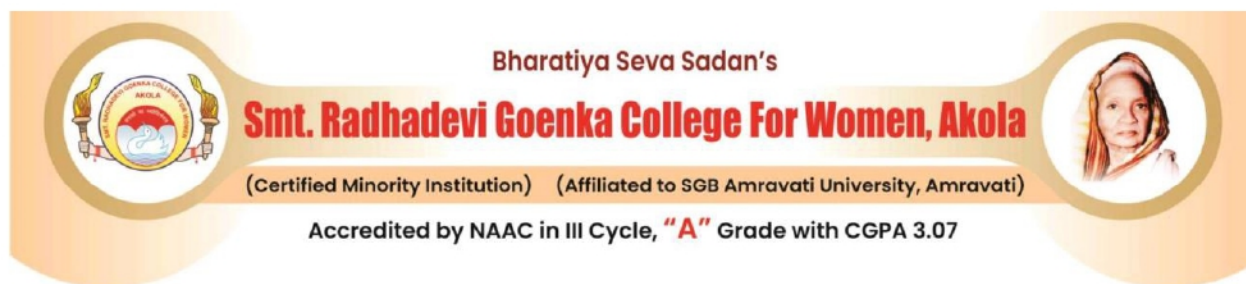


## Criterion I : Curricular Aspects



**Total number of courses that include experiential learning through project work/field work/internship Session – 2021-22**

2021-2022			
Sr. No.	Program Name	Course Name	Course Code
1.	Bachelor of Computer Application	Advanced Database Management System (Project Writing)	1065
3.	Bachelor of Commerce	Essential of E-Commerce	EOE
2.	Master of Commerce	Entrepreneurship and Skill Development	4031
4.	Master of Arts (Music)	Music Project & Viva	2361
5.	Master of Science (Home Science) FSN	Dissertation	242DR63
6.	Master of Science (Home Science) HD	Dissertation	243DR64
7.	Bachelor of Arts	Environmental Studies	EVS
8.	Bachelor of Commerce	Environmental Studies	EVS
9.	Bachelor of Science (Home Science)	Environmental Studies	EVS
10.	Bachelor of Computer Application	Environmental Studies	EVS
11.	Bachelor of Business Administration	Environmental Studies	EVS

**Sant Gadge Baba Amravati University, Amravati  
Affiliating University Curriculum**

**B.C.A. III Sem. VI Advanced Database Management System (Project Writing)**

B.C.A..Part-I,II & III  
(Sem-I to VI)

Prospectus No. 20131221

**संत गाडगे बाबा अमरावती विद्यापीठ  
SANT GADGE BABA AMRAVATI UNIVERSITY**

**विज्ञान विद्याशाखा  
(FACULTY OF SCIENCE)**

**PROSPECTUS  
OF  
B.C.A.PART-I, II & III (SEMESTER-I to VI)  
SEMESTER-I, III & V EXAM. WINTER-2012 &  
SEMESTER-II, IV & VI EXAM. SUMMER-2013 &  
ONWARDS**



2012

Price Rs. ....../-

## Criterion I : Curricular Aspects

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35.	4SP1	Lab-I	39
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## Criterion I : Curricular Aspects

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---



## Criterion I : Curricular Aspects

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Choices in tuning queries and views, DBMS Benchmarking, Security.

**Unit-II** : Concurrency control transactions and schedule, Serializability, Lock based concurrency control lock management, specialized locking techniques, control without locking.

Crash Recovery, Introduction to crash recovery, Log, Check pointing, Recovery from a system crash.

**Unit-III** : Parallel and distributed databases. Architectures for parallel databases, Parallel query Evaluation and optimization, Parallelizing individual operations, Introduction to distributed databases, Architecture, Fragmentation and Replication, Catalog management, Distributed Query processing, updating distributed data, Distributed transaction management, Distributed Concurrency control, Distributed recovery.

**Unit-IV** : **Object database Systems** : Objects, Identity, inheritance, Database Design for an ORDBMS, Storage and access methods, Query processing and optimization, Comparing RDBMS with OODBMS and ORDBMS.

**Unit-V** : **Data Warehousing**  
Introduction, DSS and OLTP, Metadata Management in Data Warehouse. Related data structures, OLAP and Data Warehousing environment.  
Data mining.  
Introduction and application areas.

### Books :

- 1) Database Management System -Raghu Ramkrishna McGraw Hill. International Editions.
- 2) Introduction to Database System by C.G.Date.

## Criterion I : Curricular Aspects

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**6SP1: LAB I-6ST1+6ST2:** Minimum 8 practical on each.

The distribution of marks in Practical examination is given as:

(1) Program writing/ execution based on 6ST1	15 marks.
(2) Program writing/ execution based on 6ST2	15 marks.
(3) Practical Record	10 marks.
(4) Viva-Voce	10 marks.
<hr/>	
<b>50 marks.</b>	
<hr/>	

**6SP2: LAB II-6ST3+6ST4:** Minimum 8 practical on each.

The distribution of marks in Practical examination is given as:

(1) Program writing/ execution based on 6ST3	15 marks.
(2) Program writing/ execution based on 6ST4	15 marks.
(3) Practical Record	10 marks.
(4) Viva-Voce	10 marks.
<hr/>	
<b>50 marks.</b>	
<hr/>	

**6SP3: LAB III-Project work with Report.**

**The distribution of marks in Practical examination is given as:**

(1) Project Work with Report	30 marks.
(2) Viva-Voce	20 marks.
<hr/>	
<b>50 marks.</b>	
<hr/>	

\*\*\*\*\*

## Criterion I : Curricular Aspects

### B.Com. III (Essential E-Commerce)

B.Com.Final  
Examination 2015


Prospectus No.2015153

संत गाडगे बाबा अमरावती विद्यापीठ  
SANT GADGE BABA AMRAVATI UNIVERSITY

वाणिज्य विद्याशाखा  
(FACULTY OF COMMERCE)

अभ्यासक्रमिका  
वाणिज्य स्नातक अन्त्य,परीक्षा २०१५  
(त्रिवर्षीय अभ्यासक्रम)

**PROSPECTUS**  
of  
The B.Com. Final Examination 2015  
(Three Year Degree Course)



2014

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## Criterion I : Curricular Aspects

Prospectus No. 2015153  
B.Com. Final

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## Criterion I : Curricular Aspects

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Internet Relay Chat (IRC); Frequently asked questions(FAQ); The world wide web consortium (W3C)- Origin and evolution, standardizing the web; W3C members; W#C recommendations; Browsing Searching; Browsing and information retrieval; Exploring the world wide web; Architecture of world wide web; Hyperlink; Hyper Text Markup Language(HTML); Hyper Text Transfer Protocol(HTTP); Address-URL.

- Unit-III: Designing Website/Webpage:**  
 WW operations; Web standards; HTML-concepts and version; Naming scheme for HTML documents; HTML editor; Explanation of structure of the home page; Elements in HTML documents; Frontpage Express-Using Frontpage to create web pages; Entering text; Changing text size; Colour; Style; Font; Justification; Inserting images; Creating hyperlinks; Symbol; Lines; Labels and Forms.
- UNIT-IV: Web Browsing:**  
 Browsers; Basic functions of web browsers; Browsers with advanced facility; Internet Explorer; Netscape Navigator; Netscape Communicator.
- Unit-V : Search Engine/Directories :**  
 Directoy; General features of the search engines; Approaches to website selection; Major search engines; Specialization search engines; Popular search engines/ directories; Guidelines for effective searching; A general approach to searching.

