



**SINDHI COLLEGE**

## Sindhi College

(Sponsors : Sindhi Seva Samiti)  
33/2B, Kempapura, Hebbal, Bengaluru-560024  
Permanently Affiliated to Bengaluru Central University  
Accredited by NAAC  
Recognised by UGC under 2(f) & 12(B)  
An ISO 9001:2015 Certified Institution

### List of Non-core subjects offered to students as per CBCS pattern of the Affiliated University

#### Academic Year 2021-22

Sl. No.	Name of the Program	Semester	Subjects
1	B.Com	I	Digital fluency
		II	Environmental studies
		III	Science and society
		IV	personality development
		V	culture, Diversity and society
		VI	creativity and innovation
2	BCA	I	Office management tools
		II	Environmental studies
		III	culture, Diversity and society
		IV	personality development
		V	Banking and finance
		VI	Entreneurship and innovation
3	Bsc	I	Office management tools
		II	Environmental studies
		III	culture, Diversity and society
		IV	personality development
		V	Banking and finance
		VI	Entreneurship and innovation
4	BA	I	Digital fluency
		II	Environmental studies
		III	Science and society
		IV	personality development
		V	Banking and finance
		VI	Computer Applications & Information Technology
5	BBA	I	Digital fluency
		II	Environmental studies



		III	Science and society
		IV	personality development
		V	culture, Diversity and society
		VI	Creativity and innovation
6	BBAM	I	Digital fluency
		II	Environmental studies
		III	Science and society
		IV	personality development

  
PRINCIPAL  
PRINCIPAL  
SINDHI COLLEGE  
#33/2B Kempapura, Hebbal,  
Bengaluru-560 024.

  
DIRECTOR  
Dr. B.S. SRIKANTA  
Director  
Sindhi College  
No. 33/2B, Kempapura, Hebbal  
Bengaluru - 560 024

<b>ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) ENVIRONMENTAL STUDIES</b>
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The module consists of 8 units in which the first seven units will cover 45 lectures which are classroom based to enhance knowledge skills and attitude to environment. Unit 8 is based on field activities which will be covered in 5 lecture hours and would provide students first –hand knowledge on various local environmental aspects.

1. Environmental Studies (AECC) is made compulsory core module syllabus framed by UGC for all the Indian Universities as per the directions given by the honorable Supreme Court, which believed that, conservation of environment should be a national way of life and to be inculcated into the education process. As suggested by NEP-2020 State Level Subject Expert committee it is proposed staggered implementation for this course as shown below. This facilitates the distribution of the teaching workload of an institution in first and second Semester as follows;

Subject	Environmental studies Ability Enhancement Compulsory Courses(AECC)	Semester
Course	B.Sc/BA/BCA/BSW	I
	B.Com, /B.B.A/BBA(T&T)	II

2. **To ensure the interdisciplinary spirit of the proposed curriculum, teaching must be carried out by the faculty who are trained at post-graduate (M.Sc.) and Ph.D. in the ‘Environmental Science subject only. A candidate who is qualified with UGC-NET/K-SET in the area of Environmental Science will be well-equipped to teach this curriculum.**
3. The scheme of Examination and the question paper pattern for AECC – Environmental Studies will be multiple choice questions (MCQ) for 60 marks and 40 marks for internal assessment **with 3 hours of teaching per week** with 2 credits.

## AECC-ENVIRONMENTAL STUDIES SYLLABUS

Number of Theory Credits	Number of lecture hours	Number of field work hours
<b>2(L T P 3-1-0)</b>	<b>45</b>	<b>5</b>

	<b>Content of AECC-Environmental Studies</b>	<b>45 hours</b>
<b>Unit 1</b>	<b>Introduction to Environmental Studies</b>	<b>2</b>
	Multidisciplinary nature of environmental studies Scope and importance; Concept of sustainability and sustainable development.	
<b>Unit 2</b>	<b>Ecosystems</b>	<b>6</b>
	<p>What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems:</p> <ul style="list-style-type: none"> <li>a) Forest ecosystem,</li> <li>b) Grassland ecosystem,</li> <li>c) Desert ecosystem,</li> </ul> <p>Aquatic ecosystems(ponds, streams, lakes, rivers, oceans, estuaries)</p>	
<b>Unit 3</b>	<b>Natural Resources: Renewable and Non-Renewable Resources</b>	<b>8</b>
	Land resources and land-use change; Land degradation, soil erosion and desertification. Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations. Water: Use and over-exploitation of surface and groundwater, floods, droughts, conflicts over water (international & inter-state). Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.	

