VELLALAR COLLEGE FOR WOMEN (AUTONOMOUS), ERODE-12
College with Potential for Excellence | An ISO 9001:2015 Certified Institution
Re-accredited with 'A+' Grade (CYCLE IV) by NAAC & Affiliated to Bharathiar University, Coimbatore

Non-Major Elective Courses - I

Name of the Department	Subject Code	Name of the Course
Tamil	21TLUN301	Pechukkalai
English	21LTUN301	Corporate English
Mathematics	21MSUN301	Mathematics for Data Science
Mathematics (CA)	22MCUN301	Fundamentals of Mathematics
Physics	21PHUN301	Physics in Everyday Life
Biochemistry	21BCUN301	Health & Hygiene
Computer Science	21CSUNP01	Data Processing through Excel Lab
Computer Applications	21CAUNP01	Data Processing through Excel Lab
Information Technology	21ITUNP01	Data Processing through Excel Lab
Computer Technology	21CTUNP01	Data Processing through Excel Lab
Costume Design &Fashion	21CFUN301	Fashion Concepts
Commerce	21COUN301	Fundamentals of Accounting
Commerce [CA]	21CMUN301	Occupational Health and Safety Measures
Commerce [CS]	21CCUN301	Modern Retail Techniques
Commerce [Cooperation]	21CPUN301	Dynamics of Cooperation
Commerce [E-Commerce]	21CEUN301	Brand Management
Commerce [PA]	21PAUN301	Cyber Law
Commerce [A&F]	21AFUN301	Production Management
Commerce [B&I]	21BIUN301	Banking Practice
Business Administration [CA]	21BAUN301	Soft Skill Development
Computer Science with Data Analytics	21DAUNP01	Data Processing through Excel Lab
Geography	21GEUN301	Climate Change and Global Warming
Computer Science with (Artificial Intelligence)	22AIUNP01	Data Management Tools Lab
Computer Science with (Cyber Security)	22CYUNP01	Google Application Lab

Department of Tamil

Non Major Elective

Semester III

CODE	COURSE TITLE
21TLUN301	பேச்சுக்கலை

Category	CIA	ESE	L	T	P	Credit
Non Major		100	57	3	-	2

Preamble:

தமிழ் இலக்கிய மாணவர்களுக்குப் பேச்சுத்திறனை வளர்த்தல்

Course Outcome:

On the successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level
CO 1	இலக்கியப்பேச்சு –குறித்தகருத்து – உணர்ச்சி – பேச்சின் வகைகள்– சொற்பொழிவு – கருத்தரங்கு – போன்றவற்றை அறிதல்	K1
CO 2	பேச்சாளரின் தகுதிகள் – குரல்வளம் – தோற்றப்பொலிவு – உச்சரிப்பு – மொழி அறிவு – தன்னம்பிக்கை–தனித்தன்மை முதலியவற்றை வெளிப்படுத்துதல்	K2
CO 3	பேச்சின் தொடக்கம்–அவையினரை விளித்தல் – கருத்து – வகைகள் – தொடக்கம் வினக்குதல்	K3
CO 4	சிறந்த சொற்பொழிவின் பண்புகள் –தொடர்பு – பேச்சின் கூறுகள் – சிந்தனைகள் – எளிமை – கதைகள் – கருத்துக்கள் – புதுமை – நடை – நகைச்சுவை –கவிதை ஆகியனவற்றை அறிதல்	K1
CO5	பேச்சை முடித்தல் – பேச்சுத்தயாரிப்பு – சில குறிப்புகள். விளக்குதல்	K2

Syllabus

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அலகு – 1

பேச்சு – இலக்கியப்பேச்சு – குறிப்பு – கருத்து – உணர்ச்சி – பேச்சின் வகைகள் – சொற்பொழிவு – கருத்தரங்கு – கூட்டங்கள் – பட்டிமன்றம்– நன்றியுரை.

அலகு – 2

பேச்சாளரின் தகுதிகள் – குரல்வளம் – தோற்றப்பொலிவு – உச்சரிப்பு – மொழி அறிவு – தன்னம்பிக்கை - தனித்தன்மை.

அலகு -3

பேச்சின் தொடக்கம் – அவையினரை விளித்தல் – கருத்து – வகைகள் – தொடக்கம்

அலகு – 4

சிறந்த சொற்பொழிவின் பண்புகள் - தொடர்பு – பேச்சின் கூறுகள் – சிந்தனைகள் – எளிமை – கதைகள் – கருத்துக்கள் – புதுமை – நடை – நகைச்சுவை – கவிதை

அலகு – 5

பேச்சை முடித்தல் – பேச்சுத்தயாரிப்பு – சில குறிப்புகள்.

பாடநூல்கள்

பேச்சுக்கலை – டாக்டர்.ம.திருமலை

பார்வைநூல்கள்

1. பேசும் கலை – கு. ஞானசம்பந்தன்
2. மேடைத்தமிழ் - டி.எம்.தெய்வசிகாமணி ஆச்சாரியார்

Department of English

Non Major Elective

Semester III

CODE	COURSE TITLE
21LTUN301	**Non-Major Elective – CORPORATE ENGLISH**

Category	CIA	ESE	L	T	P	Credit
Core	50	50	20	10	-	02

Aim

To create effective and skillful users of language

Objective

To make the students understand communication and train them to become more skillful and competent communicators in their everyday lives

Syllabus

UNIT I- Phone Calls   **6 Hrs**
1. Hello, how may I help you?
    Answering the phone
    Making a good impression on the phone.
2. Hold on, I just need to make a note
    Understanding number and details
    Making notes Checking your notes.
3. Is everything clear?
    Taking long messages Leaving messages

UNIT II-Writing   **6Hrs**
1. Layout and Content
    Good layout and style in letters and faxes
2. You've got mail
    Sending and receiving e-mail messages
3. Get it right!
    Checking your spelling
    Correcting your punctuation
4. Keep it simple and make it clear
    Writing short reports on meetings and phone calls

UNIT III- Meetings

6Hrs

1. What are your views?
   Different kinds of meetings
   Discussing ideas and exchanging opinions.
2. Thank you for coming!
   Participating in one-to-one meetings
3. The first item on the agenda is…
   Working with an agenda
   Taking part in larger meetings with a Chairperson
4. We need to come to an agreement
Taking part in negotiations.

UNIT IV – **Entertaining Visitors**   **6Hrs**

1. Make yourself at home!
   Receiving visitors
   Making people feel at home
   Giving and receiving gifts
2. what shall we talk about?
   Small talk Socializing
   Building professional relationships
3. Would you like to join me for dinner?
   Deciding where to eat
   Table manners in different countries

UNIT V- Explaining and Presenting   **6 Hrs**

1. About the company
   Explaining the history and structure of a company
2. Let me demonstrate…
   Explaining what to do
   Showing people how to do things
3. How does it work?
   Describing processes and procedures

TOTAL30 Hrs

BOOKS FOR REFERENCE:

1. **LIZ HAMP-LYONS**, *Study Writing*, Cambridge University Press, UK, 2006.
2. **LEO JONES**, *Working in English*, Cambridge University Press, UK, 2005.
3. **TIMS NICHOLAS et al.,** *Face to Face*, Cambridge University Press, UK, 2005.

