



**MES Garware College of Commerce, Pune, India
(Autonomous)**

**Affiliated to
Savitribai Phule Pune University, Pune**

**Choice Based Credit System - CBCS
(2021 Pattern)
With effect from Academic Year 2021-22**

**Degree Programme of
Bachelor of Business Administration – Computer Application (BBA-CA)**

**Course Contents
Semester II**

Sr. No.	Course Code	Name of the Course (Paper / Subject)	Pg. No.
1	B4-21/201	Advance C Programming	3
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Course Contents

Course Code: B4-21/201	Subject / Course: Advance C-Programming	Marks: 100 Credits: 3
<p>Course Objectives:</p> <ol style="list-style-type: none"> 1. To understand advanced features of C Language. 2. To understand the use of functions and storage classes in C language. 3. To understand and use of pointers in C Language. 4. To understand structure, Union and file features of C Language. 		
<p>Course Outcome:</p> <p>After completing the course, the student shall be able to</p> <p>CO1: Ability to understand code organization with complex data types and structures</p> <p>CO2: Knowledge of modular programming and its practical implementation.</p> <p>CO3: Knowledge of pointers that is used in different data structures.</p> <p>CO4: Practical knowledge of handling files, and other data types-structure and Union.</p>		

Unit	Unit Title	Contents	No. of Lectures
I	Functions and Storage Classes	<p>1.1 Introduction of Functions</p> <p>1.1.1 Purpose of function</p> <p>1.1.2 Function definition</p> <p>1.1.3 Function declaration</p> <p>1.1.4 Function call</p> <p>1.2 Types of functions-</p> <p>1.2.1 Call by value and call by reference</p> <p>1.2.2 Recursion</p> <p>1.2.3 Storage classes</p>	10
II	Pointers & Dynamic Memory Allocation in C language	<p>2.1 Introduction to pointer</p> <p>2.1.1 Definition</p> <p>2.1.2 Declaration</p> <p>2.1.3 Initialization</p> <p>2.1.4 Indirection operator and address of operator</p> <p>2.1.5 Pointer arithmetic</p>	9

Unit	Unit Title	Contents	No. of Lectures
		2.1.6 Dynamic memory allocation 2.1.7 Functions and pointers	
III	Structures	3.1 Introduction to Structures 3.1.1 Introduction to structure 3.1.2 Definition 3.1.3 Declaration 3.1.4 Accessing members 3.1.5 Structure operations 3.1.6 Nested structure	7
IV	Union and Enumeration	4.1 Union 4.1.1 Definition and Syntax. 4.1.2 Working with union 4.1.3 Initializing union 4.1.4 Advantages of union 4.1.5 Structures versus union 4.2 Enumeration 4.2.1 Enum keyword 4.2.2 Typedef keyword 4.2.3 Working with Enum	10
V	File Handling	5.1 File Handling 5.1.1 Definition of files 5.1.2 Opening modes of files 5.1.3 Standard function 5.1.3.1 fopen() 5.1.3.2 fclose() 5.1.3.3 feof() 5.1.3.4 fseek() 5.1.3.5 fewind() 5.1.4 Using text files 5.1.4.1 fgetc() 5.1.4.2 fputc() 5.1.4.3 fscanf() 5.1.5 Command line arguments	12
Total No of Lectures			48

Suggested Books:

Sr. No.	Name of Book	Author	Publication	Edition	Place
1	Let us C	Yashwant Kanetkar	BPB publication.	Sixteenth	New Delhi
2	Ansi C	Balagurusamy	McGraw Hill Education (India)	Third	New Delhi
3	The complete Reference	Herbelt Schildt	McGraw Hill Education (India)	Fourth	New Delhi

Suggested Web / E-Learning Resources:

Sr. No.	Topic of the course	Lectures (Available on Youtube / Swayam / MOOCS etc.)	Link	Journals / Articles / Case studies
1	C Programming	Swayam	https://onlinecourses.nptel.ac.in/noc21_cs81/preview	online course
2	Problem Solving through programming in C	Swayam	https://onlinecourses.nptel.ac.in/noc21_cs54/preview	online course
3	C Programming: Getting Started	edX	https://www.edx.org/course/c-programming-getting-started	online course