<b>Unit 4</b>	<b>Biodiversity and Conservation</b>	<b>8</b>
	Levels of biological diversity: Genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hotspots. India as a mega-biodiversity nation; Endangered and endemic species of India. Threats to biodiversity: Habitat loss, poaching of wildlife, man- wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.	
<b>Unit 5</b>	<b>Environmental Pollution</b>	<b>8</b>
	Environmental pollution: types, causes, effects and controls; Air, water ,soil and noise pollution, Nuclear hazards and human health risks Solid waste management, Control measures of urban and industrial waste Pollution case studies.	
<b>Unit 6</b>	<b>Environmental Policies &amp; Practices</b>	<b>7</b>
	Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture. Environment Laws: Environment Protection Act; Air(Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity(CBD). Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context	

<b>Unit 7</b>	<b>Human Communities and The Environment</b>	<b>6</b>
	<p>Human population growth: Impacts on environment, human health and welfare.</p> <p>Resettlement and rehabilitation of project affected persons; case studies.</p> <p>Disaster management: floods, earthquake, cyclones and landslides.</p> <p>Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan</p> <p>Environmental ethics: Role of Indian and other religions and cultures in environmental conservation</p> <p>Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).</p>	
<b>Unit8</b>	<b>Fieldwork</b>	<b>5</b>

## Reference

- Carson.(2002).Silent Spring. Houghton Mifflin Harcourt.
- Gadgil,M.,& Guha,R.(1993).This Fissured Land: An Ecological History of India. Univ. of California Press.
- Gleeson, B. and Low,N.(eds.)(1999).Global Ethics and Environment, London, Routledge.
- Glejck,P.H.(1993).Water in Crisis. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ.Press.
- Groom, MarthaJ., GaryK. Meffe, and Carl Ronald Carroll.(2006).Principles of Conservation Biology. Sunderland: Sinauer Associates.
- Grumbine, R.Edward and Pandit,M.K.(2013).Threats from India's Himalaya dams. Science, 339:36- 37.
- McCully,P.(1996). Rivers no more: the environmental effects of dams (pp.29-64).Zed Books.
- McNeill, JohnR.(2000).Something New Under the Sun: An Environmental History of the Twentieth Century.
- Nandini, N.(2019). A text book on Environmental Studies (AECC).Sapna Book House, Bengaluru.
- Odum, E.P.,Odum, H.T. &Andrews, J. (1971). Fundamentals of Ecology. Philadelphia: Saunders.
- Pepper, I.L, Gerba, C.P. & Brusseau, M.L. (2011). Environmental and Pollution Science.

Academic Press.

- Rao, M.N. & Datta, A.K. (1987). Waste Water Treatment. Oxford and IBH Publishing Co. Pvt. Ltd.
- Raven, P.H., Hassenzuhl, D.M. & Berg, L.R. (2012). Environment. 8<sup>th</sup> edition. John Wiley & Sons.
- Rosencranz, A., Divan, S., & Noble, M.L. (2001). Environmental law and policy in India. Tripathi 1992.
- Sengupta, R. (2003). Ecology and economics: An approach to sustainable development. OUP.
- Singh, J.S., Singh, S.P. and Gupta, S.R. (2014). Ecology, Environmental Science and Conservation. S. Chand Publishing, New Delhi.
- Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). (2013). Conservation Biology: Voices from the Tropics. John Wiley & Sons.
- Thapar, V. (1998). Land of the Tiger: A Natural History of the Indian Subcontinent.
- Warren, C.E. (1971). Biology and Water Pollution Control. WB Saunders.
- Wilson, E.O. (2006). The Creation: An appeal to save life on earth. New York: Norton.
- World Commission on Environment and Development. (1987). Our Common Future. Oxford University Press.

**Digital Fluency (Skill Enhancement Course)**  
**Number of Credits: 2 (One hour of Theory, and Two hours of practicals)**

Unit I: [5 Hours]  
Operating Systems, types of operating systems, major functions of the operating systems, types of user interface, examples of operating systems: MS-DOS, Windows, Mac OS, Linux, Solaris, Android. Office automation tools : word processor, power point, and spread sheet.

Unit II: [5 Hours]  
Introduction to Computer Networks, Evolution of Networking, types of networks, Network devices - Modem, ethernet card, RJ45, Repeater, Hub, Switch, Router, and Gateways, Identification of Nodes in a Networked Communication, Internet, Web and the Internet of Things, Domain Name Systems. Security Aspects - Threats and Prevention, Malware - virus, Worms, Ransomware, Trojan, spyware, adware, key loggers, Modes of Malware distribution, Antivirus, HTTP vs HTTPS, Firewall, Cookies, Hackers and Crackers,

Unit III: [5 Hours]  
Database Management Systems, Relational Data Model. Introduction to e-learning platforms such as Swayam, and MOOC. Virtual Meet: Technical Requirements, Scheduling a meeting, joining virtual meet, recording the meeting, Online Forms: Creating questionnaire, Publishing Questionnaire, conducting online responses, Analysing the responses, copying graphics into powerpoint, Downloading the response to spreadsheet. Introduction to societal impacts, Digital Foot prints, Digital Society and Netizen, Data Protection, E-waste, Impact on Health.