**BOOKS RECOMMENDED:**

1. Agarwaka Kamlesh N. and Agrawala Deeksha: Bridge to the online Storefront; Macmillon India, New Delhi.
2. Phillips Lee Anne  
Practical HTML 4, Prentice Hall New Delhi.
3. Minoli Daniel, Minoli Emma.  
Web Commerce Technology Handbook, Tata Mc Graw Hill, New Delhi
4. Deitel Harvey M. and Deitel Paul J. and Neita T.R.: Complete Internet and World Wide Web Programming Training Course; Prentice Hall, New Delhi.
5. इंटरनेट आणि वर्ल्ड वाईड वेब (w.w.w.) - Prof.S.M.Kolte, Pimpalapur & Co., Publishers, Nagpur.
6. Internet and World Wide Web- Prof. Uday Shrikrishna Kale, Shri Sainath Prakashan, Dharampath, Nagpur - 10

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**SCHEME OF EXAMINATION**

Year	Paper	Total Marks		Minimum Passing Marks	
		T	P	T	P
B.Com III	Internet and W.W.Web	70	* 30	24	11

**\* Division of Marks for Practical.**

Record Preparation	5	Marks
Practical	15	Marks
Description	5	Marks
Viva	5	Marks
Total ..		30

( Use answerbook for practical provided by the University)

**Notes :** B.Com III Practical batch will be of 20 students.  
**Practicals:** Based on syllabus.

**ii) ESSENTIALS OF E-COMMERCE**

**Time: 3 Hours** **Marks: 70**

**Objective :**  
 The objective of this course is to familiarize the students with the basics of e-commerce and to comprehend its potential.

**Unit-I: Internet and Commerce:**

- 1.1** Business Operations: e-commerce practices vs traditional business practices; Concepts of b2b, b2c, c2c, b2g, g2b, g2c; Benefits of e-commerce to organizations, consumers and society; Limitation of e-commerce.
- 1.2** E-Commerce Operations : Credit card transaction; Electronic payment systems; Cybercash; Smart cards; Indian payment models.

**Unit-II: Applications in B2C :**

Consumers' shopping procedure on the internet; impact on dis-intermediation and re-intermediation; Global Market; Strategy of traditional departmental stores; Products in B2C models; Online banking and its benefits; Online financial services and their future; E-auctions-benefits, implementation and impact.



## Criterion I : Curricular Aspects

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- Unit-III: Applications in B2B:**  
Applications of b2b; Key technologies for b2b; Architectural models of b2b; Characteristics of the supplier-oriented marketplace, buyer-oriented marketplace, and intermediary-oriented marketplace; Benefit of b2b on procurement reengineering, Just in Time delivery in b2b; Internet based EDI from traditional EDI; Marketing issues in b2b.
- Unit-IV: Applications in Governance :**  
EDI in governance; E-government; applications of internet; Concept of government -to-business, business-to-government, and citizen-to-government; E-governance models; Private sector interface in e-governance.
- Unit-V : Emerging Business Models :**  
Retail model; Media model; Advisory model; Made-to-order model; Do-it-yourself model; Information model; Emerging hybrid models; Emerging models in India.

**BOOKS RECOMMENDED:**

1. Agarwala Kamalesh N. and Agrawal Deeksha :  
Bride to Online Storefront; Macmillon India, New Delhi.
2. Agarwala Kamalesh N. and Agrawala Deeksha:  
Business on the Net-Introduction to E-Commerce; Macmillon India, New Delhi.
3. Agarwala Kamalesh N. and Agrawala Deeksha :  
Bulls, Bears and The Mouse- An Introduction to Online Stock Market Trading; Macmillon India, New Delhi.
4. Tiwari Dr. Murlidhar Dr.:  
Education and e-Governance; Macmillon India, New Delhi.
5. Afuah A. and Tucci C.:  
Inernate Business Models and Strategies, Mc Graw Hill, New York.

**Internal Assessment Scheme**

1. Student will have to work under the guidance of the teacher and submit project report before one month of the commencement of the theory examination.
2. Student will have to work for project report throughout the year. He will visit different industries and consultants to seek their help and prepare project report under the guidance of the teacher.
3. A record of internal assessment must preserve and be presented by concern teacher for inspection if needed by concern authority upto six months from the date of declaration of result.
  - i) Weightage between theory and sessional should be 70%

- 46
- and 30% respectively.
- ii) 30% marks will be based on continuous evaluation of the student assignment, Class test, Seminars and Education tours and Project Report.
- NOTE:** Minimum three assignment and three Class test and one educational tour should be conducted clearing the year.

\*\*\*\*\*

**COMBINATION - V  
(Computer Application)  
(To be implemented from the session 2012-13)  
(i) COMPUTER PROGRAMMING WITH  
VB.NET & ORACLE**

**Time 3 hours) (Marks-100)**  
(70 Marks for Theory and 30 Marks for Practical)

- Unit - I : Introduction to VB. Net, VB. Net project, design object, classes, Application object relationship, class design.
- Unit-II : VB. Net Language : Variables, Expressions, Statements Blocks, Structure variables, enumerevates, Classes object, Control structures : Selection structures, Sub functions & parameters, errors & exceptions, scope.
- Unit-III : Object & Arrays : Data & object, Structures, Organizing data, arrays, collections, inheritance, Polymorphism. Winforms application : Winforms basics, user interface, Form Dialogus boxes, other options, Forms styles, Database & files in VB.Net.
- Unit-IV : Introduction to ORACLE : History & standardisation of SQL, Elements of SQL Database object, reserve words, Keywords, Variable, Data type operators. Types of SQL : DDL (Data Definition Language), (DML) Data manipulation language and (DCL) Data Control Language.
- Unit-V : PL/SQL : Introduction, Variable, Initialization of variable, Dynamic data types, Control Loop statements.

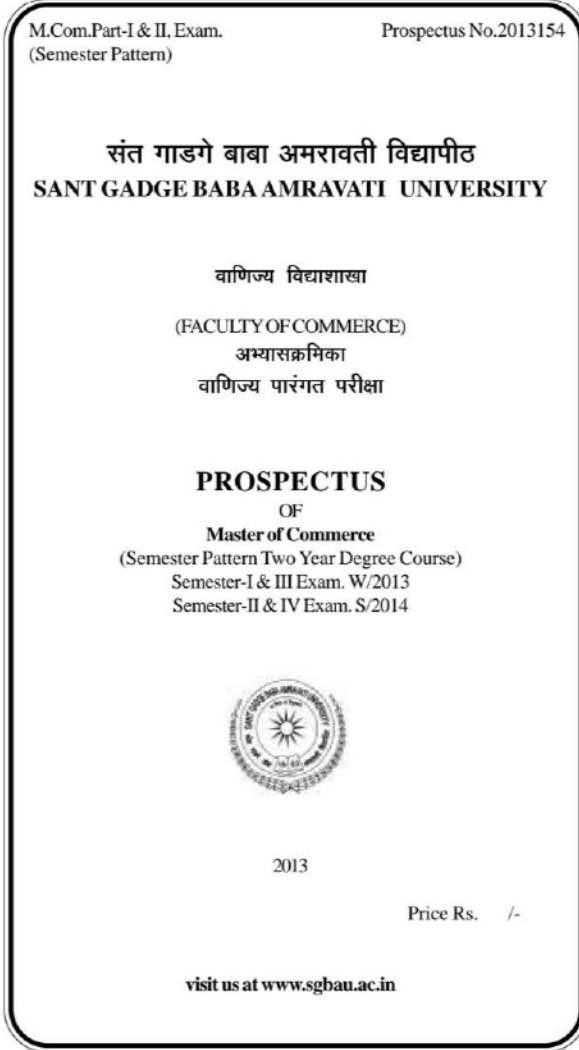
**Reference Books :**

1. Microsoft Press : MS Visual Basic .net step by step.
2. Microsoft Press : Programming MS Visual Basic. net.
3. Oracle Press : Oracle.
4. PL/SQL in 21 days (Techmedia) SAMS : Oracle PL/SQL.