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Course Code: B4-21/202	Subject / Course: Relational Database Management System	Marks: 100 Credits: 3
<p>Course Objectives:</p> <ol style="list-style-type: none"> 1. To understand concept of RDBMS & use in business 2. Enables student to write PL/SQL programs that use: procedure, function, trigger, cursor and package 3. Enables students to understand relational database concepts and transaction management concepts in database system. 4. To understand meaning and concept of Lock based and timestamp based protocol, Deadlock handling and Recovery of database 		
<p>Course Outcome:</p> <p>After completing the course, the student shall be able to</p> <p>CO1: Ability to understand concepts of Relational Database management system and its implementation</p> <p>CO2: Knowledge of PL/SQL programming in procedure, function, package, cursor and trigger</p> <p>CO3: Knowledge of Transaction based recovery system of database</p> <p>CO4: Understand concepts like lock-based recovery system, timestamp-based protocol and Deadlock handling.</p>		

Unit	Unit Title	Contents	No. of Lectures
I	Introduction To RDBMS	1.1 Introduction to popular RDBMS product and their feature 1.2 Difference Between DBMS and RDBMS 1.3 Relationship among application programs and RDBMS	5
II	PL-SQL	2.1 Overview of PL-SQL 2.2 Data Types in PL-SQL, 2.3 PL-SQL Block Diagram 2.4 Functions, 2.5 Procedures 2.6 Cursor 2.7 Trigger Package 2.8 Exception Handling	16

Unit	Unit Title	Contents	No. of Lectures
III	Transaction Management	3.1 Transaction Concept 3.2 Transaction Properties 3.3 Transaction States 3.4 Concurrent Execution 3.5 Serializability	12
IV	Concurrency Control & Recovery System	4.1 Lock Based Protocol - Lock, Granting Lock, Two-Phase locking protocol, 4.2 Timestamp Based Protocol 4.3 Deadlock Handling - Deadlock Prevention, Deadlock avoidance, Deadlock Detection, Deadlock Recovery 4.4 Failure Classification 4.5 Recovery & Atomicity 4.6 Log-based recovery, checkpoints. 4.7 Recovery with concurrent transaction - Transaction Rollback, Restart recovery	15
Total No of Lectures			48

Teaching Methodology:

Unit	Unit Title	Suggestive teaching methodology	Project (If any)	Outcome expected	Weightage of Marks (%)
				Conceptual understanding Knowledge / Skills / Attributes etc.	
I	Introduction To RDBMS	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	1. Understanding of various RDBMS products() 2. Use of relational database 3. To get knowledge of Front End and Backend	10%
II	PL-SQL	Lecture - Demonstration and Practical Implementation in Laboratory	Practical	1. Understanding of various programming aspects 2. Learning of different exceptions 3. Writing of compact code (Small program writing) 4. Understanding of exact data retrieval 5. Writing of triggers and packages(Small application using all contents)	40%

Unit	Unit Title	Suggestive teaching methodology	Project (If any)	Outcome expected	Weightage of Marks (%)
				Conceptual understanding Knowledge / Skills / Attributes etc.	
III	Transaction Management	Lecture - Demonstration and case study-based learning		<ol style="list-style-type: none"> 1. Understanding use of transaction and effect on database 2. Application of properties (Case solving) 3. Understanding of various states such as active, partially committed, Failed, aborted, committed 4. Understand concept of reduction in waiting time 5. Conflict Serializability and View Serializability 	25%
IV	Concurrency Control & Recovery System	Lecture - Demonstration and case study-based learning		<ol style="list-style-type: none"> 1. To understand concept of shared and exclusive lock 2. To learn how to prevent deadlock situation 3. Understand what deadlock is and how it can occur when giving mutually exclusive access to multiple resources 4. To learn concepts related to hardware failures 5. Data recovery with different techniques 6. Restoring of data which is changed by mistake 	25%

Suggested Readings:

Sr. No.	Title of the Book	Author/s	Publication	Place
1.	Database Management System	Bipin Desai	Galgotia Publications	New Delhi.
2.	SQL/PLSQL the programming language of oracle	Ivan Bayross	BPB Publications	New Delhi.