Department of Mathematics

Non Major Elective

SEMESTER – III

CODE	COURSE TITLE
21MSUN301	**MATHEMATICS FOR DATA SCIENCE**

Category	CIA	ESE	L	T	P	Credit
Non-Major Elective -I	50	50	27	3	-	2

Objective:

- To introduce the fundamental notion of matrices.
- To provide knowledge on Data analysis and Probability theory.
- To study the interpretation of data using aptitude problems.
- To illustrate the basic concepts of set theory.

Syllabus

UNIT I (6 hrs.)

Matrix Algebra: Matrices - Vectors – Addition and Scalar Multiplication – Matrix Multiplication - Determinants – Eigen Values – Eigen Vectors.

UNIT II (6 hrs.)

Data Analysis: Data representation – Average – Spread – Permutations and Combinations.

UNIT III (5 hrs.)

Probability Theory: Experiments – Outcomes – Events – Probability.

UNIT IV (7 hrs.)

Data Interpretation: Percentage – Calendar – Average – Simplification –Ratio and proportion – Profit and loss – Problems on trains – Problems on ages – Numbers – Time and work – Time and distance –Banker's discount – Volume and surface area.

UNIT V (6 hrs.)

Set Theory: Definition – Notations – Methods of description of sets – Types of sets – Venn diagram – Set operations – Laws and properties of sets – Number of elements – Cartesian product**.**

Text Books

S.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Erwin Kreyszig	Advanced Engineering Mathematics (Units I,II,III)	John Wiley & Sons Inc.	2011, 9th Edition
2.	-	Problems from web resources Weblinkhttps://www.indiabix.com (Unit IV)	-	-
3.	P.A.Navnitham	Business Mathematics and Statistics (Unit V)	Jai Publishers, Trichy	2012, 1st edition

Units	Book	Chapters	Sections
I	I	1	7.1, 7.2, 7.7 & 8.1
II	I	24	24.1 & 24.4
III	I	24	24.2 & 24.3
IV		Problems from Web resources Web link: https://www.indiabix.com	-
V	II	3	1 – 9

Reference Book

S.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	P.R.Vittal	Statistics	Margham Publishers,Chennai	2012, 6th Edition

Pedagogy

- Lecture, PPT, Quiz, Group Discussion, Seminar

Web Resources

- https:/nptel.ac.in/courses/122107036/28
- https:/nptel.ac.in/courses/101108057/downloads/Lecture-27.pdf
- http://nptel.ac.in/courses/105107129/module10/lecture2/lecture2.pdf
- https://www.indiabix.com
- https://www.btechguru.com/CAT-algebra-and-geometry-set-theory-venn-diagrams-problem-using-venn-diagrams-video-lecture- -5842- -8- -54.html
- Question paper setters are asked to confine to the above **text books** only.

Department of Mathematics (CA)

Non Major Elective

SEMESTER III

CODE	COURSE TITLE
22MCUN301	**FUNDAMENTALS OF MATHEMATICS**

Category	CIA	ESE	L	T	P	Credits
Non Major Elective - I	50	50	25	5	-	2

Objective:

- To introduce the fundamental notion of Sets and its operations.

- To provide knowledge on Permutations and Combinations

- To develop the students ability to deal with Measures of Central Tendency

- To illustrate the basic concepts of probability

UNIT I   **6 hrs**

Theory of Sets: Introduction – A set – Elements of a set – Method of describing a set – Types of set – Venn diagrams – Operations on set – Intersection of sets – Union of sets – Complement of a set – De-Morgan's law – Difference of two sets.

UNIT II   **6 hrs**

Permutations and Combinations : Introduction – Fundamental rule of counting – Permutations – Factorial notation – Permutation of n different things – Circular Permutation – Permutations of things not all different – Combinations – Restricted combinations – Combinations of things not all different.

UNIT III   **6 hrs**

Descriptive Measures: Arithmetic Mean – Median – Mode.

UNIT IV   **6 hrs**

Descriptive Measures: Standard Deviation – Co-efficient of Variance.

UNIT V   **6 hrs**

Probability: Introduction – Basic terminology – Mathematical Probability – Statistical Probability – Problems.

Text Books

S.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Gupta S.C., Kapoor V.K	Fundamentals of Mathematical Statistics,	Sultan Chand & Sons, NewDelhi,	11th Edition (For units I & II)
2.	Sancheti D.C., Kapoor V.K	Business Mathematics	Sultan Chand & Sons, New Delhi	11th Edition (For units III, IV & V)

Reference Books

1.	Aggarwal B.M.	Business Mathematics and Statistics Fundamentals	Sultan Chand and Sons, New Delhi	1st Edition, 2003.
2	Kapur J.N.	Mathematical Statistics	Sultan Chand and Company Ltd	12th Edition, 1984.
3	Vittal P.R.	Business Mathematics and Statistics	Margham Publications, Chennai	6th Revised and Enlarged Edition2004.

Department of Physics

Non Major Elective

Semester III

CODE	COURSE TITLE
21PHUN301	**PHYSICS IN EVERYDAY LIFE**

Category	CIA	ESE	L	T	P	Credit
NME	50	50	26	4	-	2

Preamble

To create interest in Science and provide explanation for the phenomena that the we witness in day today life. To facilitate the spread of scientific spirit. To develop an insatiable curiosity in Science.

Topics: Physics

Text Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Kasturi & Sons Ltd, Chennai	The Hindu Speaks on Scientific Facts, Volume I	Kasturi & Sons Ltd, Chennai	Sixth Print,2004.
2.	Kasturi & Sons Ltd, Chennai	The Hindu Speaks on Scientific Facts, Volume II	Kasturi & Sons Ltd, Chennai	Sixth Print,2008.

WebResources
1. https://studiousguy.com/microwave-oven-working-principle
2. https://hearinghealthmatters.org/findhearing/how-hearing-aids-work
3. https://www.techulator.com/experts/3958-How-does-the-remote-control-of-a-tv-work
4. https://www.electrical4u.com/fluorescent-lamp-its-working-principle
5. https://www.explainthatstuff.com/photocopier.html

Pedagogy
- Lecture, PPT, Quiz, Assignment, Group Discussion, Seminar

Subject Code: 21PHUN301   Physics in Everyday Life

UNIT- I   (6 Hrs)

1. Why does are frigerator produce sounds periodically?
2. Automatic wrist watches stop functioning if not worn even for a day. How does wearing them on our hand make them function?
3. How do microwave ovens cook food?
4. How does a pressure cooker work?
5. Why does milk boil and expand so rapidly at a low temperature though some quantity of wateris present in it?
6. Why do electrical appliances draw more current during low voltage?
7. Why is the earthing pin in 3 pin electrical plugs bigger than the other two pins?
8. Why do high tension wiresproduce a humming sound?
9. How does an electric line tester glow?
10. Why does a bird not get electrocuted on sitting on a live wire?