Laboratory Activities: [30 Hours]  
Identifying the configuration of a computer system, laptop, and a mobile phone, Identifying the version and the configuration of the operating system of a computer, laptop, and a mobile phone, Identifying the network components like patch cord, switch, RJ 45 Jack, Socket, and wireless router, creating a hotspot from a mobile phone, and allowing others to use the hotspot, creating a Google form, and send it to five users, scheduling a virtual meet and invite three people to join the Google meet, record the virtual Meet, Creating an account in the railway reservation website, IRCTC, and finding trains from Tumkur to Hubli, creating a one minute video of your choice in your native tongue, and upload the video to YouTube, composing word document, creating tables, creating charts, preparing power point slides, simple computation using spread sheet.

**Web Resources:**

Operating Systems - [https://ftms.edu.my/v2/wp-content/uploads/2019/02/csca0101\\_ch06.pdf](https://ftms.edu.my/v2/wp-content/uploads/2019/02/csca0101_ch06.pdf)  
Database Concepts - <https://ncert.nic.in/textbook/pdf/keip107.pdf>  
Computer Networks - <https://ncert.nic.in/textbook/pdf/lacs110.pdf>  
Security Aspects - <https://ncert.nic.in/textbook/pdf/lacs112.pdf>  
Societal Impact - <https://ncert.nic.in/textbook/pdf/leip106.pdf>  
Google Meet Tutorial - <https://edvance.hawaii.hawaii.edu/wp-content/uploads/Google-Meet-Tutorial-Getting-Started-and-Recording-a-Lecture.pdf>  
Google Forms - [https://pdst.ic/sites/default/files/Google%20Drive\\_1.pdf](https://pdst.ic/sites/default/files/Google%20Drive_1.pdf)



**Teaching Modalities:** Faculty of Computer Science shall teach this course

**Evaluation Method**

1. The evaluation method is based on descriptive question paper.
2. The question paper will have equal weightage for all three units.
3. There shall not be any explicit practical examination. However, while evaluating students for continuous assessment, the practical component shall be considered with 50% weightage
4. The pattern of question paper is as decided by the Bangalore City University for 2 credit courses.

# BANKING AND FINANCE

V Semester - B.A., B.Sc, B.Sc. (FAD), BCA / 5 year Integrated Course in Biological Science

Under Mrudhu Kousalya

## Objectives:

- Objective of the course is to give in-depth knowledge of Banking and Finance to the students with practical inputs
- To prepare the students for career in Banks & other Financial Institutions

12 hrs

**Module 1: Banking in India :** Evolution, meaning, importance, Indigenous bankers – Functions, drawbacks, Modern banking, Commercial Banks – Functions, structure RBI – Monetary policy, meaning, instruments of monetary policy – bank rate, CRR, SLR, Repo rate, reverse repo rate.

15 hrs

## **Module 2: Banking Operations:**

- Deposits : Banker-Customer relations – Know your Customer (KYC) guidelines – Different Deposit Products – services rendered by Banks – Mandate and Power of attorney ; Banker's lien – right of set off – garnishee order – Income tax attachment order etc.
- Loans and advances : utility of loans and advance, Type of loans – Secured loans, unsecured loans, Demand loan, term loan, cash credit, overdraft, Student loans, Auto loans, Personal loans, Business loans, Consolidated loans.

15 hrs

**Module 3: Finance :** meaning of finance, functions of finance, role, importance of financial planning, shares, types of shares, debentures, types of dentures, Bonds, types of Bonds, Venture Capital, Angel investors, IPOs, Lease.

## **Books Recommended –**

1. Principles & Practices of Banking – By Indian Institute of Banking & Finance – Macmillan Publication.
2. Khan M Y., Indian Financial System, Tata Mc Graw Hill, Delhi
3. Tennan M L., Banking : Law and Practice in India, India Law House, New Delhi
4. Dekock : Central Banking : Crosby Lockwood Staples, London.
5. Srinivasan N P and Saravanel, P., "Development Banking in India and Abroad" Kalyani Publications
6. Banking Technology – Indian Institute of Bankers Publication
7. Kaptan S S & Choubey N S., " E-Indian Banking in Electronic Era", Sarup & Sons, New Delhi
8. Vasudeva, "E- Banking ", Common Wealth Publishers, New Delhi.
9. Practice of Law of Banking by H.R. Suneja
10. Banking Law and Practice by P.N. Varshney
11. Practice of Banking Advances by Bedi and Hardikar
12. Banks and Institutional Management by Vasant Desai

B.A/B.Sc, B.Sc [FAD] B.A / 5 years. Integrated  
course in Biological science under  
Ardu konsalya. for VI semester.