## Criterion I : Curricular Aspects

### M. Com. II (Sem. IV) Study Visit



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## Criterion I : Curricular Aspects

**Prospectus No.2013154  
M.Com. (Semester Pattern)**

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## Criterion I : Curricular Aspects

SANT GADGE BABA AMRAVATI UNIVERSITY GAZETTE - 2018 - PART TWO - 737

### NOTIFICATION

No. 133 /2018

Date : 13, December, 2018

**Subject : Syllabus for subjects of M.Com. Semester- IV as per semester and credit & Grade System in the Faculty of Commerce & Management from the session 2018-2019 & onwards.**

It is notified for general information of all concerned that, the authorities of the University has accepted syllabi of M.Com. Semester-IV subjects, (i) **Entrepreneurship and Skill Development**, ii) **Saving and investment planning**, iii) **International Financing**, IV) **Sales and Distribution Management**, which is to be implemented from the Academic Session 2018-2019 and onwards for semester IV of M.Com. as per Direction No. 14/2017, appended (Appendix-A) to this notification, along with change in title of subject "Foreign Trade Policy, Procedures and Documentation" as "Foreign Trade" with same subject contents.

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Amravati.

**Appendix – A**  
**M.Com. – II (Semester-IV)**  
**ENTREPRENEURSHIP AND SKILL DEVELOPMENT**

Time – 3 Hours

Marks – 80

**Objective:-** The objective of the course is to improve entrepreneurship quality for self-employment. To gives knowledge for start their own start-up. This course is also guiding them how business skill developed for achieving business goals.

**Unit-I :**

- 1.1- Entrepreneurship: meaning, Concept, Definition, Entrepreneurial Characteristics and skill,
- 1.2- reasons for growth of Entrepreneurship in India, Types of Entrepreneurs. Growth of Business ideas, Factors affecting Entrepreneurial growth.
- 1.3- Intellectual property: Trademark, registration, infringement of Trademark, Passing-off, Copyright, Patents ,Designs.

**Unit-II:**

- 2.1 Entrepreneurial Support: Policies, types of policies, business incubation, Entrepreneurial Environment, business cluster
- 2.2 Business Plan: use of business plan, kinds of business plan,
- 2.3 Rural Entrepreneurship: Meaning, need, problems, Role of NGOs in rural entrepreneurship. Entrepreneurial movements.
- 2.4 Women entrepreneurship: Concept, functions, growth of women entrepreneurs, problems of women entrepreneurs,

**Unit-III:**

- 3.1 Start-up: small Enterprises, project identification and selection Project formulation and selection. Project appraisal
- 3.2 Entrepreneurial Finance: Source of Debt Finance, Securing debt finance. Venture Capital, Structure of funds venture capital investment.
- 3.3 Institutional finance to Entrepreneurs: Industrial Development Bank of India(IDBI), Industrial Finance Corporation (IFCI), Industrial Credit and Investment corporation of India (ICICI), Industrial Reconstruction Bank of India (IRBI)

**Unit-IV:**

- 4.1 Entrepreneurial Skill: elements of entrepreneurial skills, major sources of acquiring entrepreneurial skills.
- 4.2 Communication Skill & Personality development: Intra personal communication and body language. Inter personal communication and relationship. Leadership Skill. Team Building and Public Speaking.

**Unit-V:**

- 5.1 Techniques in personality development: Self Confidence, Mnemonics, Goal setting. Time Management and effective planning. Stress management, Mediation and concentration techniques.
- 5.2 Self Motivation, self acceptance and self growth.
- 5.3 Entrepreneurial Skill Development: Skill development of rural industrial sector, small scale industries. Skills required for rural industries.

**REFERENCE BOOKS:**

1. Entrepreneurship: Rajeew Rai; Oxford University Press, New Delhi.
2. Entrepreneurial Development: Dr. S.S. Khanka; S. Chand & Company Ltd. Delhi.
3. Entrepreneurship and Employment: S.B. Verma; Deep and Deep Publications Pvt. Ltd. Delhi.
4. Entrepreneurship Development Programmes & Practices: Jasmer Singh Saini; Deep and Deep Publications Pvt. Ltd. Delhi.
5. Entrepreneurship Development and Project Management: Neeta Baporikar; Himalaya Publishing House, New Delhi.
6. Business Communication: S.G. Krishnamacharyulu & R Lalitha Himalaya Publishing House, New Delhi.
7. Developing Presentation Skills: Dr. R.L. Bhatia; Wheeler Publishing , New Delhi / Allahabas.

## Criterion I : Curricular Aspects

SANT GADGE BABA AMRAVATI UNIVERSITY GAZETTE - 2018 - PART TWO - 738

8. Managerial and Skill Development: Puneet Varshney and Amita Dutta; Alfa Publication, New Delhi.
9. Encyclopedia off skill Development(Vol 1,2,3,): M.K. Gupta; Satyam Publisher and Distributers Jaipur.
10. भरत मे उद्यमिता विकास : डॉ.एस.पी.माधुर ; हिमालया पब्लिशिंग हाऊस, नई दिल्ली.
11. व्यवसायिक संवार : भगवती प्रकाश शर्मा; राजीव जैन पुरुषोत्तम दयाल; हिमालया पब्लिशिंग हाऊस, नई दिल्ली
12. कौशल्य विकास : डा. जयंत कुमार गुप्ता, डा. कमलकिशोर गुप्ता एवं डा.आनंद जी थदानी श्री बालाजी प्रकाशन, नागपूर.
13. उद्योजकता विकास : डॉ.अरुण येवले, डॉ. छाया सुखदाणे एवं डॉ अरविंद चौधरी; हिमालया पब्लिशिंग हाऊस, नई दिल्ली.
14. उद्योजकता आणि विकास : डॉ.किशोर वांगळ साई ज्योति पब्लिकेशन, नागपूर.

### M.Com. (Semester IV)

### Group- A (Paper III)

### Saving and Investment Planning

Time – 3 Hours

Marks – 80

**Objectives:** To develop understanding towards saving and investment premises.

#### UNIT I

- 1.1 Saving: Definition, Need, Objectives & Importance
- 1.2 Investment: Definition, Features, Types, Factors of Sound Investments
- 1.3 Investment, Speculation & Gambling
- 1.4 Risks in Investment

#### UNIT II

- 2.1 Time Value of Money: Time Line & Notations
- 2.2 Future Value of a Single Amount
- 2.3 Present Value of a Single Amount
- 2.4 Future Value of an Annuity
- 2.5 Present Value of an Annuity

#### UNIT III

- 3.1 Investment Avenues-Gold and Bullion
- 3.2 Investments in Bank Schemes
- 3.3 Investments in Post Office Schemes
- 3.4 Investment through Insurance Schemes

#### Unit IV

- 4.1 Mutual Fund: Definition, Features, Importance
- 4.2 Mutual Fund Schemes
- 4.3 Systematic Investment Plan & Systematic Withdrawal Plan
- 4.4 Growth of Mutual Fund Industry in India

#### Unit V

- 5.1 Real Estate Investment: Objectives & Characteristics
- 5.2 Determinants of Value of Real Estate
- 5.3 Approaches Estimating Market Value of Real Estate
- 5.4 Market Value versus Investment Analysis of Real Estate

#### Books:

- 1) Investment Management-V.K.Bhalla, S.Chand & Co. Ltd., New Delhi
- 2) Financial management-M.Y.Khan & P.K.Jain, Tata McGraw Hill Publishing Company, New Delhi
- 3) Investment Management Theory & Practice-Dr. R.P.Rustagi, Sultan Chand & Sons, New Delhi
- 4) Financial Management-Prasanna Chandra, Tata McGraw Hill Publishing Company, New Delhi
- 5) Investment Management-Preeti Singh, Himalaya Publishing House, New Delhi
- 6) Financial Management-Ravi M. Kishore, Taxmann's Publication, New Delhi

## Criterion I : Curricular Aspects

SANT GADGE BABA AMRAVATI UNIVERSITY GAZETTE - 2018 - PART TWO - 739

**M.Com. (Semester-IV)  
Group-B (Paper-III)  
International Financing**

**Time – 3 Hours**

**Marks – 80**

Unit I International Financing- An Overview

- 1.1 International Finance Function- Nature & Scope
- 1.2 Emerging challenges & Responsibilities of Manager- International Finance
- 1.3 Objectives of the firm, Risk Management V/s Wealth Maximization
- 1.4 International Finance v/s Domestic Finance