UNIT– II   (6 Hrs)

11. Why do we have sodium vapor lamp in the streets and not mercury vapor lamp?
12. What is the role on chokes and starters in tube lights? Why do they make noise?
13. Why do street lights and head lights of vehicles look like stars when viewed through glass?
14. Why is the shadow bigger than the object?
15. How do hearing aids work?
16. Is there any significance in using gravel on railway tracks?
17. How does audible sound pass through hard material such as a wall and be audible on other side?
18. Why do we not hear sound while sleeping or meditating?

19. Why does not sound travel in vacuum but light does?
20. Why does the flow of link increase when pens areabout to run out of link?

UNIT– III (6 Hrs)

21. Why do metals shine?
22. Why do metallic vessels lose their initial shine after use?
23. Why does boiling milk over flow but boiling wate rdoes not?
24. Why does a steel ball pitch higher than a rubber ball?
25. How is information stored in audio and video tapes?
26. Is it true that television, fridge and other electrical and electronic gadgets should not be switched on immediately after switching off?
27. Can we use TVmonitor for a computer monitor and the vice versa?
28. How does remote control of TV Work?
29. How does lighting affect TVs?
30. How does electric current cause death?

UNIT– IV (6 Hrs)

31. Can a fridge left open in a closed room be used to cool the room?
32. Why does it seem difficult to cycle up to steep hill than to push the bike up at the same speed?
33. Why does not the cycle travel backwards when we pedal in the reverse direction?
34. Why are fan wings slightly curved?
35. When viewed under the tube light why does a table fan appear to rotate backwards and forwards?
36. Can we reduce power consumption by running fans at slow speeds?
37. Will the life of florescent lamps decrease with frequent switching on and switching off?
38. Why does the boiling point of a liquid increase with pressure? Also, why does the heat required for vaporization decrease and increase in the former and latter case respectively?
39. Why is it difficult to balance a stationary two-wheeler?
40. How does the speed (of vehicles) measuring device used by the traffic police work?

UNIT– V (6 Hrs)

41. How does a photo copier work?

42. Why is it difficult to photograph a TV picture?

43. Why is it possible to hear noises from far away clearly on cool damp evenings? Is it because sound travels better in cool damp air than in the air?

44. How does a thermostat work?

45. While light from a candle illuminates a room, the gas (LPG) flames do not at the same time the gas stoves help cook faster. Can any one explains?

46. How does an electric train work?

47. How does a dish antenna receive signals?

48. How is electricity produced from nuclear materials?

49. Why is it easier to pull than to push a lawn roller?

50. How does a sim card function in a cell phone?

Department of Biochemistry

Non Major Elective

SEMESTER – III

CODE	COURSE TITLE
21BCUN301	**NON – MAJOR ELECTIVE PAPER – I** **HEALTH AND HYGIENE**

Category	CIA	ESE	L	T	P	Credit
NME	50	50	26	4	-	**2**

SUBJECT DESCRIPTION: This course discusses the concepts, philosophies, Nutrition, Mental being, Environment aspects, Maternal and child care in terms of health and hygiene.

OBJECTIVES: On successful completion of the course the students will acquire knowledge about

- The concepts of health and disease.
- Nutritional profile of principle foods.
- Environmental health and mental health.
- Dental health and Dental care.
- Maternal and child health care.

UNIT   I   **6 Hrs**

Introduction , General health, Signs of good health, Personal Hygiene, Hygiene specificities, Handling common Illnesses, Choosing a doctor.

UNIT   II   **6 Hrs**

Nutrition and Health – Definition of Food and Nutrition. Nutrients – Sources and functions of Proteins, fats, carbohydrates, vitamins and minerals. Balanced Diet.

Nutritional Profile of principle foods – Cereals, Millets, Vegetables, Fruits, Milk, and Milk products, Fish, meat, alcoholic beverages, egg and soft drink.

UNIT   III   **6 Hrs**

Maternal and child Health-Mother and child-Intra natal and Post natal care. Complications of post portal period, restoration of mother to optimum health.

Breast feeding; Family planning methods –definition, Natural methods (BBT, Cervical and mucous methods). Artificial methods – Hormonal contraceptives, gonodal steroids, oral pills andDepot formulations.

UNIT IV   **6 Hrs**

Dental Health – Tooth development, Developmental tooth anomalies , Promotion of Oral health, Viral infections, Oral ulcerations, Dental caries – Diagnostic methods, Non-surgicalmanagement and prevention.

UNIT V   **6 Hrs**

Mental Health – Types and causes of mental illness – Preventive aspects;Alcoholism, Drug dependence – Commonly abused drugs.

Health in Old age – Aging, caring for older people, care of bedridden.

Text Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	**Ahmed. M. N**	*Hygiene and health*	Anmol publications, New Delhi	15th edi., 2005
2.	**Ashtekar. S**	*Health and Healing – A Manual of Primary health care*	Orient Longmans	1st Edition 2001
3.	**Park. K**	*Social and preventivemedicine*	Bhanot publishers, Japalpur	18th edition, 2005

Reference Books

Sl. No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	**Patil. R.S.,**	*Practical CommunityHealth*	Vora medical publishers, New Delhi	1st edi 1995.
2.	**Prabhakara. G. N**	*Preventive and socialmedicine*	Jaypee Publications.,New Delhi	1st edi, 2003.
3.	**Sridhar Rao. B**	*Community Health Nursing*	A.I.T.B.S. Publishers,New Delhi	1st edi 2006, Revised reprint

Department of Computer Science

Non Major Elective

SEMEST
ER III

Non Major Elective I: Data Processing Through Excel Lab

Instructional Hrs. : 30   **Sub. Code:**

21CSUNP01 Max.Marks: CIA -50; ESE -50 Credits: 2

Objective: To create, edit and format Worksheet, analyze data using advanced features

in Excel

1. Enter the following data and save it in grade .xls

Name	Marks1	Marks2	Marks3	Total	Percentage	Grade
Amit	80	70	80			
Renu	70	60	90			
Rajeev	60	50	80			
Manish	50	30	90			
Sanjeev	40	40	80			
Anita	70	70	90			

Do the following

(a) Compute the total marks and percentage of each student by entering

appropriate formula.

(b) Draw a border around the worksheet

(c) Change the font size of heading to 14 points and underline it and hide column c

(d) Increase the width of column A to 15 characters

(e) Right Align the values in column B, C, F

2. Create a sheet containing Nation-wide sales results for Avon Helmets-Region,

Vendor name, Helmet type, Helmet Color and Total sales.

   a. Sort the data by Region, Vendor name and sales.

   b. Sort the data according to a custom list of Helmet Color - Red, Blue,

      Yellow and Green.

3. Create a sheet containing Nation-wide sales results for Avon Helmets- Region, Vendor name

   Helmet type, Helmet Color and total sales.
   a. Use Filtering on Region and Helmet type.
   b. Use subtotal function to count the number of records and sum of sales forthe filtered records.

4. Use Query Wizard to filter East, West Region transaction and sort them on Region andTotal sales.

5. Perform the following

   a. Create a list of vendor and total sales by consolidating the total sales.
   b. Compute sub totals with no detail data.
   c. Create Subtotals by both Region and Vendor within Region.