## COMPUTER APPLICATION & INFORMATION TECHNOLOGY

Total No of hours :42

**Unit I:** Database definition, objective of Database, DBMS, features of DBMS, Data models, DBMS Software, creating, editing, monitoring, searching and sorting databases, creating and printing formatted reports, designing custom screen display, multiple data files, executing queries. Introduction to MS-Word, Advantage and features of word processor. Operations and applications of word processor, MS-word menus, advanced MS-word function. Introduction to MS-Excel, views of MS-Excel, features and functions of MS-Excel. Introduction to MS-Access, features of MS-Access. Functions and features of presentation package (MS-PowerPoint), views of MS-Power point. Introduction to Internet, Internet services, use of Browsers, HTML and E-mail functionality. Introduction to DTP Software Package, flash, Dream viewer, Adobe-pdf. (16 hrs)

**Unit II:** Introduction to information system- MIS, EIS, TPS, DSS, expert systems, Accounting Information system, ERP and cloud computing. Cyber crimes and cyber terrorism- Cyber crimes and the categories of crime such as Cyber frauds, Cyber thefts, Cyber stacking, Cyber Terrorism and Hacking. IT-Governance Risk and compliance – CMM (Capability Maturity Model), Control objectives for information and related technology (COBIT). (12hrs)

**Unit III :** Electronic contracting, digital signature, E-Commerce, threats in e-commerce, Encryption overview, Elements of an encryption system, secret key encryption, public key encryption, Smart cards and its applications, E-Banking, types of Electronic fund transfer, Risk of electronic payment system. Salient features of IT Act – 2000- Definitions, Electronic record and digital signature authentication, Various authorities under IT Act and their powers, Penalties, Offences.(14hrs)

Note : No commands should be asked in the question paper.

### Reference books :

- 1) Data Base concepts by Abraham Siberschartz, Heriry F Korth ,S.Sudarshan. – Tata Mc Growhill 3<sup>rd</sup> Edition
- 2) Microsoft office professional – 2013 step by step -- Microw soft press
- 3) MS –Office reference guide , by ToonBunzel
- 4) A Management Information Systems , by 'O'Brien James --- Tata Mc Graw Hill, New Delhi.
- 5) Management information Systems by Gordan B Davis --- McGraw Hill
- 6) Information Syastems Control & Audit , by Weber, --- Pearson Education, India.

Note: Model question paper will submitted later.

  
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**BANGALORE UNIVERSITY**

**ENTREPRENEURSHIP AND INNOVATION**

**BA, B.Sc, B.Sc. (FAD), BCA/5 years Integrated Course in Biological Science for VI Semester  
under Mrudukousalya.**

**Max Marks: 100**

**Max time: 42 hrs.**

**Objective**

To give a glimpse of Entrepreneurship to students as well as to develop basic understanding of Innovation in Entrepreneurship.

**Module 1: Overview of Entrepreneurship**

**19 Hours**

Concept of Entrepreneurship and Entrepreneur-Nature and Importance-Benefits and potential risks of Entrepreneurship – Traits, qualities and competencies of an Entrepreneur – Types of Entrepreneurs – Role of technology in contemporary business environment – Ethics and Entrepreneurship. Govt. of India initiatives like Make in India, Start – up India, Mudra Bank etc.

**Module 2 : Overview of Innovation**

**14 Hours**

Meaning and Importance – Difference with Creativity, Invention and Discovery-Process-Typology – Innovation in Action like lateral thinking, out of box thinking, Disruptive ideas – Case Studies on Innovative business ideas like Red bus, Flip kart, Ola, Big Basket etc

**Module 3 : New venture creation**

**9 Hours**

New ideas and opportunities: Developing business ideas, evaluating the opportunity – Feasibility analysis – Developing business model.

Business plan-Meaning, significance and contents – Formulation and Presentation – Common errors – Preparation of project report.

Sources of finance: Traditional and Non-traditional sources – Venture capitalists, Angel Investors, Private equity cash.

## Pedagogy

The syllabus has to be taught through following methods

- Exercises
- Case studies
- Interaction with Entrepreneurs and Innovators
- Presentations by students

## References

### Books

- Dr.S.S.Khanka, "Entrepreneurial Development", S.Chand Publications.
- Dr.C.B.Gupta and Dr.N.P.Srinivasan. "Entrepreneurship Development in India", S.Chand Publications.
- Vinnie Jauhari& Sudhanshu Bhushan, "Innovation Management". Oxford University Press,2014
- SholmoMaital, DVR Seshadri, "Innovation Management". Response Books 2007

### Websites

- [www.redbus.in](http://www.redbus.in)
- [www.olacabs.com](http://www.olacabs.com)
- [www.flipkart.com](http://www.flipkart.com)
- [www.bigbasket.com](http://www.bigbasket.com)
- [startupindia.gov.in](http://startupindia.gov.in)
- [www.makeinindia.com](http://www.makeinindia.com)
- [www.pradhanmantriyojana.in](http://www.pradhanmantriyojana.in)
- Browse Wikipedia as and when necessary