Unit II International Flow of Fund-Balance of Payment

- 2.1 Structure of Balance of Payment
- 2.2 Equilibrium, Disequilibrium and Adjustments
- 2.3 Different Approaches to Adjustment
- 2.4 Capital Account Convertibility

Unit III Developments in International Monetary System

- 3.1 Gold Standard & Its Suspension-Global Finance
- 3.2 Bretton Woods System of Exchange Rates
- 3.3 Exchange Rate Regime
- 3.4 International Liquidity

Unit IV Global Financial Markets

- 4.1 Domestic and Offshore Markets
- 4.2 Evolution and Economic impact of Euromarkets
- 4.3 Interest rate in global money markets
- 4.4 Global Money Market Instruments

Unit V

- 5.1 World Bank-Loans/Credits
- 5.2 International finance Corporation-Working & Functions
- 5.3 Asian Development Banks- Structure & Functions
- 5.4 International Monetary Fund-Solution for Financial Crisis

Reference Books:

1. Vyuptakesh Sharan, International Financial Management, Fifth Edition, PHI Learning Private Limited, New Delhi
2. P.G. Apte, International Financial Management, Tata McGraw Hill Education Private Limited, Fifth Edition, New Delhi
3. V.A. Avadhani: International Finance Himalaya Publishing House, New Delhi
4. Kishore Rani M: Financial Management, Taxmann's Publication, New Delhi
5. Machiraju H.R.: International Financial Management, Himalaya Publishing House, New Delhi
6. Agrawal O.P.: International financial Management; Himalaya Publishing House, New Delhi
7. Madura Jeff: International Financial Management; Cengage learning India Pvt. Ltd. New Delhi
8. Rao Subba P: International Business; Himalaya Publishing House, New Delhi

**M.Com. – (Semester-IV)  
Group –B (Paper-I)  
SALES AND DISTRIBUTION MANAGEMENT**

**Time – 3 Hours**

**Marks – 80**

**Objective:-** To acquaint the students with sales operation, selling strategy and distribution management.

**Unit-I:**

- 1.1 **Sales management:** Meaning, objectives, nature. Phases of evolution of Sales management.
- 1.2 **Sales Origination:** Characteristics, structure, Types and classification and importance. Sales management cycle and control. Duties and responsibilities of General sales Manager. Steps in setting up the sales organisation .
- 1.3 **Sales forecast:** meaning, objectives, sales forecast method , limitations. Market Analysis and sales planning. Marketing strategy.

**Unit-II**

- 2.1 **Salesmanship:** Meaning, attributes of salesmanship, essentials of good salesmanship. Merits and limitations of personal selling, secrets of success in selling line olden and modern salesmanship. Selling points for different products.
- 2.2 **Sales territory:** concept and purpose sales territory- design criteria and process.



## Criterion I : Curricular Aspects

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SANT GADGE BABA AMRAVATI UNIVERSITY GAZETTE - 2018 - PART TWO – 740

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- 2.3 **Sales promotion:** sales promotion strategy and structure, sales promotion programme. Promotion mix, sales and brand promotion.
- 2.4 **Management of Sales Force:** Unique operating environment for sales field, sales force, Sales job analysis, Sales force recruitment. Sales Force selection process and Training

### Unit-III

- 3.1 **Sales force motivation and compensation**
- 3.2 **Sales quotas, Selling Budget**
- 3.3 **Sales Audit and cost analysis.**

### Unit-IV

- 4.1 **Sales Distribution:** Physical distribution concept and its importance, Physical distribution and co-ordination, physical distribution- as a total logistic system.
- 4.2 **Distribution audit:** concept, components role of intermediaries in distribution management, network planning. Strategic decision
- 4.3 Classification of distribution channel design of distribution channel, distribution channel for services channels conflicts for services. Performance and evaluation of channel.

### Unit-V

- 5.1 **Warehousing and Inventory control:** warehousing objectives and functions classification of warehouses. Order processing system. Inventory control and management
- 5.2 **Wholesalers:** wholesaling nature scope classification of wholesalers, distribution services and functions of wholesalers. Marketing strategy of wholesaler, marketing mix decisions by wholesalers
- 5.3 **Transportation:** Transportation role and modes, transportation origination and co-ordination, transportation mix and selection criteria.
- 5.4 **Retailing:** nature, scope, function and classification store and non-store retailing. Strategy to sustain competitive advantages in retailing. Franchising strategies, agreement terms of payment. Obligations of franchisers.

### REFERENCE BOOKS:

1. **Sales and Distribution Management:** N.G.Nair, Latha Nair; Himalaya Publishing House, New Delhi.
2. **Sales management:** Douglas J Dalrymple, William L. Com & Thomas E. Decarlo; John Wiley & sons Inc.
3. **Sales Management with personal selling & salesmanship:** S.A. Chunawalla; Himalaya Publishing House, New Delhi.
4. **Sales Management Decision, strategies and cases:** Richard R. Still, Edward W. Cundiff & Norman A.P. Govoni; Prentice Hall of India Pvt. Ltd. New Delhi.
5. **Advertising and Sales Management:** S.C. Agrawal; Dhanpat Rai Publishing Co. New Delhi.
6. **Sales Promotion and Advertisement Management:** M.N. Mishra; Himalaya Publishing House, New Delhi.
7. **Salesmanship & Sales Management:** P.K.Sahu and K.C.Rout' Vikash Publishing House, Pvt. Ltd. New Delhi.
8. **Advertising and sales Management:** C.N. Sontakki ; Kalyani Publishing New Delhi.
9. **Sales and Distribution Management:** K. Shridhara Bhat; Himalaya Publishing House, New Delhi.

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## Criterion I : Curricular Aspects

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Integrated logistics and distribution; Knowledge management issues and role of e-commerce infrastructure.

- 3.3 Internet Protocols** :- Layers and networking, OSI layering and TCP layering, TCP, UDP, IP, DNS, SLIP and PPP, Emerging scenario in ISP.

**Unit-IV: 4.1 Electronic Payment Systems** :- Special features required in payment systems for e-commerce; Types of e-payment systems; E-cash and currency servers; e-cheques, credit cards, smart cards, electronic purses and debit cards; Business issues and economic implications; Operational credit and legal risks of e-payment systems; Risk management options in e-payment systems; Components of an effective electronic payment system.

- 4.2 Multi-Media and E-Commerce** :- Concept and role of multimedia; Multimedia technologies; Digital Video and digitization of product and customer communication; Desktop video conferencing and marketing; Broadband networks and related concepts; ISDN, ATM, Cell relay.

**Unit-V: 5.1 Security issues in E-Commerce** :- Security risks of e-commerce, exposure of resources, types of threats, sources of threats, security tools and risk-management approach, e-commerce security and a rational security policy for e-commerce; Corporate Digital Library; I.T. Act 2000.

- 5.2 Regulatory and Legal Frame work of E-Commerce** :- Cyber laws-aims and salient provisions; Cyber-laws in India and their limitations; Taxation issues in e-commerce.

### BOOKS RECOMMENDED:

- \* Agarwala. K.N. and Deeksha Ararwala : Business on the Net: What's and How's of E-Commerce: Macmillan, New Delhi.
- \* Agarwala. K.N. and Deeksha Ararwala: Business on the Net: Bridge to the Online storefront: Macmillan, New Delhi.
- \* Cady, Glec Harrab and Mcgregor Pat : Mastering the Internet, BPB Publication, New Delhi.
- \* Diwan Parag and Sunil Sharma : Electronic Commerce-A Manager's Guide to E-Business, Vanity Books International, Delhi.
- \* Janal. D.S. : On-line Marketing Hand Book, Van Nostrand Reinhold, New York.
- \* Kosivr, David : Understanding Electronic Commerce, Microsoft Press, Washington.
- \* Minoli and Minal : Web Commerce Technology Handbook, Tata McGraw Hill, New Delhi.