6. Create a PIVOT TABLE to show the sales results by Region and Helmet type andsummarize the total sales.

7. Create a PIVOT chart for the pivot table of total sales for the Region and Helmet types.

8. Create a bar chart to show the sales results for different Helmet type and to the followingformats.

   a. Add a Secondary axis.
   b. Create picture markers.

Department of Computer Application

Non Major Elective

SEMESTER – III

Non Major Elective I: Data Processing Through Excel Lab
Sub. Code: 21CAUNP01
Max.Marks: CIA- 50; ESE-50 **Credits: 2**
Instructional Hrs. 30

Objective: To create, edit and format Worksheet, analyze data using advanced features in Excel

1. Enter the following data and save it in grade .xls

Name	Marks1	Marks2	Marks3	Total	Percentage	Grade
Amit	80	70	80			
Renu	70	60	90			
Rajeev	60	50	80			
Manish	50	30	90			
Sanjeev	40	40	80			
Anita	70	70	90			

Do the following

(a) Compute the total marks and percentage of each student by entering appropriate formula.

(b) Draw a border around the worksheet

(c) Change the font size of heading to 14 points and underline it and hide column c

(d) Increase the width of column A to 15 characters

(e) Right Align the values in column B, C, F

2. Create a sheet containing Nation-wide sales results for Avon Helmets-Region, Vendor name, Helmet type, Helmet Color and Total sales.

   a. Sort the data by Region, Vendor name and sales.
   b. Sort the data according to a custom list of Helmet Color - Red, Blue, Yellow and Green.

3. Create a sheet containing Nation-wide sales results for Avon Helmets- Region, Vendor name ,Helmet type, Helmet Color and total sales.

   a. Use Filtering on Region and Helmet type.
   b. Use subtotal function to count the number of records and sum of sales for the filtered records.

4. Use Query Wizard to filter East, West Region transaction and sort them on Region and Total sales.

5. Perform the following

   a. Create a list of vendor and total sales by consolidating the total sales.
   b. Compute sub totals with no detail data.
   c. Create Subtotals by both Region and Vendor within Region.

6. Create a PIVOT TABLE to show the sales results by Region and Helmet type and summarize the total sales.

7. Create a PIVOT chart for the pivot table of total sales for the Region and Helmet types.

8. Create a bar chart to show the sales results for different Helmet type and to the following formats.

   a. Add a Secondary axis.
   b. Create picture markers.

Department of Information Technology

Non Major Elective

SEMESTER III

Non Major Elective I: Data Processing Through Excel -Lab			
Sub. Code: 21ITUNP01			
Max. Marks: 100	**CIA: 50; ESE: 50**		**Credits: 2**
Instructional Hrs. 30			

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Preamble

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To create, edit and format Worksheet, analyze data using advanced features in Excel

1. Enter the following data and save it in grade .xls

Name	Marks1	Marks2	Marks3	Total	Percentage	Grade
Amit	80	70	80			
Renu	70	60	90			
Rajeev	60	50	80			
Manish	50	30	90			
Sanjeev	40	40	80			
Anita	70	70	90			

Do the following

    a. Compute the total marks and percentage of each student by entering appropriate formula.

b. Draw a border around the worksheet

    c. Change the font size of heading to 14 points and underline it and hide column c

    d. Increase the width of column A to 15 characters

    e. Right align the values in column B, C, F

2. Create a sheet containing Nation-wide sales results for Avon Helmets-Region, Vendor name, Helmet type, Helmet Color and Total sales.

    a.Sort the data by Region, Vendor name and sales.

    b.Sort the data according to a custom list of Helmet Color - Red, Blue, Yellow and Green.

3. Create a sheet containing Nation-wide sales results for Avon Helmets- Region, Vendor nameHelmet type, Helmet Color and total sales.

    a.Use Filtering on Region and Helmet type.

    b.Use subtotal function to count the number of records and sum of sales for the filtered records.

4. Use Query Wizard to filter East, West Region transaction and sort them on Region and Total sales.

5. Perform the following
        a.Create a list of vendor and total sales by consolidating the total sales.
        b.Compute sub totals with no detail data.
        c.Create Subtotals by both Region and Vendor within Region.

6. Create a PIVOT TABLE to show the sales results by Region and Helmet type and summarize the total sales.

7. Create a PIVOT chart for the pivot table of total sales for the Region and Helmet types.

8. Create a bar chart to show the sales results for different Helmet type and to the following formats.
        a.Add a Secondary axis.
        b.Create picture markers.

Department of Computer Technology
Non Major Elective
SEMESTER – III

Non Major Elective I: Data Processing Through Excel-Lab
Instructional Hrs.:30
Sub.Code: 21CTUNP01
Max.Marks:100   CIA-50; ESE -50   Credits:2

Objective: To create, edit and format Worksheet, analyse data using advanced features in Excel

1. Enter the following data and save it in grade.xls

Name	Marks 1	Marks2	Marks3	Total	Percentage	Grade
Amit	80	70	80			
Renu	70	60	90			
Rajeev	60	50	80			
Manish	50	30	90			
Sanjeev	40	40	80			
Anita	70	70	90			

Do the following

a. Compute the total marks and percentage of each student by entering appropriate formula.

b. Draw a border around the worksheet

c. Change the font size of heading to 14 points and underline it and hide column c

d. Increase the width of column A to15 characters

e. Right Align the values in column B, C,F

2. Create a sheet containing Nation-wide sales results for Avon Helmets-Region, Vendor name, Helmet type, Helmet Color and Total sales.

a. Sort the data by Region, Vendor name and sales.

b. Sort the data according to a custom list of Helmet Color - Red, Blue, Yellow and Green.

3. Create a sheet containing Nation-wide sales results for Avon Helmets- Region, Vendor name Helmet type, Helmet Color and total sales.

a. Use Filtering on Region and Helmet type.

b. Use subtotal function to count the number of records and sum of sales for the filtered records.

4. Use Query Wizard to filter East, West Region transaction and sort them on Region and Total sales.

5. Perform the following

a. Create a list of vendor and total sales by consolidating the total sales.

b. Compute sub totals with no detail data.

c. Create Subtotals by both Region and Vendor within Region.

6. Create a PIVOT TABLE to show the sales results by Region and Helmet type and summarize the total sales.

7. Create a PIVOT chart for the pivot table of total sales for the Region and Helmet types.

8. Create a bar chart to show the sales results for different Helmet type and to the following formats.

a. Add a Secondary axis.

b. Create picture markers.

Department of Costume Design & Fashion

Non Major Elective

SEMESTER – III

CODE	COURSE TITLE
21CFUN301	NON MAJOR ELECTIVE - I FASHION CONCEPTS

Category	CIA	ESE	L	T	P	Credit
NME - I	50	50	27	2	-	2

Preamble

To gain knowledge about The Fashion Industry & Principles of Design in a Dress Design

Syllabus

UNIT I (6 hrs.)