Sr. No.	Title of the Book	Author/s	Publication	Place
3.	An Introduction to Database Systems	C. J.Date, A.Kannan, S.Swamynathan	Pearson Publications	North America
4.	Database System Concepts	Silberschatz, Korth, Sudershan	Vikas Publishing House McGraw-Hill	New York

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Course Code: B4-21/203	Subject / Course: Business Mathematics	Marks: 100 Credits: 3
<p>Course Objectives:</p> <ol style="list-style-type: none"> 1. To develop the basic understanding of numbers & their operations. 2. To understand the concept of Commercial Mathematics, competitive aptitude & Numerical Ability. 3. To understand Share and mutual Fund. 4. To understand the concept of Determinants and Matrices. 5. To develop logical and analytical approach towards data. 		
<p>Course Outcome:</p> <p>After completing the Course, the student shall be able to:</p> <p>CO1: Understand numbers & their operations with Ratio, Proportion, Profit and Loss.</p> <p>CO2: Develop Mathematical competence for various interest related transactions and other commercial calculations.</p> <p>CO3: Understand Share and Mutual Fund concepts.</p> <p>CO4: Understand the Determinants and Matrices in business.</p> <p>CO5: Understand the concept and application of Linear Programming Problems and Transportation Problems.</p>		

Unit	Unit Title	Contents	No. of Lectures
I	Commercial Mathematics I	1.1 Ratio & Continued Ratio. 1.2 Proportion – Continued Proportion, Direct Proportion, Inverse Proportion. 1.3 Variation – Direct & Inverse Variation, Joint Variation. 1.4 Percentage. 1.5 Average. 1.6 Profit and Loss – Terms and Formulae, Trade Selling Price, Trade Discount and Cash Discount. 1.7 Introduction to Commission, Brokerage and Premium, Problems on Commission, Brokerage and Premium.	15

Unit	Unit Title	Contents	No. of Lectures
II	Commercial Mathematics II	2.1 Interest and Annuity Simple Interest, Compound Interest, Equated Monthly Installments (EMI) by interest of Reducing balance and Flat Interest methods and problems. Ordinary Annuity, Sinker Fund, Annuity due, Present value and Future value of annuity. 2.2 Share and Mutual Funds Shares, face value, Market value, Dividend, Brokerage, Equity shares, Preferential shares, Bonus shares, Examples and Problems. Concept of Mutual Funds, Change in Net Asset Value (NAV), Systematic Investment Plan (SIP), Examples and Problems.	15
III	Determinants and Matrices	3.1 Determinants. 3.2 Definition of Matrices, Types of Matrices, Algebra of Matrices, Adjoint of Matrix, Inverse of Matrix, System of Linear equations, Solution of System of Linear Equation by Adjoint Method (Up to 3 Variables Only).	14
IV	Linear Programming Problem Transportation Problem	4.1 Linear Programming Problem – Concept of LPP, Formulation of LPP and solution of LPP by graphical method. 4.2 Transportation Problem – Concept of Transportation Problem, Initial Basic Feasible Solution, North-West Corner Method (NWCN), Least Cost Method (LCM), Vogel's Approximation Method (VAM).	13
Total No of Lectures			57

Suggested Readings:

Sr.	Title of the Book	Author/s	Publication	Edition	Place
1.	A Textbook of Business Mathematics	Dr. Padmalochan Hazarika	S. Chand	Fourth	New Delhi
2.	Business Mathematics: Theory & Applications	J. S. Sharma	S. Chand	Second	New Delhi

