value if that condition evaluates to *False*.

Syntax: IF (logical-text, [value-if-true], [value-if-false]).

Or

(a) Explain the different data types used in MS-Excel.

5+10

(b) Write the appropriate formula considering the following information:

	A	B	C
1	Name of Product	Month	Sales (₹)
2	Soap	JAN.	20,000
3	Hair Oil	FEB.	11,000
4	Perfume	MARCH	33,000
5	Soap	FEB.	22,000

6	Perfume	JAN.	40,000
7	Hair Oil	MARCH	11,000
8	Soap	MAY	5,000

Calculate the following by using appropriate formula	Write the formula below
Total of Soap	
Total of MARCH	
Sum of Sales above ₹ 20,000	
Sum of Sales upto ₹ 20,000	
Count of Perfume	

**Ans. (a)** Data type refers to the characteristics of the information stored in a worksheet cell.

*Mainly three types of data can be entered:*

- (i) **Text.** Text data is used for worksheet headings, names and for identifying columns of data. Text data can contain letters, numbers and speciality characters such as ! or &. By default text data is left-aligned in a cell.
  - (ii) **Numbers.** Numbers can be used in calculations. By default numbers are right-aligned in a cell. In addition to numerals excel also stores dates and times as numbers.
  - (iii) **Symbols.** Various symbols like +, -, ^, \*, /, =, >, :, ;, can also be inserted in cells. They are generally used as operators while writing functions in excel. MS-excel offers four different types of operators namely Arithmetic, Comparison, Text and Reference.
- (b) (i) Total of Soap = Sumif (A2 : A8, "Soap", C2 : C8)  
(ii) Total of March = Sumif (B2 : B8, "March", C2 : C8)  
(iii) Sum of Sales above ₹20,000 = Sumif (C2 : C8, ">20,000")  
(iv) Sum of Sales upto ₹20,000 = Sumif (C2 : C8, "<20,000")  
(v) Count of Perfume = Countif (A2 : A8, "Perfume")

**Q. 7. (a)** You have taken a loan of ₹1,00,000 at 12 percent and want to pay it back in ten months. How much amount you must pay per month so that your entire loan is paid back in time? Write down the appropriate formula for the problem. 3×5=15

(b) What is the difference between Protect Sheet and Protect Workbook?

(c) Write the description of the following functions:

- |             |                 |
|-------------|-----------------|
| (i) AVERAGE | (ii) COUNTBLANK |
| (iii) MAX   | (iv) PV         |
| (v) ABS     |                 |

**Ans. (a)** PPMT function will be used to solve this problem.

PPMT function computes the principal component of an individual payment made to repay a loan over a specified time period with constant periodic payments and a constant interest rate and takes the form

$$= \text{PPMT}(\text{rate}, \text{period}, \text{nper}, \text{pv}, \text{fv}, \text{type})$$

...where

- Rate* is the interest rate
- Period* is the number of an individual periodic payment
- nper* is the term of investment
- pv* is the investment value today
- fv* is the investment value at the end of the term
- Type* indicates when payments are made  
(0 or omitted = at the end of period; 1 = at the beginning of period)

**Solution to the given problem:** =ppmt (12/10, 1, 10, 1,00,000)

(b) **Protect Sheet** protects an individual worksheet in MS-access against unauthorised access. It makes the data and other content in the worksheet safe from unwanted changes. A sheet can be protected by giving a password and it can again be unprotected by using the same password.

**Protect workbook** protects all the worksheets in an MS-Excel workbook. It makes the data, stored in all the worksheets safe from unauthorised users. Every time we download some document, MS-office 2010 opens it in protected mode. It will not allow to edit the documents unless document editing is enabled.

(c) (i) **AVERAGE**. AVERAGE returns the arithmetic mean or average of the specified numbers by summing a series of numeric values and then dividing the result by the number of values. It takes the form =AVERAGE(number1, number2, ...). It can include up to 30 arguments, where the numbers can be names, arrays or references that resolve to numbers. Cells containing text, logical values or empty cells are ignored, but cells containing a zero value are included.

	A
1	Data
2	10
3	76
4	98
5	27
6	29

For the above data if we have to find mean we will type =AVERAGE(A2:A6) in a cell and the output will be 48.

(ii) **COUNTBLANK**. It counts empty cells in a specified range of cells.

**Syntax.** COUNTBLANK (range). For example, COUNTBLANK (A2 : A7)

(iii) **MAX**. MAX function returns the largest value in a range, takes the form =MAX(number1, number2, ...), and can accept up to 30 arguments, ignoring text, error values and logical values.

For example, for data of numbers in cells ranging from A1 to E10 function entered =max(A1:E10).

(iv) **PV**. It returns the present value of an investment. The present value is the total amount that a series of future payments is worth now.

**Syntax.** PV (rate, nper, pmt [fv], [type]).

**Rate.** (Required) Interest rate per period.

**Nper.** (Required) total number of payment periods.

**Pmt.** (Required) payment made each period

**Fv.** (Optional) The future value or cash balance you want to attain after the last payment is made.

**Type.** (Optional) The number 0 or 1 and indicates when payments are due.

- (v) **ABS.** It returns the absolute value of the parameter.  
ABS (number). Number is a numeric value.

Or

(a) Explain the use of Format Painter and Wrap Text in MS-Excel.

(b) Compute the estimated time using appropriate function:

Dependent	Independent	Estimated
Delivery Time	Distance	Delivery Time
In Days (Y)	In Miles (X)	In Days (Y)
5	725	
1	115	
4	510	
2	250	
1	110	
3	420	
6	850	
7	925	
3	370	

(c) What is the use of Insert Function in MS-Excel?

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**Ans. (a) Format Painter.** It copies formatting from one place to another. It can be applied to many places by double-clicking the format painter button. This command is present in the Home Tab.

**Wrap text.** It places the text going beyond the right margin/all in the next line without pressing the *Enter key*. In excel it fits the text within the cell and in word processors it fits the text within the margin. In excel, we can also use this command to merge the cell with empty, adjoining cells.

(b) The following formulas/functions will be used:

(i) In cell E5, intercept (y) is calculated using formula:

$$= \text{intercept} (B4 : B12, A4 : A12)$$

(ii) Likewise in cell E6, slope (x) is calculated using:

$$= \text{Slope} (B4 : B12, A4 : A12)$$

(iii) With help of calculated intercept and slope estimated delivery time is calculated by putting in cell C4 the formula ( $y = a + bx$ ):

$$= \$E5 + \$E9 * A4$$

The same formula will be copied in cells C5 to C12.

(c) Insert function command in MS-Excel is used to insert various functions in Excel. Insert function command allows us to search for a function by typing a description of what we are looking for or by selecting a category to pursue. It can also be used to easily enter or select more than one arguments for a function.