



**PALANISAMY COLLEGE OF ARTS, PERUNDURAI – 638 052**  
(Approved by AICTE Recognized by UGC and Affiliated To Bharathiar University)  
ISO 9001:2015 CERTIFIED INSTITUTION  
**DEPARTMENT OF BIOTECHNOLOGY**

**BRIDGE COURSE**

**SYLLABUS**

S.No	Topic	Content	Duration (hour)
1	ENGLISH	Parts of speech, Tenses, Letter writing	3 Hours
2	MATHS	Matrix, Measures of central tendency, Differentiation, Integration, Interest	5 Hours
3	INTRODUCTION BIOTECHNOLOGY AND INSTRUMENTATION	History of Biotechnology, Scope of Biotechnology, Plant cell and Animal cell, Micro organisms. Types of microscopes, pH meter, Laminar Air Flow, Autoclave, Incubator.	3 Hours
4	MICROBIOLOGICAL MEDIA AND TISSUE CULTURE TECHNIQUES	Types and preparation of media, Methods of Sterilization, Composition of Plant and Animal tissue culture media, Preparation of suitable explants for organogenesis, Micro propagation, Plant hormones and growth Regulators.	3 Hours
5	TRANSGENIC METHODS	Production of transgenic Plant and transgenic Animals. Animal cloning: Methods of cloning in animal system.	1 Hours
<b>TOTAL HOURS</b>			<b>15 HOURS</b>

SIGNATURE OF THE CO – ORDINATOR

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**PALANISAMY COLLEGE OF ARTS, PERUNDURAI – 638 052**  
**(Affiliated to Bharathiar University, Coimbatore – 641 046)**  
An ISO 9001:2015 Certified Institution  
**DEPARTMENT OF CHEMISTRY**

**SYLLABUS FOR BRIDGE COURSE**

**Organic chemistry**

**Lecture 1**

Introduction to Reaction Intermediates: Carbocations: Generation, stability, reaction, and application in synthetic organic chemistry.

**Lecture 2**

Free radicals, Carbenes and Nitrenes: Generation, stability, reaction, and application in synthetic organic chemistry.

**Lecture 3**

Organic reaction without formation of intermediates: Diels-Alder reaction,  $SN_2$  and E2 reaction, their application

**Coordination chemistry**

**Lecture 1**

Importance of coordination chemistry, Types of complexes Classifications of Ligands.

**Lecture 2**

Crystal Field Theory to explain nature of bonding in octahedral, tetrahedral, and square planar complexes

**Lecture 3**

Magnetic properties of all types of complexes

**Physical chemistry**

Thermodynamics and equilibrium and law of Thermodynamics.

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**DEPARTMENT OF CHEMISTRY**

**BRIDGE COURSE**

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3	ORGANIC CHEMISTRY	Introduction to Reaction Intermediates, Organic reaction without formation of intermediates, (Free radicals, Carbenes and Nitrenes).	2 Hours
4	INORGANIC CHEMISTRY	Types of complexes Classifications of Ligands, Crystal Field Theory, Magnetic properties of all types of complexes.	2 Hours
5	PHYSICAL CHEMISTRY	Thermodynamics and equilibrium and law of Thermodynamics.	3 Hours
<b>TOTAL HOURS</b>			<b>15 Hours</b>

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**PALANISAMY COLLEGE OF ARTS, PERUNDURAI-638052**

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**ISO: 9001:2015 Certified Institution**

**DEPARTMENT OF COMMERCE**

**BRIDGE COURSE FOR B.COM AND B.COM (CA) BEGINNERS**

### **BUSINESS ORGANISATION**

Business-Trade-Commerce-Scope of business- International Trade and Profession- Banking and Insurance-Transportation and warehousing-Advertising and Sales Promotion- Business Organisation and Types of Business Organisation-Import,Export and Entrepot.

### **ACCOUNTING**

Accounting-Accounting Concepts and Conventions-Rules of Double Entry System- Book keeping-Accounting Cycle- Branches of Accounting-Important terms in Financial Accounting- Price list,Quotation, Invoice, Voucher, Receipts and Bills, Assets and liabilities, Capital and Revenue , Income and Expenditure ,Bills of Exchange, Discount-Trade Discount and Cash discount.