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# BANGALORE UNIVERSITY

Soft Skills ('Mrudu Kousalya') Paper

3<sup>rd</sup> Semester, B.Sc/BCA from 2015-16

## CULTURE, DIVERSITY AND SOCIETY

2 Credits

Max. Marks: 100

Hours of Teaching: 42

### Objectives

- To help B.Sc. and B.C.A. students gain a better understanding and comprehension of Indian culture, diversity and society.
- To instil in the students a healthy respect for the rich diversity in Indian society and culture.
- To help them understand the problems of rural society.
- To develop in them the secular values of tolerance, communal amity and peaceful co-existence.
- To help them address the contemporary challenges before Indian society like communalism, ethnocentrism and gender discrimination.
- To remind the youth that they have a key role to play in the promotion of national integration, and in promoting the unity and integrity of the country.

### Syllabus

#### Unit-1: Understanding the Diversity of Indian Society

(12-14 Hours)

- Geographical diversity. 5 Hrs.
- Religious diversity. 3 Hrs.
- Cultural diversity. 2 Hrs.
- Unity in Diversity. 2 Hrs.

#### Unit-2: Family, Caste, Village and Women in India

(12-14 Hours)

- Family as a basic institution of Indian Society; Indian family in transition. 3 Hrs.
- Social stratification and disparities; the Caste System and its evils; the predicament of the weaker sections: Scheduled Castes and Tribes; Backward Classes and Religious Minorities. 4 Hrs.
- Rural society and its problems; Rural-Urban migration. 3 Hrs.
- Gender Discrimination; Violence against women; Measures to improve the status of women. 3 Hrs.

**Unit-3: Contemporary Challenges before Indian Society** (12-14 Hours)

- Communalism and Religious Fundamentalism. 2 Hrs.
  - Regionalism and Ethnocentrism. 2 Hrs.
  - Globalization and mono-culturalism; *McDonaldization*. 2 Hrs.
  - Child labour; Migrant labour; Bonded labour; Contract labour. 4 Hrs.
  - Mass Media and its impact on society. 2 hrs.
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**Reference List**

- Beteille, Andre, *Social Inequality*, New Delhi, OUP, 1974.
  - Bose, N.K., *Culture and Society in India*, Bombay, Asia Publishing House, 1967.
  - Deshpande, Satish, ed., *The Problem of Caste*, Orient Blackswan, 2014.
  - Dube, S.C., *Indian Village*, London, Routledge, 1955.
  - Dube, S.C., *Society in India*, New Delhi, National Book Trust, 1990.
  - Jodhka, Surinder, *Village Society*, Orient Blackswan, 2012.
  - Lannoy, Richard, *The Speaking Tree: A Study of Indian Society and Culture*, New Delhi, OUP, 1971.
  - Majumdar, D.N., *Races and Cultures of India*, Bombay, Asia Publishing House, 1958.
  - Mukherjee, D.P. *Diversities*, Delhi, People's Publishing House, 1958.
  - Satyamurty, T.V., *Region, Religion, Caste, Gender and Culture in Contemporary India*, New Delhi, OUP, 1996.
  - Srinivas, M.N., *India: Social Structure*, New Delhi, Hindustan Publishing Corporation, 1980.
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**Scheme of Examination**

End-Semester Examination:	70 marks
Internal Assessment:	<u>30 marks</u> (Test/s: 20 marks; Seminar: 5 marks; Project: 5 marks)
<b>Total:</b>	<b><u>100 marks</u></b>

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**Question Paper Pattern for End-Semester Examination**

- a. 40 Multiple-Choice Questions x 1 mark = 40 marks
  - b. 15 Multiple-Choice Questions x 2 marks = 30 marks
- Total = 70 marks**
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**Eligibility for Teaching**

The Paper shall be taught by a qualified Post-Graduate teacher from the Arts/Social Sciences/Humanities faculty, preferably from the Department of Sociology. If the Sociology teachers are available in the college, it shall be taught by them. If the Sociology teachers are not available, other faculty from the Arts/Social Sciences/Humanities can teach the paper.

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**Syllabus and Scheme for MruduKousalya at UG level  
IV Semester B.A, B.Ss, B.C.A,B.Com, BBM or BHM**

**No. of Credits: 2**

**Max Marks:**

**70**

**No. of Hours:42**

**Internal Assessment: 30**

**Personality Development**

**Introduction:**

Personality Development is a development of the organized pattern of behaviours and attitudes that make a person distinctive. It is concerned with the views of others and how they realize you and what they see in you .It occurs by on -going interaction of temperament, character and environment.Erik Erikson provided an insight full description as to how personality develops based on his extensive experience. He has identified eight phases of the socialisation process of an individual. Five of them occur during infancy, childhood and adolescence. Personality Development is different from self-development which is generally perceived as same. They are related to each other.

