# Shri Govind Guru University 

(Established by Government of Gujarat Vide Gujarat Act no 24/2015)


## BA/B.Com Semester II

Syllabus

## Computer Application

## As per NEP- 2020 Guidelines

Website:www.sggu.ac.in

# Shri Govind Guru University, Godhra(PMS). 

# B.A./B.Com. Semester- II (Syllabus) <br> Multidiscipline Course (MDC 2) <br> Computer Application-II <br> Course Code (BA23MD2CO1) <br> Computer Networks and MS Excel 

| Unit | Content | Weightage |
| :---: | :---: | :---: |
| 1. | Introduction to networking: <br> Basic Needs and Concept of Networking, Networking Topologies, LAN, WAN, MAN, Protocol, Benefits of networking , Use of networking in banks, railways, governments, industries and institutes. | (20\%) |
| 2. | Introduction to Worksheet: <br> Basic Components of MS Excel, worksheet, Workbook, Advantages of Worksheet. Overview of various types of data Types (Number, Text, Date \& Time, Formula, Function). Creating, Viewing, Editing worksheet by change in columns width, Row height, Hiding, Deleting, Inserting rows and columns. Saving, Copying, Inserting, Searching and replacing data in worksheet, Editing, Copying, Deleting data in Worksheet. Merging and splitting of cells, Wrapping text, Cell references, inserting page break, Range name. | (20\%) |
| 3. | Data Formatting and Worksheet: <br> Fonts (Font type, Font size, Bold, Italic, Underline, Text Color), Cell Color, Border Color, Horizontal and Vertical alignments, Bullets and Numbering, Text Wrapping, Different formats of number, Date and time, AutoCorrect, AutoSum, Sorting and Filtering. | (20\%) |
| 4. | Perform Operations with Formulas and Functions: <br> Adding formula and functions in formula bar as well in cell, Various types of Operators, Basic Properties, Editing Formula, <br> Types of Functions: <br> Statistical Functions: AVERAGE, MIN, MAX, COUNT <br> Mathematical Functions: ABS, CEILING, EXP, FLOOR, FACT, INT, LN, <br> LOG, LOG10, MOD, POWER, RAND, ROUND, SQRT, SUM <br> Logical Function: IF, AND, OR, NOT <br> Date \& Time Function: DATE, DATEVALUE, DAY, HOUR, MONTH, NOW, TIME, TODAY, WEEKDAY, YEAR <br> Text Functions: ASC, CHAR, CONCATENATE, EXACT, LEFT, LEN, LOWER, MID, PROPER, REPT, RIGHT, TRIM, UPPER Financial Functions: FV, INTRATE, IPMT, NPER, NPV, PMT | (20\%) |
| 5. | Charts, Object and Sheet Management: | (20\%) |


|  | Overview of Charts, Types and Component of Charts, Creating, Editing, |  |
| :--- | :--- | :--- |
| Deleting Charts, Formatting a Chart, Insert text boxes and shapes, |  |  |
| Insert images, Modify object properties, Add alternative text to objects for |  |  |
| accessibility, Page Setup, Header and Footer, Margins, Print preview, Printing |  |  |
| options. |  |  |

## Reference Books:

- Fundamental of Computer Networks by Sudakshina Kundu, PHI Publication.
- Computer Networks by A.D.Tanenbaum and D.J. Wetherall, Pearson Education.
- Computer course by R.K. Taxali, Tata McGrawHill Publisher.
- Microsoft Office 2010 training guide by Prof. Satish Jain, M Geeta and Kratika, BPB Publication.


## Practical:

The practical assignment must include connecting parts of a computer and assembling it to an extent, media formatting and installation of some software. Practical exercises based on MS Office 2010 tools using worksheet preparation.

Out of 100 marks 50 marks assigned for end semester examinations which includes 50\% weightage ( 25 Marks) for end semester theory examinations and $50 \%$ weightage ( $\mathbf{2 5}$ Marks) for end semester practical examinations. Remaining 50 marks for internal evaluation examination.

1. Introduction to MS Excel files, Workbooks, Worksheets, Columns and Rows.
2. Create a worksheet of the following.

| Roll <br> No. | Name of <br> Student | Date of <br> Birth | Gender | Category | City | Mobile <br> No. |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |

3. Create a worksheet of the following.

| Sr_No | Name of Customer | Date |  | Total Days | Room <br> Type | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Check In | Check Out |  |  |  |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |

If Room Type A, Rs. 1000 rent per day
If Room Type $B$, Rs. 750 rent per day
4. Enter the Following data in Excel Sheet

|  |  | REGIONAL SALES PROJECTION |  |  |  |  |
| :--- | :--- | :---: | ---: | ---: | ---: | :--- |
| State | Qtr1 | Qtr2 | Qtr3 | QTR4 | Qtr Total | Rate Amount |
| Delhi | 2020 | 2400 | 2100 | 3000 |  | 15 |
| Punjab | 1100 | 1300 | 1500 | 1400 |  | 20 |
| U.P. | 3000 | 3200 | 2600 | 2800 |  | 17 |
| Harayana | 1800 | 2000 | 2200 | 2700 |  | 15 |
| Rajasthan | 2100 | 2000 | 1800 | 2200 |  | 20 |