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- \* Schnelder. Gary P : Electronic Commerce, Course Technology, Delhi.
- \* Young, Margaret Levine : The Complete Reference to Internet, Tata McGraw Hill, New Delhi.
- \* O'Brien J : Management Information Systems, Tata McGraw Hill, New Delhi.
- \* Parag Diwan and Sunil Sharma : E-Commerce- A Manager's Guide to E-Business ; Excel Books, New Delhi.
- \* C.S.V. Murthy : E-Commerce- Concepts, Models, Strategies, Himalaya Publishing House.
- \* Electronic Commerce - By Bharat Bhaskar, Tata Mc Graw Hill Publication, New Delhi.
- \* E-Commerce - By Bhushan Diwan, S.Chand & Co. Ltd. New Delhi-55.
- \* Computer Applications in Business and Banking : By R.S. Virmal, K.M. Gupta-Umesh Publication, 5-B, Nath Market, Nai Sarak- Delhi-6.
- \* ई-कॉमर्स : विवेक मेहरे - उद्वेली बुक्स, मुंबई-१२

### Division of Marks :

(1)Practicals:-	20 Marks	(Record Preparation-5, Practical discription & Performance-10, Viva-Voce-5).
(2)Assignment:-	20 Marks	(Home assignment-4), (Each assignment of 5 Marks)
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	40 Marks	

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### SEMESTER-IV

#### M.COM.401

#### PROJECT REPORT & VIVA-VOCE

**Objective :** The objective of this course is to provide an understanding to the field work and practical proficiency the students should acquire.

The candidates for Semester IV Examination shall submit a project report at the end of forth Semester and shall go through the viva-voce alongwith paper for Semester III&IV.

The project report will carry 60 marks and Viva-Voce will carry 40 marks.

## Criterion I : Curricular Aspects

### M.A. I Sem. I (Indian Music)

#### एम.ए.सेमिस्टर-१

#### प्रायोगिक - मौखिक (Viva)

प्रश्नपत्र - १

(संगीताचे क्रियात्मक शास्त्र आणि सांगीतिक रचना)

वेळ - १ तास

पूर्णांक - १००

बाह्य मूल्यांकन - ८०

अंतर्गत मूल्यांकन २०

१) रागज्ञान		
अ) पाठ्यक्रमातील राग		
विभाग अ	विभाग ब	विभाग क
i) अहिरभैरव	i) शुद्धसारंग	i) देशकार
ii) बैरागी भैरव	ii) मधमाद सारंग	ii) चारुकेशी
iii) नटभैरव	iii) गौडसारंग	iii) झिंझोटी
iv) गुणक्री	iv) मियो का सारंग	iv) खंबावती
v) बिभास (भैरव थाट)	v) सामंत सारंग	v) बसंत मुखारी

ब) वरील प्रत्येक विभागातील किमान दोन राग करणे आवश्यक.

क) पाठ्यक्रमातील कोणत्याही दोन रागांमध्ये विलंबित ख्याल तसेच मध्यलयीतील बंदिश विस्तृत गायकीसह

ड) पाठ्यक्रमातील कोणत्याही दोन रागांमध्ये (विस्तृत गायकीचे राग सोडून) विलंबित ख्यालातील फक्त बंदिशी

इ) विलंबित ख्यालासाठी निवडलेल्या रागांव्यतिरिक्त पाठ्यक्रमातील कोणत्याही चार रागातील

छोट्याख्यालाच्या बंदिशी गायकीसह

१) वरील रागांपैकी कोणत्याही रागात एक धृपद (गायकी व विविध लयकारीसह) एक तराना (विस्तृत गायकीसह)

क्रियात्मक अंतर्गत	अ) प्रात्यक्षिक वही तयार करणे (सादरीकरणप्रमाणे)	-०५ गुण
गुण :	ब) घटक / वार्षिक चाचणी परीक्षा	- ०५ गुण
	क) वरील अभ्यासक्रमावर आधारित घेतलेला प्रकल्प व त्याचे सादरीकरण	-१० गुण

एकूण २० गुण

#### एम.ए.सेमिस्टर -१

#### प्रायोगिक - मंच प्रदर्शन (Stage Performance)

प्रश्नपत्र २

वेळ- ४० मिनिट

पूर्णांक - १००

बाह्य मूल्यांकन - ८०

अंतर्गत मूल्यांकन २०

१) पाठ्यक्रमातील कोणत्याही एका रागाची ऐच्छिक निवड करून विलंबित ख्याल व छोट्याख्याल गायकीसह प्रस्तुति करणे.	(४० गुण)
१) अ) परीक्षकांनी सुचविलेल्या तीन रागांपैकी एका रागात छोट्याख्याल गायकीसह प्रस्तुत करणे	(२० गुण)
ब) उपशास्त्रीय गीतप्रकार - नाट्यगीत व गजल	(२० गुण)

क्रियात्मक अंतर्गत गुण :	अ) हार्मोनियम साथसंगत	-१० गुण
	ब) तानपुरा वाजविणे	- १० गुण

## Criterion I : Curricular Aspects

एकूण २० गुण

### एम.ए.सेमिस्टर-१

गायन / स्वरवाद्य पाठ्यक्रम

प्रश्नपत्र -३

शास्त्रीय संगीताचे क्रियात्मक सिध्दांत

वेळ ३ तास

पूर्णांक — १००
बाह्य मूल्यांकन — ८०
अंतर्गत मूल्यांकन - २०
१६ गुण
१६ गुण
१६ गुण
१६ गुण
१६ गुण
१६ गुण
-१० गुण
१० गुण

घटक-१ अ) पाठ्यक्रमातील रागांचे शास्त्रीय विवेचन आलाप तानांसहीत.	
ब) पाठ्यक्रमातील गीतप्रकार लिपीबद्ध करणे	
घटक-२ रागांग वगीकरणाचे अध्ययन आणि भैरव व सारंग रागांगाचे विश्लेषण	१६ गुण
घटक-३ अ) स्वरप्रस्तार, खंडमेरु, नष्टोद्दीष्ट चे अध्ययन	
ब) तान रचना व तिहाईचा सिध्दांत	१६ गुण
घटक-४ अ) भारतीय संगीतासाठी कंठसंस्कार विधी	
ब) स्वरोत्पादक यंत्र व कर्णोद्भ्रिय रचनेचे अध्ययन	१६ गुण
घटक-५ संपूर्ण पाठ्यक्रमावर आधारित वस्तुनिष्ठ प्रश्न	१६ गुण
सैध्दांतिक अंतर्गत गुण : अ) वरील अभ्यासक्रमावर आधारित घेतलेला प्रकल्प व त्याचे सादरीकरण	-१० गुण
ब) गटचर्चा (Group Discussion)	१० गुण

एकूण २० गुण

### एम.ए.सेमिस्टर-१

गायन / स्वरवाद्य पाठ्यक्रम

प्रश्नपत्र -४

प्राचीन भारतीय संगीताचा इतिहास व शास्त्र  
(वैदिक काळापासुन ११ वी शताब्दी पर्यंत)