But eastern philosophy in general and Indian spirituality in particular understands personality from a different context. Swami Vivekananda says, "Personality Development in the real sense refers to deeper level of a person".Hence, he opines that a study of personality should start from a clear grasp of nature of our mind, and how it functions. Mind has four fold functions likemanas, buddhi, chitta and ahamkara.He has identified four essential qualities for personality development. They are faith in oneself, think positive thoughts, attitude towards failures and mistakes, self-reliance& renunciation and service.

**Unit:1 18 HRS**

*Self-Awareness:* Meaning of self-awareness-Components –Improving self-awareness- Benefits of Understanding self

*Goal setting:* Meaning of goal and goal setting – Short, medium and long term goals-Importance of goal setting- Choices/selection of setting goals-Steps for goal setting –SMART goals.



*Creativity: Meaning of Creativity - Difference with Innovation-Barriers to creativity-Steps to stimulate creativity-Understanding and importance of human values-Difference with ethics, Ideals in life – Becoming a role model*

## **Unit 11** 12 HRS

*Interpersonal Skills–Meaning of Interpersonal skills- Need to develop Interpersonal skills- Components of Interpersonal skills- Techniques required to improve skills- Benefits of effective interpersonal skills*

*Stress Management: Meaning of stress- Factors causing stress- Positive and negative types of stress- Effects of stress on body and mind-Stress removal techniques.*

## **Unit 12** 12 HRS

*Time Management: What and why of Time Management – Necessity and benefits of time management – Tools of time management-How to manage time wisely*

*Leadership Development: Meaning and Importance-Types of leadership styles-Theories of leadership*

### **Pedagogy:**

1. Activities exercises and assignments have to be given not less than 40% weightage
2. Appropriate Case studies could be used
3. You tube videos to be used effectively

### **References:**

1. Vikas (Life skills Manual) : Published by:Member Secretary & Executive Director,KarnatakaJnanaAayoga (Karnataka Knowledge Commission) Govt of Karnataka ,Copy Right:2010 Karnataka JnanaAayoga
2. ManikaGhosh, "Positivity -A way of Life", Published by Orient Blackswan Pvt Ltd
3. Swami Vivekananda,"Personality Development", Published by Ramakrishna Math And Ramakrishna Mission (December 2011)

### **Eligibility for teaching:**

This subject could be thought by all teachers who have undergone some training or other in the given topics.Regular trainers could also be explored

**BANGALORE UNIVERSITY**

**CREATIVITY AND INNOVATION**

**B.Com/BBA/BHM/5 years Integrated Course in Commerce for VI Semester under  
Mrudukousalya.**

**Max Marks: 100**

**Max time: 42 hrs.**

**Objectives**

1. To give an insight into creativity and innovation
2. To develop an appreciation for them among students, and
3. To enhance sensitivity to creativity and innovation

**Module 1: Overview of Creativity**

**10 Hours**

Meaning and concept of creativity - Creativity Process- Nature and characteristics of creativity – Factors affecting creativity – understanding creativity from studying the profiles of most creative personalities.

**Module 2: innovation Management**

**20 Hours**

Meaning and Importance – Difference with Creativity, Invention and Discovery – Process – Typology – Case Studies on Innovation business ideas like Red bus, Flip fart, Ola, Big Basket, methods and techniques – organizational Aspects – Economic Aspects like venture capital, angel investors – Evaluation of Effectiveness of Innovation – Legal Aspects like IPR, patent etc.

**Pedagogy**

The pedagogy needs to explore the following

- Videos on You tube
- Case studies
- Interaction with creative persons and Innovators
- Demonstration by students.

**Module 3: Creativity and various Forms of Arts**

**12 Hours**

Understanding the forms and characteristics of Various Painting Traditions (cave paintings, Ajanta murals, Indian miniatures, Traditional & Folk Arts), Sculpture (Indian sculpture & Temple architecture), contemporary Art forms – Art & Architecture (Photography, Films, Graphic Animation and Digital Art), Performing Arts (Music, Dance and Theatre), and Poetry & Literature with examples.