Terms related to the fashion Industry – Fashion, style, fad, classic and collection, chic, custom made, mannequin, fashion, show, trend, forecasting, high fashion, fashion cycle, haute couture, pre-a-porter.

UNIT II (6 hrs.)

Design – definition and types – structural and decorative design, requirements of a good structural and decorative design. Elements of design- line, shape or form, colour, size and texture.

UNIT III (6 hrs.)

Principles of design: Balance - formal and informal, rhythm – through repetition, radiation and gradation, emphasis, harmony and proportion. Garment designing by applying the principles of design.

UNIT IV (6 hrs.)

Colour – definition, colour theories – prang colour chart and munsell colour system, Dimensions & colour – hue, value and Intensity. Standard colour harmonies. Application of colors harmony's in dress designing.

UNIT V (6 hrs.)

Selection and applications of trimmings and decorations-fagotting, embroidery, belt, bow, pompons, quilting, patch work, lace work, ric-rac.

Fashion accessories– shoes, handbags, and ties-different types.

Reference Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	**SusheelaDantygi**	Fundamentals Of Textiles And Their Care	5th Edition, Orient Longman Ltd.New Delhi	2002
2.	**Heannette A Jarnow ET**	Inside The Fashion Business	Al, Macmillan Publishing Company, New York	2007
3.	**McJimsey And Harriet**	Art And Fashion In Clothing Selection	Lowa State University	1994

Pedagogy

- Lecture, PPT, Quiz, Assignment, Group Discussion, Seminar

Department of Commerce
Non Major Elective

SEMESTER III

CODE	COURSE TITLE
21COUN301	**FUNDAMENTALS OF ACCOUNTING**

Category	CIA	ESE	L	T	P	Credit
Non Major	**50**	**50**	**30**	**-**	**-**	**2**

Objectives

- To help the students acquire conceptual knowledge about the fundamentals of accounting procedures
- To enable the students to gain knowledge about the financial position of a concern.

Syllabus

Unit I   **3 Hrs.**
Accounting – Definition – Meaning – Systems of Accounting – Single Entry System – Double Entry System.

Unit II   **8 Hrs.**
Types of Account – Rules of Debit and Credit – Journal – Journal Entries.

Unit III   **6 Hrs.**
Ledger – Meaning – Posting – Balancing.

Unit IV   **8 Hrs.**
Subsidiary Books – Purchases Book – Purchases Returns Book- Debit Note – Invoice – Vouchers – Sales Book – Sales Returns Book – Credit Note.
Preparation of Three Column Cash Book.

Unit V   **5 Hrs.**
(a) Trial Balance – Meaning – Preparation of Trial Balance. (b) Trading and Profit and Loss Account, Balance Sheet – Meaning, Trading Account Items – Profit and Loss Account Items – Balance Sheet Items. (The whole of part (b) covers Theory only)

Text Books

S. No.	Author	Title of the Book	Publisher	Year and Edition
1	Grewal .T.S	Double Entry Book-Keeping	Sultan Chand & Co. Ltd., New Delhi	2020 (Reprint) & 1st Edition
2	Nagarajan .K.L, Vinayagam .N & Mani P.L	Principles of Accountancy	Eurasia Publishing House, Private Ltd., New Delhi	2009 & 3rd Edition
3.	Reddy T.S. & Murthy .A	Financial Accounting	Margham Publications, Chennai	2022 (Reprint) & 7th Revised Edition

Pedagogy

- Lecture, PPT, Quiz, Assignment, Group Discussion, Seminar

Department of Commerce (Computer Application)

Non Major Elective

SEMESTER III

CODE	COURSE TITLE
21CMUN301	OCCUPATIONAL HEALTH AND SAFETY MEASURES

Category	CIA	ESE	L	T	P	Credit
Non–Major Elective -I	50	50	30	-	-	2

Preamble
- ❖ After the successful completion of the course the students must be able to know the multidisciplinary field concerned with the safety, health and welfare of people at work.

Syllabus

UNIT – I   (6 Hrs.)
Employee Health: Meaning – Importance – Occupational Hazards And Diseases – Protection against hazards – preventive measures – curative measures – Provisions relating to hazardous process and Health Provisions as per Factories Act 1948.

UNIT – II   (6 Hrs.)
Working Condition: Meaning – Importance – Various Aspects Of Working Condition – Welfare provision as per Factories Act 1948.

UNIT – III   (6 Hrs.)
Hours of work: Importance of regulating hours of work – Hours of work as fixed by factories Act 1948. Shift system – Need – Kinds of Shift – spread over.

UNIT – IV   (6 Hrs.)
Accidents: Meaning – Nature or Types – Causes of Accidents – unsafe conditions – unsafe Acts – other causes – Personal characteristics and Accidents – Reduction of accidents / strategies for preventing accidents.

UNIT – V   (6 Hrs.)
Workers Safety: Significance of industrial safety – Safety measures / Programmes – Safety Engineering – Safety campaign – Evaluation of Safety Programmes – Safety provisions as per Factories Act 1948.

Reference Books

Sl. No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Prasad, L.M	Human Resource Management	S.Chand & Sons, New Delhi	2003,1st edition
2.	Khanka, S.S	Human Resource Management	S.Chand & Sons, New Delhi	2005, 1st edition.
3.	Kapoor.N.D	Elements of Industrial Law	S.Chand & Sons, New Delhi	2002, 1st edition.
4.	Aswathappa. K	Production and Material Management	Himalaya Publishing House, Mumbai	1998

Pedagogy

- Lecture

Department of Commerce (Corporate Secretaryship)

Non Major Elective

SEMESTER – III

CODE	COURSE TITLE
21CCUN301	MODERN RETAIL TECHNIQUES

Category	CIA	ESE	L	T	P	Credit
Non – Major Elective - I	50	50	30	-	-	2

Preamble

The subject aims to educate the students to gain Working Experience in Retailing

UNIT I   **5 Hrs.**

Retailing –introduction-functions- characteristics & responsibilities of retailers- retail life cycle – classification of retail institutions – benefits of retailing – setting up retail organization.

UNIT II   **3 Hrs.**

Retail store planning- planning retail location - store design, circulation plan in store layout, retail space management.

UNIT III   **6 Hrs.**

Human resources environment of retailing – recruiting and selecting retail personnel-compensating retail personnel – supervision of retail personnel.

UNIT IV   **6 Hrs.**

Operational dimensions – store security – insurance – credit management – computerization – outsourcing – risk management.

UNIT V   **10 Hrs.**

 Practical Sessions (Training to students on retailing)

Text Books

1. T.Svagnanasithi & R.Rajesh, Retail Business Management, Bharathiar University Edition.

Reference Books

1. **Chettan Bajaj, Rajnishtuli & Nidhi Srivastava**, *Retail Management*, Oxford
   University press, New Delhi, 1st Edition, 2007.
2. **Swapna Pradhan**, *Retail Management*, Tata McGraw Hill Education Private Ltd.,
   New Delhi – 2nd Edition – 2009.
3. **Sivakumar A**, *Retail Marketing* , Excel Books ,New Delhi ,1st Edition, 2000

Department of Cooperation

Non Major Elective

SEMESTER – III

CODE	COURSE TITLE
21CPUN301	DYNAMICS OF COOPERATION

Category	CIA	ESE	L	T	P	Credit
NME	50	50	28	2	-	2

Preamble

To introduce and impart the concept of Cooperation in the young minds of other department students.