### **BANKING**

Banks and its Classification-Types of deposits,-Commercial banks,-RBI and its functions.-Bank transaction: Cheques, Demand Draft, Overdraft, Debit card and Credit card- its types – NEFT- IFSC- Mobile banking, Net banking. ATM, KIOSK machine

### **MARKETING**

Evolution of Marketing-Marketing Concepts-Marketing Functions-E-Marketing- Share Market: Capital and Debt-Equity– Types of shares – Debentures and its types- Primary market and Secondary market-Stock Exchange-DEMAT Account-IPO – Speculators, Brokers in share market.

### **ECONOMICS**

Economics-Scope –Micro and Macro Economics-Various Definitions of Economics- Concepts in Economics-Cost concept and types of Costs-Markets on the basis of Competition, Demand and Law of Demand and Law of Supply-Utility Analysis.

  
Signature of the Coordinator

  
Signature of the HOD

  
Signature of the Principal



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DEPARTMENT OF COMMERCE (B.COM&B.COM (CA))

BRIDGE COURSE

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1	ENGLISH	Parts of speech, Tenses, Letter writing	3 Hours
2	MATHS	Matrix, Measures of central tendency, Differentiation, Integration, Interest	5 Hours
3	BUSINESS ORGANISATION	Business-Trade-Commerce Scope of business-International Trade and Profession-Banking and Insurance-Transportation and warehousing-Advertising and Sales Promotion-Business Organisation and Types of Business Organisation-Import, Export and Entreport.	2 Hours
4	ACCOUNTING	Accounting-Accounting Concepts and Conventions-Rules of Double Entry System-Book keeping-Accounting Cycle- Branches of Accounting-Important terms in Financial Accounting- Price list, Quotation, Invoice, Voucher, Receipts and Bills, Assets and liabilities, Capital and Revenue , Income and Expenditure ,Bills of Exchange, Discount-Trade Discount and cash discount	2 Hours
5	MARKETING AND BANKING	Banks and its Classification-Types of deposits,-Commercial banks,-RBI and its functions.-Bank transaction: Cheque, Demand Draft, Overdraft, Debit card and Credit card-its types – NEFT- IFSC- Mobile banking, Net banking, ATM, KIOSK machine Evolution of Marketing-Marketing Concepts-Marketing Functions-E-Marketing-Share Market: Capital and Debt-Equity– Types of shares – Debentures and its types- Primary market and Secondary market.	2 Hours
	ECONOMICS	Economics-Scope –Micro and Macro Economics-Variou Definitions of Economics-Concepts in Economics-Cost concept and types of Costs-Markets on the basis of Competition. Demand and Law of Demand and Law of Supply-Utility Analysis.	1 Hours
<b>TOTAL HOURS</b>			<b>15 Hours</b>

*P. Kokilavani*  
Signature of the co-ordinator

*A. Subramanyam*  
Signature of the HOD



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DEPARTMENT OF COMPUTER SCIENCE

### SYLLABUS FOR BRIDGE COURSE

#### Computer Basic

##### Lecture 1

Introduction to basic Computer, Operating System, Understanding Word Processing, Using Spread Sheet and Collaboration, Making small presentation.

##### Lecture 2

Communicating using the Internet, WWW and web browsers.

##### Lecture 3

Communications and Collaboration, Making small presentation.

#### Adobe Photoshop Basic

##### Lecture 1

Introduction to Basic tools, working with layers.

##### Lecture 2

Working with colors, working with file formats, sizing.

##### Lecture 3

Working with color palate.

#### C Programming

##### Lecture 1

Introduction to C - Language History , C - Language Basics.

##### Lecture 2

Explain about Printf and Scanf C Program, C - Data Types.

##### Lecture 3

Introduction C - Tokens and Keywords, C - Constant, C - Variable.