वेळ ३ तास

पूर्णांक — १००
बाह्य मूल्यांकन — ८०
अंतर्गत मूल्यांकन २०

घटक-१ अ) संगीताच्या उत्पत्तीबाबत विविध तज्ञांच्या मतांचे अध्ययन या संदर्भात भारतीय व पाश्चात्य मतांचा परिचय	
ब) वैदिक आणि शिक्षा ग्रंथ, पौराणिक ग्रंथ, रामायण, महाभारत, मौर्य व गुप्त कालीन संगीताचा परिचय	१६ गुण
घटक-२ अ) दत्तिलम, नाट्यशास्त्र बृहद्देशी आणि भरतभाष्यम् या ग्रंथांचा सामान्य परिचय.	
ब) चित्रा, विपंची, मत्तकोकीला, त्रिपुष्कर, मृदंग, पणव, दर्दुर, जयघंटा, कास्यताल या वाद्यांचा सामान्य परिचय.	१६ गुण
घटक-३ गांधर्वगान, मार्ग-देशीसंगीत, ग्राम, मुर्च्छना, चतुःसारणा व ग्रामराग आदि दशविध राग वर्गीकरणाचे अध्ययन	१६ गुण
घटक-४ अ) मार्गताल व देशीताल पध्दतीचे अध्ययन व तालाचे दहा प्राण	१६ गुण
घटक-५ संपूर्ण पाठ्यक्रमावर आधारित वस्तुनिष्ठ प्रश्न	१६ गुण
सैध्दांतिक अंतर्गत गुण : अ) अभ्यासक्रमावर आधारित सेमिनार	-१० गुण
ब) अभ्यास दौरा (Study Tour)	१० गुण

एकूण २० गुण

संदर्भग्रंथ सूची

- १) हिंदुस्थानी संगीत क्रमिक पुस्तक मालिका भाग १ ते ६ पं. वि.ना.भातखंडे संगीत प्रकाशक कार्यालय, हाथरस
- २) अभिनव गितांजली, भाग १ ते ५ पं. रामश्रय झा.संगीत सदन, इलाहबाद
- ३) शास्त्र परिचय, भाग १ ते ५ हरिश्चंद्र श्रीवास्तव, संगीत सदन इलाहबाद.
- ४) भातखंडे संगीत शास्त्र पं.वि.ना.भातखंडे संगीत कार्यालय, हाथरस
- ५) संगीत परिभाषा- विवेचन पं.श्रीकृष्ण रातंजनकर, आचार्य, एस एन.रातंजनकर फौंडेशन मुंबई

## Criterion I : Curricular Aspects

- ६) राग विज्ञान, विनायकबुवा पटवर्धन.
- ७) संगीत शास्त्र दर्पण, शांती गवर्धन, संगीत कार्यालय, हाथरस.
- ८) संगीत शास्त्र विजयनी – पं.नारायण मंगरुळकर , स्वर संपदा केंद्र कोस्टीपुरा मार्ग सिताबर्डी नागपूर.
- ९) संपूर्ण विशारद शास्त्र (तबला) समीर जगताप, मधुराज पब्लिकेशन, पुणे.
- १०) संगीत शास्त्र विज्ञान डॉ.सुचिता बिडकर, संस्कार प्रकाशन, ६-४०० अभ्यदनगर, काळा चौक मुंबई
- ११) संगीत प्रविण दर्शिका पं. नारायण लक्ष्मण गुणे, साधना गुणे ५८ पुरा ठाकुर किटगंज इलाहाबाद
- १२) गुरतुर गा ले राग, प्रो.गुणवंत माधवलाल व्यास, वैभव प्रकाशन, नागपूर.
- १३) वसंत सुधा, डॉ.धनश्री पांडे, विद्या विकास प्रकाशन, नागपूर.
- १४) संगीत विशारद वसंत संगीत कार्यालय, हाथरस
- १५) स्वकिया पं.गुणवंत माधवलाल व्यास, व्यासमुनी संस्थान, रायपूर.
- १६) बंदीशीच्या बंदिशी पं.देवीदासपंत काळे गुरुजी प्रा.कमल भोंडे अमरावती.
- १७) नादकमल प्रा.कमल मु भोंडे मुरलीधर अ भोंडे, अमरावती.
- १८) संगीत समाधान डॉ.मधू शुक्ला, पाठक पब्लिकेशन इलाहाबाद.
- १९) भारतीय संगीत (गायन) शास्त्र (सैध्दांतिक) प्रा.डॉ.सौ.मानिक ना. मेहरे राघव डिस्ट्रीब्युटर नागपूर.
- २०) अनुपरागविलास भाग १ , २ कुमार गंधर्व मौज प्रकाशन, मुंबई.
- २१) कहत गुणिजन, डॉ.साधना शिलेदार, विजय प्रकाशन नागपूर.
- २२) पं.वि.ना.भातखंडे यांचे संगीतशास्त्र आणि बंदिशीची मिमांसा,डॉ.भोजराज बी. चौधरी, मेघ प्रकाशन, अमरावती.
- २३) संगीतार्जन, डॉ.अर्चना अंभोर अमेय पब्लिकेशन, अकोला.
- २४) ग्वाल्हेर घराण्याचे शिलेदार पं.राजभैर्या तथा पं.बाळासाहेब पुछवाले डॉ.राजेन्द्र देशमुख
- २५) संगीत चिंतन डॉ.भोजराज बी चौधरी नभ प्रकाशन, अमरावती .
- २६) संगीत सरिता,रमा सराफ विद्यानिधी प्रकाशन, दिल्ली.
- २७) भारतीय संगीत का इतिहास उमेश जोशी संगीत कार्यालय, हाथरस
- २८) भारतीय संगीत का इतिहास, ठाकुर जयदेव सिंह संगीत कार्यालय, हाथरस
- २९) भारतीय संगीत का इतिहास शरदचंद्र परांजपे, संगीत कार्यालय, हाथरस
- ३०) संगीत चिकित्सा डॉ.सतीश वर्मा, राधा प्रकाशन, नई दिल्ली.
- ३१) भारतीय संगीत शास्त्र तुलसीराम देवांगण, मध्यप्रदेश हिंदी ग्रंथ अकादमी
- ३२) भारतीय संगीत शास्त्र परंपरा लिपीक दासगुप्ता, कला प्रकाशन, अमरावती.
- ३३) भारतीय तंत्रिवाद्य डॉ.प्रकाश महाडिक, मध्यप्रदेश हिंदी ग्रंथ अकादमी
- ३४) भारतीय संगीत वाद्य, लालमणी मिश्रा.
- ३५) **Voice culture, S.A.K.Durga**
- ३६) आवाज साधना शास्त्र प्रो.बी.आर.देवधर.
- ३७) संगीत जिज्ञासा और समाधान, तेजसिंह हाट, बेकश आलमी फाँडेशन, लखनौ.
- ३८) संगीत विज्ञान एवं गणित,तेजसिंह पाट, बेकश आलमी फाँडेशन, लखनौ.
- ३९) संगीत विशारद, वसंत संगीत कार्यालय, हातरस उ.प्र.
- ४०) संगीत मेनूअल डॉ.मृत्यूनजय शर्मा, एच.जी.प्रकाशन, दिल्ली.
- ४१) स्वरार्थरामणी, गानसरस्वती किशोरी आमोणकर, राजहंस प्रकाशन, पुणे.
- ४२) निबंध संगीत, लक्ष्मी नारायण गर्ग, संगीत कार्यालय, हाथरस

## Criterion I : Curricular Aspects

### M.Sc. (Home Science) FSN (Dissertation)

M.Sc. (Home Science) Prospectus No. 2015199  
Semester-I & III - Winter-2014  
Semester-II & IV - Summer-2015

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गृहविज्ञान विद्याशाखा  
(FACULTY OF HOME SCIENCE)

**PROSPECTUS**  
OF  
M.Sc. (Home Science) (Food Science and Nutrition)  
EXAMINATIONS  
SEMESTER-I & III, WINTER-2014  
SEMESTER-II & IV, SUMMER-2015



2014

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## Criterion I : Curricular Aspects

### I N D E X

M.Sc. (Home Science) (Food Science and Nutrition)

(Semester-I to IV)

(Prospectus No.2015199)

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12.	Research Methods in Nutrition	31 - 33
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25.	Current Issues in Food & Nutrition	48 - 49
26.	Scientific Writing	49 - 51



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### Reference :-

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**Semester-IV**  
**Subject Code : 242SW62**  
**Scientific Writing**

**Objective** – After completion of course students will be able to understand national / international standards of scientific writing and develop skill of writing research reports.