Sr.	Title of the Book	Author/s	Publication	Edition	Place
3.	Business Mathematics	Dr. Amarnath, Dikshit & Dr. Jinendra kumar	Himalaya	First	New Delhi
4.	Schaum's Outline of Linear Algebra	Seymour Lipschutz, Marc Lipson	Mc-Graw Hill	Sixth	New Delhi
5.	Operation Research	J. K. Sharma	S. Chand	Fifth	New Delhi

Suggested Web/E-Learning Resources:

Sr. No.	Topic of the Lecture	Lectures (Available on Youtube / Swayam / MOOCS etc.)	Films	Journals / Articles / Case studies
1	All	https://youtube.com/c/IcaiOrgtube		
2	All	College e-library https://sites.google.com/mespune.in/mesgarwarecollegeofcommerc elib/library-membership?authuser=0		

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Course Code: B4-21/204	Subject / Course: Business Communication Skills	Marks: 100 Credits: 3
<p>Course Objectives:</p> <ol style="list-style-type: none"> 1. To understand the role of communication in personal, social and economic system. 2. To understand methods and various types of communication. 3. To develop proficiency required in business correspondence. 4. To understand recent trends in communication. 		
<p>Course Outcome:</p> <p>After completing the course, the student shall be able to</p> <p>CO1: Demonstrate the understanding of concept, principles and role of communication.</p> <p>CO2: Demonstrate the concepts of various types of communication</p> <p>CO3: Write concise business letters and show proficiency in other types of business correspondences</p> <p>CO4: Use recent platforms for the purpose of communication.</p>		

Unit	Unit Title	Contents	No of Lectures
I	Introduction to Communication	1.1 Concept of Communication 1.2 Concept of Communication 1.3 Role of Communication in Personal, social and economic system 1.4 Need for effective communication, meaning and definition 1.5 Principles of effective communication 1.6 Barriers to communication and over comings	10
II	Methods of Communication	2.1 Verbal Communication, Non-verbal Communication, Formal Communication, Informal Communication. 2.2 Oral communication- Objectives, Functions, Advantages and Disadvantages. Types of Oral Communication.	14

Unit	Unit Title	Contents	No of Lectures
		<p>2.3 Written communication, Forms of written communication. Qualities, difficulties in written communication, Constraints in developing effective written communication.</p> <p>2.4 Non-Verbal Communication- Objectives, Functions, Advantages and Disadvantages. Forms of Non-Verbal Communication.</p>	
III	Business Correspondence	<p>3.1 Concept, need and functions of Business Correspondence</p> <p>3.2 Essentials of Business Letter</p> <p>3.3 Types of Business letters</p> <p>3.4 Layout/Drafting of business letter.</p> <p>3.5 Business Correspondence: Enquiry Letter, Reply to enquiry, Purchase Order, Credit & Status enquiry, Sales Letter, Complaint letter, circulars.</p> <p>3.6 Report Writing and Internal Correspondence: Report- Meaning, Need & Importance, Types. Notices, memos, business promotion, leave application and resignation letter.</p>	14
IV	Recent trends in Communication	<p>4.1 Email- Types, Components, Do's and Dont's.</p> <p>4.2 Digital Communication Platforms- Zoom, Google meet, Webex, Microsoft Teams, etc.</p> <p>4.3 Social Media Communication: Facebook, Instagram, LinkedIn, Twitter, Whatsapp.</p>	10
Total No of Lectures for Teaching			48
Total No of Lectures for Evaluation			9

Suggested Readings:

Sr. No	Title of the book	Author	Publication
1.	Business Communication	Meenakshi Raman, Prakash Singh	Oxford
2.	Business Communication	HomaiPradhan, N.S. Pradhan	Himalaya
3.	Business Communication	R.K. Madhukar	Vikas
4.	Business Communication and personality Development	Biswajit Das. ipswwtaSatpathy	S. Chand Excel Books
5.	Business Communication – Concepts, Cases and applications	P.D Chaturvedi, MukeshChaturvedi	Dorling Kindersley
6.	Business Communication – Connecting at work	Hory Sankar Mukerjee	Oxford
7.	Business Communication Today	Courtland L. Bovee, John V. Thill, Abha Chatterjee	Sultan Chand and Sons Pearson
8.	Hand Book of internal Communication	Eileen Scholes	Infinity Books

Add-on Courses:

1. International Communication and Mannerisms.
2. Business Behavior and Etiquettes.
3. Public Speaking and Confidence Building.