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**DEPARTMENT OF COMPUTER SCIENCE**

**BRIDGE COURSE**

**SYLLABUS**

S.No	Topic	Content	Duration (hour)
1	ENGLISH	Parts of speech, Tenses, Letter writing	3 Hours
2	MATHS	Matrix, Measures of central tendency, Differentiation, Integration, Interest	5 Hours
3	Computer Basic	Knowing computer, Operating System, Understanding Word Processing, Using Spread Sheet, Communicating using the Internet, WWW and web browsers, Communications And Collaboration, Making small presentation	2 Hours
4	Adobe Photoshop Basic	Introduction, Basic tools, working with layers, working with colors, working with file formats, sizing, Working with color palate.	2 Hours
5	C Programming	<ul style="list-style-type: none"><li>• C - Language History</li><li>• C - Language Basics</li><li>• C - Printf And Scanf</li><li>• C - Data Types</li><li>• C - Tokens And Keywords</li><li>• C - Constant</li><li>• C - Variable</li></ul>	3 Hours
<b>TOTAL HOURS</b>			<b>15 Hours</b>

  
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**DEPARTMENT OF ENGLISH**

**BRIDGE COURSE**

**ENGLISH DEPARTMENT**

➤ **LITERATURE**

Description: Literature is a group of works of art made up of words. There are many different kinds of literature, such as Poetry, Play or Novels.

➤ **POETRY**

Description: The expression of feeling and ideas is given intensity by use of distinctive style and rhythm.

➤ **FICTION**

Description: Literature in the form of prose, especially novels, that describes imaginary events and people.

➤ **DRAMA**

Description: Drama is the specific mode of fiction represented in performance.

➤ **CRITICISM**

Description: Criticism is the practice of judging the merits and faults of something.





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**DEPARTMENT OF MATHEMATICS**

**ACADEMIC YEAR 2018-2019**

**BASIC MATHEMATICS**

**SYLLABUS**

**Matrix:**

Addition – Subtraction – Multiplication - Determination, Simple Problems.

**Measures Of Central Tendency:**

Mean, Median, Mode and Simple Problems.

**Differentiation:**

Differentiation of Arithmetic, Logarithmic, Trigonometric, Exponential series and its simple problems.

**Integration:**

Integration of Arithmetic, Trigonometric, Exponential series and its simple problems.

**Interest:**

Simple Interest and Compound Interest and basic problems.

  
**BRIDGE COURSE CO-ORDINATORE**

  
**HOD**




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**DEPARTMENT OF MICROBIOLOGY**

**BRIDGE COURSE**

**SYLLABUS**

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1	<b>ENGLISH</b>	Parts of speech, Tenses, Letter writing	3 Hours
2	<b>MATHS</b>	Matrix, Measures of central tendency, Differentiation, Integration, Interest	5 Hours
3	<b>CELL BIOLOGY</b>	Cell structure-Properties and its types. Classification of Microorganisms- Bacteria, Fungi, Algae, yeast, Protozoa, Virus, Viroids, Prions. Beneficial and Harmful effects of Microorganisms. Microscopy- Principles and applications.	3 Hours
4	<b>BRANCHES OF MICROBIOLOGY</b>	Medical microbiology, Industrial microbiology, Agricultural microbiology, Dairy microbiology, Soil and environmental microbiology, Marine microbiology.	2 Hours
5	<b>MICROBIAL INSTRUMENTAL</b>	Autoclave, Hot air oven, Incubator, pH meter, Water Bath, Laminar air flow, Colony counter, Centrifuge, Calorimeter	2 Hours
<b>TOTAL HOURS</b>			<b>15 Hours</b>

  
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DEPARTMENT OF COSTUME DESIGN AND FASHION

FUNDAMENTALS OF APPAREL

BRIDGE COURSE

SYLLABUS

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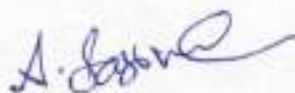
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**DEPARTMENT OF CHEMISTRY**

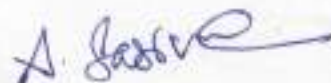
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**DEPARTMENT OF COMPUTER SCIENCE**

**BRIDGE COURSE  
SYLLABUS FOR BRIDGE COURSE**

**Computer Basic**

**Lecture 1**

Introduction to basic Computer, Operating System, Understanding Word Processing, Using Spread Sheet and Collaboration, Making small presentation.

**Lecture 2**

Communicating using the Internet, WWW and web browsers.

**Lecture 3**

Communications and Collaboration, Making small presentation.

**Adobe Photoshop Basic**

**Lecture 1**

Introduction to Basic tools, working with layers.

**Lecture 2**

Working with colors, working with file formats, sizing.

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Working with color palate.