## References Books

- Vinnie Jauhari & Sudhanshu Bhushan, "Innovation Management". Oxford University Press, 2014
- Sholmo Maital, DVR Seshadri, "Innovation Management", Response Books 2007
- Indian Art by Partha Mitter
- Art of India pre- history to present by Frederick M. Asher
- Contemporary Indian Art and other realities by Yashodara Dalmia

## Websites

- [www.redbus.in](http://www.redbus.in)
- [www.olacabs.com](http://www.olacabs.com)
- [www.flipkart.com](http://www.flipkart.com)
- [www.bigbasket.com](http://www.bigbasket.com)
- Performing Arts- Wikipedia
- Digital Art- Wikipedia
- Graphics and Animation - Wikipedia
- Browse Wikipedia as and when necessary

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# BANGALORE UNIVERSITY

## Soft Skills ('Mrudu Kousalya') Paper

3<sup>rd</sup> Semester B.A./B.Com./B.B.M./B.H.M. from 2015-16

### SCIENCE AND SOCIETY

2 Credits

Max. Marks: 100

Hours of Teaching: 39-42

### Objectives

We inhabit a world today that is shaped significantly by Science and Technology(S&T). S&T has enriched our lives and proved to be beneficial in our livelihoods. At the same time, many of the products of S&T pose challenges, and in ways, even threaten the existence of societies. This course, meant for students of the humanities/commerce streams, is to provide an overview of the nature of S&T and its interaction with society. It is meant to provide a broad introduction to the most significant discoveries and inventions of modern science that have changed our lives and to bring into focus the need for developing a critical appraisal of the issues related to the connection of S&T with society.

### Notes to the Instructor(s)

1. All the units under this syllabus may be taught by any qualified science Post-Graduate teacher. However, the units may be taught in collaboration with the concerned faculty.
2. **Unit I (A):** A brief introduction to science and the practice of the scientific method as it has come to be understood in the 20<sup>th</sup> century, with a historical outline that provides a flavor of the developments that led to modern science and the contributions of different civilizations in this direction.
- Unit I (B):** A discussion on how the discoveries of science transform to technologies and also how technologies have enabled to ask new scientific questions with suitable examples.
3. **Unit II:** This unit explores through specific examples, the discoveries in science that have profoundly impacted civilizations. It is to provide some basic information and introduce some of the consequences of the products of these discoveries on the safety of humans.
4. **Unit III:** This unit is to explore the impact of S&T on socio-economic sphere and the lives of individuals. It will also delve into environmental issues concerned with the deployment of technologies on a large scale.

### Unit I: Introduction to Science:

(13 Hours)

A. What is Science & History of Science

(4 hrs.)

- *What is Science? The revolutions in Physics - Contributions of Copernicus and Galileo; A brief history of the Renaissance in Europe; Age of Enlightenment; Industrial Revolution; Science in the 20<sup>th</sup> century.*

- *Modern Science and the Scientific Method* (2 hrs.)  
*A discussion on hypothesis, experimentation, criteria for experimentation, theorizing, and the open-ended nature of the scientific quest*
  - *Science in other Cultures* (2 hrs.)  
*A brief exploration of science and technology in pre-modern era with emphasis on India in areas of Mathematics, Metallurgical Sciences, Medicine and Health*
- B. The interdependence of Science and Technology
- *Molecular basis of disease and vaccination* (1hr.)
  - *Laser and photonics applications* (1 hr.)
  - *Microscopy and applications* (1 hr.)
- C. Science and the Public (2 hrs.)
- *Discussion on the need for an informed public in a democracy about S&T, Science policy and research funding, S&T and development*

**Unit II: Modern Science and its impact on Societies: (13 Hours)**

- *Theory of Evolution: A lecture summarizing the modern theory of evolution of species and its implications* (1 hr.)
- *Discovery of Antibiotics: What is an antibiotic and how does it work? A brief history of the discovery of antibiotics and its impact on health. Adversities due to misuse of antibiotics* (2 hrs.)
- *Soaps, Detergents, Polymers and Chemicals: Their use and abuse* (2 hrs.)
- *Atomic Energy : Introduction to fission and fusion reactions, atomic reactors and power plants; nuclear weapons; Chernobyl accident* (2 hrs.)
- *Space Sciences: History of space exploration; Sputnik and US space programme; Modern satellites, Applications in weather prediction and analysis; remote sensing with reference to Indian space programme.* (2 hrs.)
- *Genetics and human health: Introduction to gene, DNA and basis of heredity; some issues of health linked to genetics* (2 hrs.)
- *Nanotechnology, Smart materials: Introduction to nanotechnology and examples of some devices that use nanotechnology. A brief survey of smart materials* (2 hrs.)

**Unit III: Science, Life and Livelihoods: (13 Hours)**

- *India's agricultural productivity and dairy development: The Green and White Revolutions; The Gene Revolution and GM Crops* (3 hrs.)
- *Information Revolution: The impact of internet and web-based technologies* (2 hrs.)
- *Impact of high-tech devices on emotional, social and cognitive facets of humans* (2 hrs.)
- *Energy issues and renewable energy sources: solar, wind, bio-fuels* (3 hrs.)
- *Climate Change* (3 hrs.)