Suggested Web/E-Learning Resources:

Sr No	Topic	Lectures (Available on Youtube / Swayam / MOOCS etc)	Films	Journals / Articles / Case studies
1	Introduction to Communication	1. https://www.youtube.com/watch?v=DLpINabdbRI 2. https://www.youtube.com/watch?v=Mqvg2vLfbgg 3. https://www.youtube.com/watch?v=gFNQ-aZlAkM 4. https://www.youtube.com/watch		1. http://ndl.iitkgp.ac.in/document/MD15cHdNUUln0lnZHNoQXlvOG5IUENRNG5vb25FV0xOK2VrYVBKTXpYWT0

Sr No	Topic	Lectures (Available on Youtube / Swayam / MOOCS etc)	Films	Journals / Articles / Case studies
		?v=glnMChrjU_8		
2	Methods of Communication	1. https://www.youtube.com/watch?v=2nJAiNgTzKM 2. https://www.youtube.com/watch?v=0bepN-_VKRE		1. http://ndl.iitkgp.ac.in/document/MD15cHdNUUInd0lnZHNoQXlvOG51RkVqVHJBQkczb2QzMWxya2swK3p0VT0
3	Business Correspondence	1. https://www.youtube.com/watch?v=L_ogawqybWU 2. https://www.youtube.com/watch?v=6NADEfJOVNo		1. http://ndl.iitkgp.ac.in/document/MD15cHdNUUInd0lnZHNoQXlvOG51Qmh0ZlY5aEtDcVFXcHdWZGllIOFpjND0
4	Recent trends in Communication			

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Course Code: B4-21/205	Subject / Course: Organizational Behavior & Human Resource Management	Total Marks: 100 Credits: 3
<p>Course Objectives:</p> <ol style="list-style-type: none"> 1. To understand the basic concept of Organizational Behaviour & Human Resource Management 2. To study functions, importance of human resource management & understand the role of Human resource manager. 3. To study recruitment & selection process know the major trends in HRM &OB 4. To understand recent trends in training & development 		
<p>Course Outcome:</p> <p>After completing the Course, the student shall be able to</p> <p>CO1: Understand application of organizational behaviour & Human Resource Management</p> <p>CO2: Understand the role & importance of Human Resource Department in the industry & role of HR manager & its liaison with other departments in the industry.</p> <p>CO3: Know the process of recruitment & selection takes place in the company & how to face interview confidently.</p> <p>CO4: Understand changes taking place in the training & development areas.</p>		

Unit	Unit Title	Contents	No of Lectures
I	Introduction to Organizational Behavior	1.1 Definition, Concept, Scope & Models of OB 1.2 Major trends in OB: -Total Quality management, Cultural diversity, Organizational Change, Stress Management: Sources of Stress, Effects of Stress & Stress Management 1.3 Work life Balance and Quality of Work Life	13
II	Introduction to HRM	2.1 Distinguish between Personnel Management & HRM 2.2 Definition, Concepts, Scope, Importance, Functions, Objectives, challenges of HRM 2.3 Role of HR Manager 2.4 Areas in which Human Resource Manager can be of assistance	12