**C Programming**

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4	Adobe Photoshop Basic	Introduction, Basic tools, working with layers, working with colors, working with file formats, sizing, Working with color palate.	2 Hours
5	C PROGRAMMING	<ul style="list-style-type: none"> <li>• C - Language History</li> <li>• C - Language Basics</li> <li>• C - Printf And Scanf</li> <li>• C - Data Types</li> <li>• C - Tokens And Keywords</li> <li>• C - Constant</li> <li>• C - Variable</li> </ul>	3 Hours
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**DEPARTMENT OF ENGLISH**

**BRIDGE COURSE**

**ALL UG I YEARS**

**> PARTS OF SPEECH**

Description: The Parts of Speech explain how a word is used in Sentences.

**> TENSES**

Description: Tense is a category that expresses time reference with reference to the moment of speaking.

**> LETTER WRITING**

Description: Written communication in both the formal and informal.

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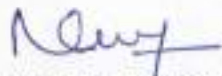
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DEPARTMENT OF MICROBIOLOGY

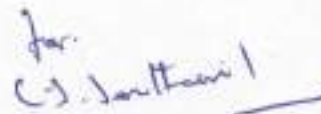
BRIDGE COURSE

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5	MICROBIAL INSTRUMENTAL	Autoclave, Hot air oven, Incubator, pH meter, Water Bath, Laminar air flow, Colony counter, Centrifuge, Calorimeter	2 Hours
<b>TOTAL HOURS</b>			<b>15 Hours</b>



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பழனிசாமி கலைக் கல்லூரி

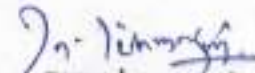
பெருந்துறை -638 052

தமிழ் இலக்கியத்துறை

அடிப்படை பாடத்திட்டம் (Bridge Course)

1. இலக்கணம் - எழுத்து - தோற்றம் - வகை - தொகை - விரி - வடிவம் - மாத்திரை போன்றவற்றை அறியச் செய்து விளக்குதல் .  
சொல் - வகை - பெயர்ச்சொல், வினைச்சொல், இடைச்சொல், உரிச்சொல் என தமிழ்ச் சொற்களுடைய வகையும் , அவை பயின்று வரும் முறையும் பற்றிய அறிமுகம்.  
பொருள் - (i) வாழ்வியல் முறை - அகம்( களவு, கற்பு),புற (போர், கொடை, வீரம், வெற்றி) போன்ற வாழ்வியல் சார்ந்த ஒழுக்க விழுமியங்களை மொழிதல் .  
(ii) செய்யுள் - இயற்றும் முறை , அமையும் முறை .
2. இலக்கியம் - அறிமுகம் , வகை -சங்க இலக்கியம் (எட்டுத் தொகை , பத்துப்பாட்டு) , சங்க மருவிய இலக்கியம் (நீதி) , பக்தி இலக்கியம் (சைவம் , வைணவம்) , காப்பிய இலக்கியம் , சிற்றிலக்கியம் , இக்கால இலக்கியம் (சிறுகதை, புதினம்,நாடகம் , கவிதை ) பேச்சு , எழுத்து மொழிகளின் தோற்றம் . தொல் மொழிகள் - மொழிக் குடும்பம் (திராவிட மொழிகள்)
3. மொழி வரலாறு - தமிழக வரலாற்றுக்கான அடிப்படை ஆதாரங்கள் , தமிழகத்தின் இயற்கை அமைப்பு , பண்டைய தமிழரின் அயல்நாட்டுத் தொடர்புகள் , பண்டைத் தமிழரின் வாழ்வியல் நிலை போன்றவற்றை விளக்குதல்.
4. தமிழக வரலாறும், மக்களின் பண்பாடும் - தமிழக வரலாற்றுக்கான அடிப்படை ஆதாரங்கள் , தமிழகத்தின் இயற்கை அமைப்பு , பண்டைய தமிழரின் அயல்நாட்டுத் தொடர்புகள் , பண்டைத் தமிழரின் வாழ்வியல் நிலை போன்றவற்றை விளக்குதல்.
5. மொழிப் பயிற்சி - தமிழ் - கற்றல், கற்பித்தல் , பயன்

  
ஒருங்கிணைப்பாளர்

  
துறைத்தலைவர்

  
முதல்வர்