Syllabus

UNIT I (7 hrs.)

Cooperation: Concept, Features, Benefits - Cooperative Principles: Meaning, Evolution, Rochadale Principles - ICA Cooperative Identity Statement 1995: Definition, Vision, Mission, Values and Principles.

UNIT II (7 hrs.)

Cooperative Banking: Short and Medium Term and Long Term Credit – Constitution and Functions of PACS, DCCB, SCB, PARDB and SARDB – Constitution and Functions of Urban Cooperative Banks.

UNIT III (5 hrs.)

Service Cooperatives: Structure, Constitution and Functions of Marketing Cooperatives - Consumer Cooperatives - Dairy Cooperatives.

UNIT IV (5 hrs.)

Organisational setup for cooperative management: Pyramidal Structure – General Body, Board of Directors and President – Powers, Duties and Responsibilities - Special Officer-Administrative Set up of a Cooperative Institution.

UNIT V (6 hrs.)

Cooperative Education and Training: Cooperative Education and Training, Need and Importance – Arrangements for Cooperative Education and Training in India.

Text Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Hajela T. N.	Cooperation Principles, Problems and Practice	Ane Books Pvt. Ltd., New Delhi.	2016, 8th Edition.
2.	Mathur B.S.	Co-operation in India	Sahitya Bhawan	1999, 1st Edition.

Reference Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Abdul Kuddus K.A., Zahir Hussain A. K.	Theory, Law and Practice of Cooperative Banking	Limra Publications,	2017, 4th Revised Edition.
2.	Krishnaswamy O.R. and Kulandaiswamy V.	Cooperation Concept and Theory	Arudra Academy, Coimbatore	2000, 1st Edition.

CODE	COURSE TITLE
21CEUN301	BRAND MANAGEMENT

Category	CIA	ESE	L	T	P	Credit
Non Major Elective I	50	50	26	4	-	2

Preamble

 To enrich the students' knowledge on Brand Management for the successful marketing techniques.

Syllabus

UNIT I   **(6 Hrs.)**

Brand Management: Introduction - Meaning – Definition – Concepts - Process-Significance of Brand.

UNIT II   **(6 Hrs.)**

Brand Positioning: Need of positioning - Rules for successful brand positioning. Brand equity

 – Definition - Measurement-Building brand equity.

UNIT III   **(6 Hrs.)**

Brand Identity: Definition – Models – Elements. Brand Personality - Definition-Scales.

UNIT IV   **(6 Hrs.)**

Brand Image - Brand gap - Decoding Brand Image - Brand Communication – Tools.

UNIT V   **(6 Hrs.)**

 Brand Awareness - Brand Extension - Merits and Demerits of Brand Extension-Choosing the right Brand Extension-Global Branding – Benefits.

Text Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Mahim Sagar , Deepali Singh, D.P.Agarwal & Achintya Gupta	Brand Management	Ane Books Pvt. Ltd, New Delhi	2009

Reference Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Kevin Lane Keller	Strategic brand Management	Pearson Education, New Delhi	2003
2.	Jean Noel, Kapferer	Strategic brand Management	The Free Press, New York	2012
3.	Brad VanAuken	Branding	Jaico Publishing House, New Delhi	2010 and 4th Edition

Web resources

- https://www.theseus.fi/bitstream/handle/10024/8472/Ropo.Juha-Pekka.pdf
- https://cdn2.hubspot.net/hub/58820/docs/polarismr_brand_positioning.pdf
- https://www.nima.today/wp-content/uploads/2018/11/Brand-Identity-Design-Alina-Wheeler.pdf
- https://www.academia.edu/35086197/BASIC_BRANDING_CONCEPTS_BRAND_IDENTITY_BRAND_IMAGE_AND_BRAND_EQUITY
- https://www.researchgate.net/publication/325675041_Brand_Awareness_And_Success_In_The_Market

Pedagogy

- Lecture, PPT, Quiz, Assignment, Group Discussion, Seminar

Department of Commerce (Professional Accounting)

Non Major Elective

SEMESTER III

CODE	COURSE TITLE
21PAUN301	CYBER LAW

Category	CIA	ESE	L	T	P	Credit
NME	50	50	27	3	-	2

Preamble

To impart knowledge on the cyber crimes and security measures.

Syllabus

UNIT I (6 Hrs.)

Cyber Law: Meaning – Definition – Scope- Importance – Need – Advantages and Limitations. Cyber Space- Meaning, Need, Features, challenges.

UNIT II (5 Hrs.)

Cyber Crime: Meaning – Classifications – Need for Cyber Crime Law- Factors Contributing to Cyber Crime – Strategy to Prevent Cyber Crime – Cyber Forensics: Need – Advantages.

UNIT III (6 Hrs.)

Encryption: Meaning - Technical aspects – Digital Signature – Difference between Electronic and Digital Signature- Digital Signature Certificate.

UNIT IV (7 Hrs.)

E-Governance: History – Objectives of e- Governance, e- Government, e-Democracy Significance.

E-Commerce: Meaning – Importance – Functions - Factors for Growth – Types - Features - Security Issues.

UNIT V (6 Hrs.)

EDI: Meaning, Working of EDI, Legal Framework, EDI Scenario in India, Functions, Features and Benefits.

Copy Right: Meaning – First Owner of Copy Right – Assignment – Mode of Arrangement.

Text Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Dr.P.Rizwam Ahmed	Cyber Law	Margham Publication, Chennai	2016, 1st Edition
2.	Vivek Sood	Cyber Law Simplified	Tata Mc Graw Hill Publications Co., New Delhi	2016 3rd Reprint

Reference Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Shilpa Suryabhan Dongre	Cyber Law and its Applications	Current Publications, Mumbai	2004

Pedagogy

- Lecture, Chalk & Talk, Power Point Presentation, Quiz, Assignment, Seminar

Non Major Elective

SEMESTER III

CODE	COURSE TITLE
21AFUN301	PRODUCTION MANAGEMENT

Category	CIA	ESE	L	T	P	Credit
Non -Major	50	50	27	3	-	2

Preamble

To understand the planning and functional areas of production management

Syllabus

UNIT I (6 Hrs.)

Production Management - Meaning – Nature – Objectives – Decision Making in Production Management – Problems in Production Management – Concepts of Planning related to Production management.

UNIT II (6 Hrs.)

Functional areas of Production management – Materials Management – Maintenance Management – Quality Management – Production Planning and Control – Recent Trends in Production Management.

UNIT III (6Hrs.)

Production Systems – Production System Model and Diversity – Types – Features – Factors Affecting Production Management.

UNIT IV (6 Hrs.)

Plant Location – Factors Affecting Location Decisions – Plant Layout – Objectives – Factors Influencing Layout – Types of Layout – Arrangement of Other Facilities.

UNIT V (6 Hrs.)