Unit	Unit Title	Contents	No of Lectures
III	Recruitment & Selection	3.1 Human Resource Planning - Concept, Definition, Merits & Demerits, process of Human resource planning (HRP), Factors influencing of HRP 3.2 Recruitment-Concept, Definition, Objectives, internal as well as external sources of recruitment, advantages and disadvantages of internal as well as external sources of recruitment, E- Recruitment 3.3 Selection- Concepts, definition, process, Objectives, importance of selection, Difference between recruitment & selection	12
IV	Procedure for Opening and Operations of Deposit Accounts	4.1 Training - Concept, Definition, Importance 4.2 Methods of Training-On the job training & Off the job training methods & Methods & E- Training 4.3 Development- Concept, meaning, Importance 4.4 Recent trends in Training & development	11
Total No of Teaching Lectures			48 (48 min)
Total No of lectures for Evaluation			9

Suggested Readings:

Sr. No.	Title of the Book	Author/s	Publication	Place
1.	Human Resources Management	L.M. Prasad	Sultan and Chand Publishing Company	New Delhi
2.	Human Resources Management	K. Ashwathappa	Tata McGraw Hill	New Delhi
3.	Organizational Behavior Text, Cases and Games	K. Ashwathappa	Tata McGraw Hill	New Delhi
4.	Organizational Behavior	L.M. Prasad	Sultan and Chand Publishing Company	New Delhi
5.	Personnel Management	C. B. Mamoria		

Suggested Web / E-Learning Recourses:

Sr. No.	Topic of the Lecture	Lectures (Available on Youtube / Swayam / MOOCS etc.)	Link	Journals / Articles / Case studies
1.	All	1. https://www.coursera.org		
2.	All	2. https://www.swayamprabha.gov.in		

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Course Code: B4-21/207	Subject / Course: Advance Excel	Marks: 50 Credits: 2
Course Objectives:		
<p>This course trains the students with the most required part of MS-Excel in day-to-day Administrative work like Managing Worksheets, Database Management through Worksheets, Data Analysis, Reporting, preparing Charts, Summary, etc. so that when they actually get placed anywhere, they should be able to handle all these industrial requirements most efficiently.</p>		
Course Outcome:		
<p>After completing the course, the student shall be able to</p> <p>CO1: Manage MS-Excel Worksheets Data as Range of Cells, Tables, etc., Validate the Worksheet Data, Do Calculations by different Formulas / Functions, Consolidate data, Apply Formatting / Conditional Formatting on the Worksheet Data, Database Management through Worksheets, etc.</p> <p>CO2: Do Data Analysis by using different facilities / Functions provided by MS-Excel like Summary Functions, Custom Sorting, Advanced Filtering, Inserting Sub-totals, Making Pivot Tables, Using What-If Analysis utilities, etc.</p> <p>CO3: Build various Reports in Excel, Prepare Charts, Summary, etc., Protect the data in Worksheet by setting passwords, Print the Worksheet and set the Printing Settings, Record and Use Macros, etc.</p>		

Unit	Unit Title	Contents	No. of Lectures
I	Basic Overview of MS-Excel, Worksheet Creation, Formula Building, Cell Referencing, Functions & Tools for Data Summary	<p>1.1 Basic Excel Overview - MS-Excel Screen elements, About Workbook, Worksheet, Rows, Columns, Workbook Templates, etc.</p> <p>1.2 Worksheet Creation - Basic Data Entry in Excel, Formatting the Cells, Adjust Column Width / Row Height, Insert / Delete Rows, Columns, Cells, Sheets, etc.</p> <p>1.3 Basic Formula Building – Addition, Subtraction, Multiplication, Division, Percentage, etc.,</p> <p>1.4 Cell Referencing - Absolute & Relative Cell Referencing in Formula, Naming the Cell Range, Cell References from other worksheets</p>	10