TOTAL

## AVERAGE

(a) Apply Formatting as follow:
i. Title in TIMES NEW ROMAN
ii. Font Size-14
iii. Remaining text - ARIAL, Font Size -10
iv. State names and Qtr. Heading Bold, Italic with Gray Fill Color.
v. Numbers in two decimal places.
vi. Qtr. Heading in center Alignment.
vii. Apply Border to whole data.
(b) Calculate State and Qtr. Total
(c) Calculate Average for each quarter
(d) Calculate Amount = Rate * Total.
5. Given the following worksheet

| Roll No. | Name | Marks | Grade |
| :---: | :--- | :---: | :---: |
| 1001 | Sachin | 99 |  |
| 1002 | Sehwag | 65 |  |
| 1003 | Rahul | 41 |  |
| 1004 | Sourav | 89 |  |
| 1005 | Har Bhajan | 56 |  |

Calculate the grade of these students on the basis of following guidelines:
If Marks then Grade
$>=80$ A+
$>=60 \&<80 \quad A$
$>=50 \&<60 \quad B$
$<50$ F
6. Given the following worksheet

|  | A | B | C | D | E | F | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Salesman | Sales in (Rs.) |  |  |  |  |  |
| 2 | No. | Qtr1 | Qtr2 | Qtr3 | Qtr4 | Total | Commission |
| 3 | S001 | 5000 | 8500 | 12000 | 9000 |  |  |
| 4 | S002 | 7000 | 4000 | 7500 | 11000 |  |  |
| 5 | S003 | 4000 | 9000 | 6500 | 8200 |  |  |

Calculate the commission earned by the salesmen on the basis of following Candidates:

| If Total Sales | Commission |
| :--- | :--- |
| $<20000$ | $0 \%$ of sales |
| $>20000$ and $<25000$ | $4 \%$ of sales |
| $>25000$ and < 30000 | $5.5 \%$ of sales |
| $>30000$ and <35000 | $8 \%$ of sales |
| $>=35000$ | $11 \%$ of sales |

The total sale is sum of sales of all the four quarters.
7. A company XYZ Ltd. pays a monthly salary to its employees which consists of basic salary,
allowances \& deductions. The details of allowances and deductions are as follows:

## Allowances

- HRA Dependent on Basic
$30 \%$ of Basic if Basic $<=1000$
$25 \%$ of Basic if Basic>1000 \& Basic<=3000
$20 \%$ of Basic if Basic >3000
- DA Fixed for all employees, $30 \%$ of Basic
- Conveyance Allowance

Rs. 50/- if Basic is $<=1000$
Rs. 75/- if Basic >1000 \& Basic<=2000
Rs. 100 if Basic >2000

- Entertainment Allowance

NIL if Basic is $<=1000$
Rs. 100/- if Basic > 1000

## Deductions

- Provident Fund

12\% of Basic

- Group Insurance Premium

Rs. 40/- if Basic is $<=1500$
Rs. 60/- if Basic > 1500 \& Basic<=3000
Rs. 80/- if Basic >3000
Gross Salary $=$ Basic + HRA + DA + Conveyance + Entertainment

```
Total deduction = Provident Fund + Group Insurance Premium
Net Salary = Gross Salary - Total Deduction
```

8. Create Payment Table for a fixed Principal amount, variable rate of interests and time in the format below:

| No. of Installments | $5 \%$ | $6 \%$ | $7 \%$ | $8 \%$ | $9 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | XX | XX | XX | XX | XX |
| 4 | XX | XX | XX | XX | XX |
| 5 | XX | XX | XX | XX | XX |
| 6 | XX | XX | XX | XX | XX |

9. Use an array formula to calculate Simple Interest for given principal amounts given the rate

| of Interest and time |  |
| :---: | :--- |
| Rate of Interest | $8 \%$ |
| Time | 5 Years |
| Principal | Simple Interest |
| 1000 | $?$ |
| 18000 | $?$ |
| 5200 | $?$ |

10. The following table gives year wise sale figure of five salesmen in Rs.

| Salesman | 2000 | 2001 | 2002 | 2003 |
| :---: | :---: | :---: | :---: | :---: |
| S1 | 10000 | 12000 | 20000 | 50000 |
| S2 | 15000 | 18000 | 50000 | 60000 |
| S3 | 20000 | 22000 | 70000 | 70000 |
| S4 | 30000 | 30000 | 100000 | 80000 |
| S5 | 40000 | 45000 | 125000 | 90000 |

(a) Calculate total sale year wise.

Calculate the net sale made by each
(b) salesman
(c) Calculate the maximum sale made by the salesman
(d) Calculate the commission for each salesman under the condition.
(i) If total sales $>4,00,000$ give $5 \%$ commission on total sale made by the salesman.
(ii) Otherwise give 2\% commission.
(e) Draw a bar graph representing the sale made by each salesman.
(f) Draw a pie graph representing the sale made by salesman in 2000.
11. Create the following worksheet. Using this worksheet create a Column Chart.

| Sr_No | Name of <br> Product | Production(in KGS) |  |  | Total <br> Production | Average <br> Production |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | 2017 | 2018 | 2019 |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |

12. Create a Bar Chart and Line Chart using the worksheet in Practical 11.
13. Create a Pie Chart.