Production Planning and Control – Objectives –Role in Operations Management – Scope – Levels of Production Planning – Functions of Production Planning and Production Control.

Text Book

S.No.	Author	Title of the Book	Publisher	Year and Edition
1	K.Shridhara Bhat	Production Management	Himalaya Publishing House., Mumbai	2005, 1st Edition

Reference Books

S. No.	Author	Title of the Book	Publisher	Year and Edition
1	K.K.Ahuja	Production Management	CBS Publication, Chennai	2010 1st Edition
2	Telsang Marland T	Production Management	S.Chand & Company Ltd.,New Delhi	2007 1st Edition

Pedagogy

- Lecture, Chalk & Talk, PowerPoint Presentation and Assignment

Department of Banking & Insurance

Non Major Elective

SEMESTER III

CODE	COURSE TITLE
21BIUN301	BANKING PRACTICE

Category	CIA	ESE	L	T	P	Credit
Non Major	50	50	30	-	-	2

Preamble

To enable the students to gain conceptual knowledge on fundamentals of banking practice

Syllabus

Unit I   **3 Hrs.**

Banker and Customer: Definition - General and Specific Relationship - Rights and Duties.

Unit II   **8 Hrs.**

Banker as an Agent: Collecting Vs Paying Banker - Payment in Due Course - Holder in Due Course.

Unit III   **6 Hrs.**

Banking Operations: Negotiable Instruments - Cheques Vs Draft - Characteristics of Crossing - Types - Legal Requirements.

Unit IV   **8 Hrs.**

Subsidiary Services: Agency Services - Payment and Collection – Banks as Trustee, Executor, Administrator - General Utility Services: Safe Custody of Customer Valuables – Safe Custody of Deposits – Safe Deposit Vault.

Unit V   **5 Hrs.**

Deployment of Funds: Cash Reserve Ratio and Statutory Liquidity Ratio - Loan – Types - Limitations.

Text Book

S. No.	Author	Title of the Book	Publisher	Year and Edition
1	Sundaram&Varshney	Banking Theory Law and Practice	Sultan Chand & Company Ltd., New Delhi	2022 21st Edition and Reprint

Reference Books

S. No.	Author	Title of the Book	Publisher	Year and Edition
1	Natarajan .S and Parameswaran .R	Indian Banking	Sultan Chand & Company Ltd., New Delhi.	2020 Revised Edition and Reprint
2	Gorden .E and Natarajan. K	Banking Theory, Law and Practice	Himalaya Publishing House	2021 29th Revised Edition

Web Resources

- https://indianmoney.com/articles/relationship-between-the-banker-and-customer
- http://skpodder.co.in/pdf/u11-UNIT-4.pdf
- https://www.toppr.com/guides/principles-and-practice-of-accounting/bills-of-exchange-and-promissory-notes/introduction-to-negotiable-instruments/
- http://www.yourarticlelibrary.com/banking/primary-and-subsidiary-functions-performed-by-banks/42124

Pedagogy

- Lecture, Chalk & Talk, Power Point Presentations,Assignment, Quiz.

Department of Business Administration with CA

Non Major Elective

SEMESTER – III

CODE	COURSE TITLE
21BAUN301	SOFT SKILL DEVELOPMENT

Category	CIA	ESE	L	T	P	Credit
NME - I	50	50	25	5	-	2

Preamble

To impart knowledge, abilities and training on various soft skill sets to enhance the students personality and career prospects.

Course Outcomes

On the successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level
CO1	Analyze self by SWOT and Johari window and goal setting.	K2
CO2	Acquire skills on creativity techniques.	K2
CO3	Demonstrate stress management techniques.	K3
CO4	Develop body language tips for job interviews.	K3
CO5	Apply management games for team building.	K3

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5
CO1	S	M	L	S	S
CO2	S	M	S	S	S
CO3	S	S	M	S	S
CO4	S	S	M	S	M
CO5	S	S	M	S	S

S- Strong; M-Medium; L-Low

UNIT I (5 Hrs.)

Knowing Thyself: Significance – Process – Self Analysis through SWOT &Johari Window. **Goal Setting:** Significance – Ten Commandments – Steps to achieve goals.

UNIT II (5 Hrs.)

Creativity: Concepts - Characteristics of creative person – Process of creativity –Mental blocks and Block – busting techniques – Creative methods – Creative tools and techniques – Brainstorming.

UNIT III (5 Hrs.)

Stress Management: Introduction – Classification – Teen stress – Causes of stress – Specific stress factors – The negative stress cycle – Techniques to manage stress.

UNIT IV (5 Hrs.)

Body Language: Types of non-verbal communication – Positive body language to adopt – Negative body language to avoid – Body language tips for job interview.

UNIT V (10 Hrs.)

Team building: Meaning – Aspects – Skills – Process – Characteristics of an effective team – simple Management games.

Interpersonal Skills: Meaning – Tips for improvement.

Text Book:
Study materials provided by the department.

Reference Books

Sl. No.	Author Name	Title of the Book	Publisher	Year and Edition
1	B.N.Ghosh	Managing Soft Skills for Personality Development	Tata McGraw Hill Education Pvt.Ltd.	1st Edition 2012
2	Jeff Butterfield	Soft Skills for everyone	Cenage Learning, New Delhi.	1st Edition, 2011
3	Grossman, Rodgers & Moore	Unlocking Creativity in the Workplace	Jaico Publishing House, Mumbai	5th Edition, 2009
4	S.Ramachander	Creativity at Work	Sage Publications Ltd., New Delhi	5th Edition, 2010
5	Hedwig Lewis	Body Language – A Guide for Professionals	Sage Publications Ltd., New Delhi	21st Edition, 2009
6	Dr.K.Alex	Soft Sills-Know Yourself and Know the World	S.Chand& Company Ltd., New Delhi.	3rd Edition 2014
7	M.S.Rao	Soft Skills-Enhance Employability Connecting Campus with Corporate	International Publication House Pvt. Ltd., New Delhi.	1st Edition 2010

Web Resource

- http://stocklogos.com/topic/creative-thinking-methods-and-techniques
- https://en.wikipedia.org./wiki/creativity_techniques
- www.businessballs.com/management games/
- www.mbacrystalball.com/management games/

Pedagogy

- Lecture, PPT, Quiz, Assignment, Group Discussion, Seminar, Brain Storming, Case study and Role play

Question Paper Pattern

Section	Choice	Marks	Total
A	Open Choice (5 out of 8)	5 * 20 = 100	100

Department of Computer Science with Data Analytics
Non Major Elective
SEMESTER III

CODE	COURSE TITLE
21DAUNP01	DATA PROCESSING THROUGH EXCEL LAB

Category	CIA	ESE	L	T	P	Credit
Non Major Elective I	Nil	100	-	-	30	2

Objective: To create, edit and format Worksheet, analyze data using advanced features in Excel

1. Enter the following data and save it in grade .xls

Name	Marks1	Marks2	Marks3	Total	Percentage	Grade
Amit	80	70	80			
Renu	70	60	90			
Rajeev	60	50	80			
Manish	50	30	90			
Sanjeev	40	40	80			
Anita	70	70	90			

Do the following

(a) Compute the total marks and percentage of each student by entering appropriate formula.