Unit	Unit Title	Contents	No. of Lectures
		<p>/ workbooks, etc.</p> <p>1.5 Functions & Tools for Data Summary–</p> <p>1.5.1 Functions – Sum, Average, Count, Min, Max, Large, Small, IF, Nested If, AND, OR, NOT, SUMIF(S), COUNTIF(S), AVERAGEIF(S), etc.</p> <p>1.5.2 Tools – Conditional Formatting, Sort, Filter, Subtotals, etc.</p>	
II	Data Analysis with Charts & Pivot, Data Import & Other Analysis Tools	<p>2.1 Charts - Simple Chart, Multiple Series in Chart, Chart on Contiguous / Discrete Cell Range, Editing the Charts, Chart Options, Adding / Formatting, Chart Elements</p> <p>2.2 Pivot Table – Create Pivot Table, Pivot Table options, Pivot Table Design, Adding Slicers, Pivot Chart</p> <p>2.3 Data Validation - Setting Validation Rules, Validation Styles, Circle Invalid Data, Clear Validation Rules</p> <p>2.4 What if Analysis - Goal Seek, Scenarios, Data Table</p> <p>2.5 Data Import – Import External Data (CSV files) into Excel, Convert Range into Tables, Break Text into Columns, etc.</p> <p>2.6 Data Consolidation: Consolidate data from multiple worksheets</p>	10
III	Functions in MS-Excel, Macros, Other Miscellaneous options in MS-Excel	<p>3.1 Lookup Functions - Vlookup, Hlookup, Lookup, Match, Index, etc.</p> <p>3.2 Text Functions - Text, Concatenate, &, Upper, Lower, Proper, Len, Trim, Left, Right, Mid, Find, Search, Replace, Substitute, etc.</p> <p>3.3 Date & Time Functions - Today, Date, Datevalue, Day, Month, Year, Datedif, Workday, Networkdays, Now, Hour, Minute, Second, Calculating Time Difference, etc.</p> <p>3.4 Financial Functions - SLN, DB, SYD, PMT, FV, Rate, NPER, IRR, NPV, Round, etc.</p> <p>3.5 Formula Auditing – Trace Precedents, Dependents, Errors, Evaluate Formula</p> <p>3.6 Macros – Record Macro, Run Macro, Primary Editing in Macro Code</p> <p>3.7 Worksheet / Workbook Protection,</p> <p>3.8 Go to Special, Paste Special</p>	10

Unit	Unit Title	Contents	No. of Lectures
		3.9 Insert Hyperlinks, Insert Comments / Notes 3.10 View Tab - Freeze Panes, Split, Custom View, Page Break Preview, 3.11 Printing of Worksheet, Printing Options	
Total No of Lectures			30

Course Evaluation – 50 marks

MCQS - 30 Marks

Assignment - 20 Marks

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Course Code: B4-21/208	Subject / Course: Physical Education, Sports and Yoga	Marks: 50 Credits: 2
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Unit	Unit Title	Contents
I	Participation in Yoga Activity	Every student should participate in Yoga Activity for 5 hours
II	Participation in Fitness Activity	Every student should participate in Fitness Activity for 5 hours
III	Participation in Games and Sports	A student will have to select one game/sport from the list of Association of Indian Universities, New Delhi (List of events available on website www.aiuweb.org). The choice of game/sports will be according to the facilities available in the college. Every student should participate in Games and sports for 5 hours.
IV	Fitness Assessment	1. Cardiovascular Endurance 2. Flexibility 3. Muscular Strength Endurance 4. Body Composition (No marks)

Suggested Readings:

Sr. No.	Title of the Book	Author/s	Publication	Place
1	Foundation of Physical Education, Exercise Science and Sports.	Bucher, C. A., & Wuest, D.	Tata McGraw Hill Education Private Limited	New Delhi
2	Textbook of Applied Measurement Evaluation & Sports Selection.	Kansal, D. K.	Sports & Spiritual Science	New Delhi
3	Advanced Fitness Assessment and exercise prescription	Hayward, V	Human Kinetics,	USA.
4	Physical Activity and Health Guidelines	Rahl, R. V	Human Kinetics,	USA.
5	Light on Yoga	Iyengar, B.K.	Orient Longman Pvt. Ltd.	Mumbai
6	Light on Astanga Yoga	Iyengar, B.K.	Alchemy Publishers.	New Delhi
7	Guidelines for Yogic Practices	Gharote, M. L.	The Lonavla Yoga Institute	Pune