### Course Contents :

#### Theory :

- Unit 1 :** Introduction to Scientific Writing
- 1.1 Meaning, definition
  - 1.2 Characteristics and Principles
  - 1.3 Types of report
  - 1.4 Format of report
  - 1.5 National and international standards

50

- 1.6 Lay out of thesis / dissertation :-  
Preliminaries, Text, End Matter

### Unit 2 : Writing preliminaries

- 2.1 Title page, Title of dissertation / thesis.
- 2.2 Certificates : Declaration by students certificate of guide
- 2.3 Acknowledgement
- 2.4 Table of content - list of Table, list of Figure
- 2.5 Glossary / Abbreviation / Acronym

### Unit 3 : Writing Text / Main Body

- 3.1 Writing introduction
- 3.2 Writing Review of Literature
- 3.3 Writing Methodology Material and Methods
- 3.4 Writing Results
- 3.5 Writing Discussion
- 3.6 Writing Summary, Conclusion and Implication

### Unit 4 : Writing End Matter

- 4.1 Writing References / Literature cited
  - Books
  - Journal / Periodical
  - Websites
  - Magazines, newspaper
- 4.2 Appendices

### Unit 5 : General Guidelines


- 5.1
  - Size of paper, margin, font type and size
  - Headings and Subheadings
  - Number of chapters and pagination
  - Punctuations.
- 5.2 Evaluating structure of dissertation / thesis

### Practicals :

1. Use of Library -  
Get acquainted with the-
  - Type of Library (Traditional, modern, digital, virtual)
  - Services provided by Libraries
  - Various sources (Printed and electronic)
  - Technical work (classification, cataloguing)
  - Information retrieval ( i.e. OPAC, WEBOPAC, SOUL, Library Portal, e-books etc.)
2. Practice of writing references on reference cards and notes on note cards from different sources.
3. Review, understand and critically evaluate.
  - Thesis
  - Dissertation
  - Abstract

## Criterion I : Curricular Aspects

### M.Sc. (Home Science) HD (Dissertation)

M.Sc. (Home Science) Semester-I & III - Winter-2015 Semester-II & IV - Summer-2016	Prospectus No. 2016196
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## Criterion I : Curricular Aspects

### I N D E X

M.Sc. (Home Science) (Human Development)

(Semester-I to IV)

(Prospectus No.2016196)

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<b>Semester-II</b>		
8.	Psychological Testing	26 - 28
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10.	Entrepreneurship in Human Development	30 - 32
11.	Human Anatomy and Physiology	32 - 34
12.	Research Methods in Human Development	34 - 36
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18.	Projective Techniques of Psychological Testing	46 - 48
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21.	Mental Health in Developmental Perspectives	52 - 54
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25.	Current Trends and Issues in Human Development	60 - 64
26.	Scientific Writing	64 - 65

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### Semester-IV

**Subject Code : 243SW62**

### Scientific Writing

**Objective-** After completing course students will be able to understand national / international standards of scientific writing and develop skill of writing research reports.

#### Course Content

#### Theory :

**Unit 1** : Introduction to Scientific Writing

- 1.1 Meaning, definition
- 1.2 Characteristics and Principles
- 1.3 Types of report
- 1.4 Format of report
- 1.5 National and international standards
- 1.6 Lay out of thesis / dissertation :- Preliminaries, Text, End Matter

**Unit 2** : Writing preliminaries

- 2.1 Title page, Title of dissertation / thesis.
- 2.2 Certificates : Declaration by students certificate of guide
- 2.3 Acknowledgement
- 2.4 Table of content - list of Table, list of Figure
- 2.5 Glossary / Abbreviation / Acronym

**Unit 3** : Writing Text / Main Body

- 3.1 Writing introduction
- 3.2 Writing Review of Literature
- 3.3 Writing Methodology Material and Methods
- 3.4 Writing Results
- 3.5 Writing Discussion
- 3.6 Writing Summary, Conclusion and Implication

**Unit 4** : Writing End Matter

- 4.1 Writing References / Literature cited
  - Books

## Criterion I : Curricular Aspects

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- Journal / Periodical
- Websites
- Magazines, newspaper

### 4.2 Appendices

#### Unit 5 : General Guidelines

- 5.1
- Size of paper, margin, font type and size
  - Headings and Subheadings
  - Number of chapters and pagination
  - Punctuations.

### 5.2 Evaluating structure of dissertation / thesis

#### Practicals :

1. Use of Library -  
Get acquainted with the-
  - Type of Library (Traditional, modern, digital, virtual)
  - Services provided by Libraries
  - Various sources (Printed and electronic)
  - Technical work (classification, cataloguing)
  - Information retrieval ( i.e. OPAC, WEBOPAC, SOUL, Library Portal, e-books etc.)
2. Practice of writing references on reference cards and notes on note cards from different sources.
3. Review, understand and critically evaluate.
  - Thesis
  - Dissertation
  - Abstract

#### References :

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## Criterion I : Curricular Aspects

### Environmental Studies

(All B.A., B.Com., B.Sc. (Home Sci.), B.C.A., B.B.A. IV<sup>th</sup> Semester)

### INDEX

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4.	Ordinance No.42 of 2005	15-19
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6.	Regulation No. 41 of 2003	21-23
7.	Direction No. 17 of 2011	24-25
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	<b>Any one of the languages :</b>	
9.	Marathi (Compulsory)	27-28
10.	Hindi (Compulsory)	28-29
11.	Sanskrit (Compulsory)	29-30
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19.	Information Technology and Business Data Processing	41-43
20.	Environmental Studies	43-47



## Criterion I : Curricular Aspects

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9. Information Technology & Business Data Processing : Prof.Uday Shrikrushna Kale Shree Sainath Prakashan, Nagpur.

### Practical Based on Syllabus :

1. MS-Excel 2003/2007/Higher
2. Tally 9.0/Higher.

**Notes: B.Com.II Practical Batch will be of 20 students.**

### SCHEME

Year	Paper	Total Marks		Min. Passing Marks	
		T	P	T	P
B.COM.II	Information Technology and Business Data Processing.	60	*40	21	14

### \*Division of Marks for Practical

Record preparation	10 Marks
Practical	15 Marks
Discription	10 Marks
Viva	<u>05 Marks</u>
TOTAL ..	40 Marks

(Use Answer Book for practical provided by the University)

### SYLLABUS FOR ENVIRONMENTAL STUDIES AT BACHELOR DEGREE LEVEL

Total Marks : 100

### PART-A

### SHORT ANSWER PATTERN

25 Marks

#### 1. The Multidisciplinary nature of environmental studies

- . Definition, scope and importance.
- . Need for public awareness. (2 lecture hours)

#### 2. Social Issues and the Environment

- . From Unsustainable to Sustainable development
- . Urban problems related to energy
- . Water conservation, rain water harvesting, watershed management
- . Resettlement and rehabilitation of people; its problems and concerns.

## Criterion I : Curricular Aspects

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Case studies.

- . Environmental ethics : Issues and possible solutions.
- . Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- . Wasteland reclamation.
- . Consumerism and waste products.
- . Environment Protection Act.
- . Air (Prevention and Control of Pollution) Act.
- . Water (Prevention and Control of Pollution) Act.
- . Wildlife Protection Act.
- . Forest Conservation Act.
- . Issues involved in enforcement of environmental legislation.
- . Public awareness. (7 lecture hours)

### 3. Human Population and the Environment

- . Population growth, variation among nations.
- . Population explosion - Family Welfare Programme.
- . Environment and human health.
- . Human Rights.
- . Value Education.
- . HIV / AIDS.
- . Women and Child Welfare.
- . Role of Information Technology in Environment and human health.
- . Case Studies. (6 lecture hours)

### PART-B

ESSAY TYPE WITHIN BUILT CHOICE 50 Marks

#### 4. Natural resources :

- . **Renewable and non-renewable resources :**
  - . Natural resources and associated problems.
    - Forest resources : Use and over exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.
    - Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
    - Mineral resources : Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
    - Food resources : World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer - pesticide problems, water logging, salinity, case studies.
    - Energy resources : Growing energy needs, renewable and

## Criterion I : Curricular Aspects

45

non renewable energy sources, use of alternate energy sources, Case studies.