## Reference List

- Bala, Arun, 2008, *The Dialogue of Civilizations in the Birth of Modern Science*, New York, NY: Macmillan.
  - Biswas, Arun Kumar (Edited), 2001, *History, Science and Society in the Indian Context : A Collection of Papers*, The Asiatic Society, xv, 474 p, ISBN : 8172361033.
  - Fouad Abd-El-Khalick, 2005, *Developing Deeper Understandings of Nature of Science: The Impact of a Philosophy of Science Course on Pre-service Science Teachers' Views and Instructional Planning*, International Journal of Science Education , Vol. 27, Iss. 1.
  - Russell, B., (1985), *The Impact of Science on Society*, Psychology Press.
  - Singh, S., K. C. Garg, S. Pruthi, B. Dutt (2001) *Indicators of Indian Science and Technology*, (NISTADS), Allied Publishers.
  - Stanford Encyclopedia of Philosophy: Helen Longino's "The Social Dimensions of Scientific Knowledge" (HTML) [www.http://plato.stanford.edu/entries/scientific-knowledge-social/](http://plato.stanford.edu/entries/scientific-knowledge-social/)
  - University of California, Berkeley: Understanding Science: P. Godfrey-Smith's "The Philosophy of Science" (HTML) <http://undsci.berkeley.edu/article/philosophy>
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## Scheme of Examination

End-Semester Examination: 70 marks

Internal Assessment: 30 marks (Test/s: 20 marks; Seminar: 5 marks; Project: 5 marks)

**Total: 100 marks**

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## Question Paper Pattern for End-Semester Examination

a. 40 Multiple-Choice Questions x 1 mark = 40 marks

b. 15 Multiple-Choice Questions x 2 marks = 30 marks

**Total = 70 marks**

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# Computer Lab

## Course Description:

This course is a hands-on introduction to the personal computer and application software. Give students an in-depth understanding of why computers are essential components in business, education and society. Provide hands-on use of Office applications Word, Excel, Access and PowerPoint. Provide foundational or “computer literacy” curriculum that prepares students for life-long learning of computer concepts and skills. Topics include types of data, data cleaning, recoding and sorting, data visualization, summarizing data and an introduction to analysis of relationships between variables.

## Course Outline:

### 1. Basic Skills

In and out view of different components of computer (Hardware), booting the machine, GUI of desktop, input and output interfacing

### 2. Word

Introduction Word - Uses of Word Processor – Working with Word - Explore the use of graphics and different fonts, understand and to make use of basic features of documents, Advanced Word Processing - Managing Document Changes - Advanced Editing and Formatting - Protecting and Sharing Documents - Customizing Documents - Using Macros, Quick parts, and Content Links - Using Fields, Forms and Indexes

### 3. Excel [Spreadsheets]

Introduction Spreadsheets - Uses of Spreadsheets - Anatomy of a Spreadsheet - Creating a Spreadsheet - Formatting a Spreadsheet- Explore the tools available in spreadsheets, including formulas and calculations, Inserting and working on Graphs, Using office backstage - Using basic formulas - Using functions -Formatting cells and Ranges - Formatting worksheets - Managing worksheets - Working with data and Macros - Using advanced formulas - Securing and sharing workbooks - Creating charts - Adding pictures and shapes to a worksheet.

### 4. Power Point Presentation

Introduction Power point presentation (PPT) – Uses of PPT - Creating and Formatting a Presentation - Slide Show Mode, Speaker Notes, and Outline Mode - Drawing Diagrams - Tables and Charts, review each slide template - Duplicate, move and import slides - Insert pictures and video clips - manage add-ins and security options - Create handouts - Create and apply master slides - Manage proofing options - manage language options - Use “Presenter Tools”- Connect to the projection system.

### 5. Use of Excel for Statistical Analysis

Data Classification and Presentation - Cumulative Frequency Distribution - Bivariate Frequency Distributions - Tabulation of Data - Graphical Representation - Other Forms of Representation Measures of Location and Dispersion - The Arithmetic Mean – The Median – The Mode – Geometric and Harmonic Mean – Other methods of Location: Quartiles, Deciles

and Percentiles – Measures of Variations or Dispersion – The Variance and Standard Deviation. Correlation - Scatter diagram – correlation coefficient

## **6. ACCESS**

Overview of Microsoft Access Databases – Design and Create Tables to Store Data – Simplify Data Entry with Forms - Obtain Valuable Information Using Queries - Create Professional Quality Output with Reports – Design and Implement Powerful Relational Databases - Build User Friendly Database Systems

### **Readings:**

1. Wiley, “Microsoft Official Academic Course for ‘Microsoft Word’, ‘Microsoft Excel’, ‘Microsoft PPT’”.
2. Access 2016 Bible: The Comprehensive Tutorial Guide” by Michael Alexander and Dick Kusleika.
3. Berk, K. N. and Carey, P., “Data Analysis with Microsoft Excel, Duxbury Press, 2000.
4. Medhi .J, “Statistical Methods an introductory text”.
5. Kenneth N. Berk and Patrick Carey, “Data Analysis with Microsoft Excel”.