(b) Draw a border around the worksheet

(c) Change the font size of heading to 14 points and underline it and hide column c

(d) Increase the width of column A to 15 characters

(e) Right Align the values in column B, C, F

2. Create a sheet containing Nation-wide sales results for Avon Helmets-Region, Vendor name, Helmet type, Helmet Color and Total sales.

   a. Sort the data by Region, Vendor name and sales.
   b. Sort the data according to a custom list of Helmet Color - Red, Blue, Yellow and Green.

3. Create a sheet containing Nation-wide sales results for Avon Helmets- Region, Vendor name Helmet type, Helmet Color and total sales.

   a. Use Filtering on Region and Helmet type.
   b. Use subtotal function to count the number of records and sum of sales for the filtered records.

4. Use Query Wizard to filter East, West Region transaction and sort them on Region and Total sales.

5. Perform the following

   a. Create a list of vendor and total sales by consolidating the total sales.
   b. Compute sub totals with no detail data.
   c. Create Subtotals by both Region and Vendor within Region.

6. Create a PIVOT TABLE to show the sales results by Region and Helmet type and summarize the total sales.

7. Create a PIVOT chart for the pivot table of total sales for the Region and Helmet types.

8. Create a bar chart to show the sales results for different Helmet type and to the following formats.

   a. Add a Secondary axis.   B. Create picture markers.

Department of Geography

Non-Major Elective Subject – I Syllabus

SEMESTER – III

CODE	COURSE TITLE
21GEUN301	Climate Change and Global Warming

Category	CIA	ESE	L	T	P	Credit
III	50	50	28	2	-	5

Preamble

The course deals with an introduction towards climate change and its impact on impact on various factors. By studying this course learners will get an awareness about the factors responsible for the climate change and global warming. It would also discuss about various treaties implemented to combat climate change.

Course Outcomes

On the successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge
CO1	Define the basic concepts of geography and relate it with the aspects of climate change	K1 & K2
CO2	Explain the factors responsible for the climate change and global warming	K1 & K2
CO3	Understand the impact of climate change on various factors on a world scale.	K2 & K3
CO4	Identify the impact of climate change in India in specific on agriculture and health factors.	K3 & K4
CO5	Evaluate the efforts taken by the governments of both national and international level to combat climate change and global warming.	K4 & K5

Mapping with Programme Outcomes

CO Number	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	M	S
CO3	S	S	S	S	S
CO4	S	S	S	M	S
CO5	S	S	S	S	S

S - Strong; M - Medium; L – Low

Syllabus

UNIT-I   (6 Hrs.)

Introduction to geography: Definition & Branches; Concept of Climate and Weather, Applications and Importance of geography towards climate change.

UNIT-II   (6 Hrs.)

Climate change- meaning and need of the concept, Factors affecting climate change: Natural and Anthropogenic factors. Global warming – causes and effects.

UNIT-III   (6 Hrs.)

Evidence of Climate change- Increasing surface temperature, Glacial retreat, Sea level rise, Ocean acidification, Change in weather pattern; Case Study.

UNIT-IV   (6 Hrs.)

Impacts of climate change: Environmental, Economic, Agricultural and Health impacts.

Climate change in India: Potential effects-Extreme heat, Changing rainfall pattern, Drought, Groundwater decreasing, Glacial melt, Sea level rise.

UNIT-V   (6 Hrs.)

Climate change Combat: India - NAPCC, Natural clean energy fund, ISA, BS emission norms.

Efforts to combat climate change in international level: IPCC, UNFCC, Kyoto protocol, Paris agreement, REDD+. Sustainable development and Responsibilities.

Text Books

Sl. No.	Author Name	Title of the Book	Publisher	Year and Edition
1	Critchfield, H.J.	General Climatology	Prentice Hall, New Jersey	1996
2	Trewartha, G.T.	An Introduction to Climate	McGraw Hill Book Co., New York	1981

Reference Books

Sl. No.	Author Name	Title of the Book	Publisher	Year and Edition
1	Collings, V.K.	Weather, Radar and Flood Forecasting	John Wiley & Sons, New York	1987
2	Lal, D.S.	Climatology	Chaitanya Publishing House, Allahabad.	1996

Pedagogy

Lectures, PPT, SPSS, assignments

Department of Computer Science with Artificial Intelligence

Non Major Elective

SEMESTER – III

CODE	COURSE TITLE
22AIUNP01	DATA MANAGEMENT TOOLS LAB

Category	CIA	ESE	L	T	P	Credit
NME-I	50	50	-	30	-	2

Objective: To gain a Practical exposure on MS office tool.

MS Word

1. Type Notes for your Subject and perform the following operations: Bold, Underline, Font Size, Style, Background color, Text color, Line spacing, Spell Check, Alignment, Bullets, Header & Footer, inserting pages and page numbers, Find and Replace.

2. Prepare an invitation for the college function using Text boxes, Drawing toolbar, Clip Art, Word Art, Symbols, Borders and Shading.

3. Prepare a Class Time Table and perform the following operations: Inserting the table, Data Entry, Alignment of Rows and Columns, Inserting and Deleting the Rows and Columns and Change of Table Format.

MS Excel

4. Prepare a mark list of your class (minimum of 5 subjects) and perform the following operations: Data Entry, Total, Average, Result, Ranking and sorting by using arithmetic and logical functions.

5. Draw the different type of charts (Line, Pie, Bar) to illustrate range of Marks of the Students.

6. Prepare a statement of Bank customer's account showing simple interest calculations for 10 different customers using mathematical and logical functions.

MS PowerPoint

7. Design presentation slides for a product of your choice. The slides must include name, brand name, type of product, characteristics, special features, price, special offer etc. The presentation should work in manual mode.

8. Design presentation slides about a Breaking News and perform frame movement by interesting clip arts to illustrate running of an image automatically. Add Animation Effects to the presentation.

Department of Computer Science with Cyber Security

Non Major Elective

SEMESTER III

CODE	COURSE TITLE
22CYUNP01	GOOGLE APPLICATION LAB

Category	CIA	ESE	L	T	P	Credit
NON MAJOR ELECTIVE I	50	50	-	30	-	3

Preamble

To gain a practical exposure on Web and Google Applications.

Practical List

1. Create an email account in Gmail. Using the created account compose a mail to invite other college students for your college fest, enclose the invitation as attachment and send the mail to at least 50 recipients. Use CC and BCC options accordingly.
2. Create your resume in Google Docs.
3. Create your own Google classroom and invite all your friends through email id. Post study material in Google classroom using Google drive. Create a separate folder for every subject and upload all unit wise E-Content Materials.
4. Create a sheet to illustrate simple mathematical calculations using Google Sheets.
5. Create a Google form with minimum 10 questions to conduct a quiz and generate a certificate after submission.
6. Create a Google slides for a topic and share the same with your friends.
7. Create an interactive poster using Google drawings.
   Create a Site using Google Site for your College