- Land resources : Land as a resource, land degradation, man induced landslides, soil erosion and desertification.
- . Role of an individual in conservation of natural resources.
- . Equitable use of resources for sustainable lifestyles. (8 lecture hours)

### 5. Ecosystems

- . Concept of an ecosystem.
- . Structure and function of an ecosystem.
- . Producers, consumers and decomposers.
- . Energy flow in the ecosystem.
- . Ecological succession.
- . Food chains, food webs and ecological pyramids.
- . Introduction, types, characteristic features, structure and function of the following ecosystem :-
  - Forest ecosystem
  - Grassland ecosystem
  - Desert ecosystem
  - Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) (6 lecture hours)

### 6. Biodiversity and its conservation

- . Introduction - Definition : genetic, species and ecosystem diversity.
- . Biogeographical classification of India.
- . Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values.
- . Biodiversity at global, National and local levels.
- . India as a mega-diversity nation.
- . Hot-spots of biodiversity.
- . Threats to biodiversity : habitat loss, poaching of wildlife, man-wildlife conflicts.
- . Endangered and endemic species of India.
- . Conservation of biodiversity : In-situ and Ex-situ conservation of biodiversity. (8 lecture hours)

### 7. Environmental Pollution

- . Definition
  - . Causes, effects and control measures of :-
    - Air pollution
    - Water pollution
    - Soil pollution
    - Marine pollution
    - Noise pollution
    - Thermal pollution



## Criterion I : Curricular Aspects

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- Nuclear hazards
- . Solid Waste Management : Causes, effects and control measures of
- . Role of an individual in prevention of pollution.
- . Pollution case studies.
- . Diaster management : floods, earthquake, cyclone and landslides.  
(8 lecture hours)

### Part-C

### ESSAY ON FIELD WORK

25 Marks

#### 8. Field work

- . Visit to a local area to document environmental assets - river / forest / grass land / hill / mountain
- . Visit to a local polluted site - Urban / Rural / Industrial / Agricultural
- . Study of common plants, insects, birds.
- . Study of simple ecosystems - pond, river, hill slopes, etc.  
(5 lecture hours)

- (Notes : i) Contents of the syllabys mentioned under paras 1 to 8 shall be for teaching for the examination based on Annual Pattern.
- ii) Contents of the syllabys mentioned under paras 1 to 4 shall be for teaching to the Semester commencing first, and
- iii) Contents of the syllabys mentioned under paras 5 to 8 shall be for teaching to the Semester commencing later.

#### LIST OF REFERENCES :-

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(R)
- 3) Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p.
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## Criterion I : Curricular Aspects

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- 8) Gleick, H.P. 1993, Water in Crisis, Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press. 473p.
- 9) Hawkins R.E., Encyclopedia of Indian Natural History, Bombay Natural History Society, Mumbai **(R)**
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- 17) Sharma B.K., 2001, Environmental Chemistry, Goel Publ. House, Meerut.
- 18) Survey of the Environment, The Hindu **(M)**
- 19) Townsend C., Harper J., and Michael Begon, Essentials of Ecology, Blackwell Science **(TB)**
- 20) Trivedi R.K., Handbook of Environmental Laws, Rules, Guidelines, Compliances and Standards, Vol. I and II, Enviro Media **(R)**
- 21) Trivedi R.K. and P.K. Goel, Introduction to Air Pollution, Techno-Science Publications **(TB)**
- 22) Wagner K.D., 1998, Environmental Management, W.B.Saunders Co., Philadelphia, USA 499p.
- 23) Dr.Deshpande A.P., Dr. Chudiwale A.D., Dr.Joshi P.P. & Dr. Lad A.B.: Environmental Studies -Pimpalpure & Co. Publishers, Nagpur.
- 24) डॉ.विठ्ठल घारपुरे : पर्यावरणशास्त्र - पिंपळापुणे अँड कंपनी पब्लिशर्स, नागपूर.
- 25) Environmental Studies : R. Rajagopalan, Oxford University Press, New Delhi- 2005
- 26) Dr.N.W.Ingole, D.M.Dharmadhikari, Dr.S.S.Patil : Environmental Chemistry and pollution control- Das Ganu Prakashan, Nagpur.  
**(M) Magazine**  
**(R) Reference**  
**(TB) Textbook**

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## Criterion I : Curricular Aspects

### संत गाडगे बाबा अमरावती विद्यापीठ

क्र.संगाबाअवि-३/सपमुमं/१६६/२०२१  
दिनांक : १२ जुन २०२१

प्रति,

प्राचार्य / केंद्राधिकारी,  
विद्यापीठाशी संलग्नित सर्व महाविद्यालये/  
संत गाडगे बाबा अमरावती विद्यापीठ.

**विषय : Environmental Studies** या विषयाच्या परीक्षेच्या वेळापत्रकाबाबत.  
**उन्हाळी - २०२० व हिवाळी २०२० परीक्षा.**

महोदय / महोदया,

उपरोक्त विषयाचे अनुषंगाने आपणांस कळविण्यात येते की, संबंधीत परीक्षांचे अध्यादेशातील तरतुदीनुसार ज्या परीक्षांना Environmental Studies या विषयाची परीक्षा देणे आवश्यक आहे अशा परीक्षेस पात्र असलेल्या व परीक्षा आवेदनपत्र भरलेल्या उन्हाळी २०२० मध्ये प्रवेशित होणाऱ्या नियमित, माजी व बहीःशाल वर्गवारीतील विद्यार्थ्यांची तसेच हिवाळी २०२० च्या माजी विद्यार्थ्यांची लेखी परीक्षा विद्यापीठाने पुरविलेल्या प्रश्नपत्रिकेनुसार महाविद्यालयाच्या स्तरावर खाली नमूद तारीख, दिवस व वेळेमध्ये होईल.

#### वेळापत्रक

विषय	परीक्षा दिनांक	वेळ
Environmental Studies	बुधवार दिनांक ३० जुन २०२१	सकाळी १०.०० ते ११.००

कृपया उपरोक्त परीक्षेच्या सर्व संबंधीत विद्यार्थ्यांना Environmental Studies या आवश्यक विषयाच्या प्रश्नपत्रिकेच्या वेळापत्रकाची माहिती देण्यात यावी, ही विनंती.

परीक्षा संचालनानंतरची पुढील कार्यवाही अध्यादेश क्रमांक ४२/२००५ मधील तरतुदीनुसार महाविद्यालयाने करावी.

आपला,

(डॉ. हेमंत आर. देशमुख)

संचालक, परीक्षा व मूल्यमापन मंडळ,  
संत गाडगे बाबा अमरावती विद्यापीठ.

**प्रतिलिपी : माहिती व आवश्यक कार्यवाहीस्तव.**

- मुख्य अधिकारी, केंद्रीय मूल्यांकन कार्यक्रम केंद्र
- प्रमुख, संगणक केंद्र, — उपरोक्त वेळापत्रक विद्यापीठ संकेत स्थळावर प्रसिद्ध करण्याचे कार्यवाहीस्तव
- सहा.कुलसचिव (सारणी)
- सहा.कुलसचिव (गोपनीय/परीक्षा /प-चौ)
- जनसंपर्क अधिकारी, उपरोक्त वेळापत्रक माहिती प्रसार माध्यमाद्वारे प्रसिद्ध करण्याचे दृष्टीने आपणाकडे पाठविण्यात येत आहे.
- प्रमारी, शैक्षणिक विभागाचे प्रशासकीय केंद्र.

**प्रतिलिपी : माहितीस्तव अग्रेषित.**

सन्माननीय सदस्य, व्यवस्थापन परिषद / परीक्षा व मूल्यमापन मंडळ.  
मा. कुलगुरु, संत गाडगे बाबा अमरावती विद्यापीठ.