



Syllabus of Value-Added Course in Computer Application for UG programmes

Course Title: Digital & Technological Solutions
Contact Hours: 30

Credits-2

Course Code: UACDTS101

Maximum Marks: 50

Internal Assessment: 10 Marks

Internal Assessment Duration: 1 Hrs

End Term Examination:40Marks

End Term Exam. Duration:2 Hrs

Course objectives:

- To gain familiarity with digital technologies.
- To sensitize about role & significance of digital technology.
- To provide know how of communications & networks.
- To bring awareness about the e-governance and Digital India initiatives.
- To provide familiarity with the emerging digital technologies.

Course outcomes:

- Knowledge about the digital paradigm.
- Realisation of importance of digital technology, digital financial tools, e-commerce.
- Know-how of communication and computer networks.
- Familiarity with the e-governance and Digital India initiatives.
- Understanding the latest digital technologies.

UNIT I

Introduction and Evolution of Digital Systems, Role and significance of Digital Technology, Information & communication technology & tools, Computer system & it's working, Software and its types, Operating Systems: types and functions. Communication Systems: Principles, model & transmission media, Computer networks, Internet: concept and applications, WWW, Web Browsers, Search Engines, Messaging, E-mail, Social networking.

UNIT II

Computer Based Information System: significance and types, e-Commerce & digital marketing: basic concepts, benefits & challenges.

Digital India & e-Governance: Initiatives, Infrastructure, Services and Empowerment. Digital Financial Tools: Unified Payment Interface, Aadhar enabled payment System, USSD, Credit/Debit Cards, e-Wallets, Internet Banking, NEFT/RTGS and IMPS, Online Bill Payments and PoS. Cyber Security: Threats, Significance, Challenges, Precautions, Safety Measures & Tools.

UNIT III

Emerging Technologies & their applications: Overview of Cloud Computing, Big Data, Internet of things. Virtual reality, Block chain, Robotics, Artificial intelligence, 3-D Printing, Future of digital technologies.

Text Books:

1. Fundamentals of Computers by E Balagurusamy, Tata McGraw Hill.
2. Data Commination and Networking by Behrouz A. Forouzan, McGraw Hill Education.
3. Emerging Technologies in Computing: Theory, Practice, and Advances, by P. Kumar, A.Tomar, and R. Sharmila, 1st Edition, 2021.
4. Essentials of cloud computing by K. Chandrasekhran, CRC press, 2014.
5. Blockchain: Blueprint for a new economy by M. Swan, O'Reilly Media, 2015.

Reference Book:

1. Introduction to Computers by Peter Norton, Tata McGraw Hill.
2. Artificial intelligence-a modern approach by Stuart Russell and Peter Norvig Brewka, Prentice Hall, series in Artificial Intelligence, Englewood Cliffs, NJ. The Knowledge Engineering Review, 11(1), 78-79. doi:10.1017/S0269888900007724.
3. E-commerce, by K. C. Laudon, and C.G. Traver, MA: Pearson, 2013.

4. Big data for dummies, Hurwitz, Judith, A. Nugent, F. Halper, and M. Kaufman, Hoboken, NJ John Wiley & Sons, 2013.
5. Cloud Computing: Principles and Paradigms, by Rajkumar Buyya, James Broberg and Andrzej M. Goscinski. Wiley, 2011.
6. Blockchain Basics: A Non-Technical Introduction in 25 Steps, by Daniel Drescher, 1st Edition.

SCHEME OF EXAMINATION

The paper shall be of 50 marks comprising 10 marks for Mid Semester Assessment and 40 marks for End-Semester Examination. The responsibility of conducting and evaluating the Mid Semester Assessment is vested on the teacher designated as Course Coordinator. The End-Semester Examination shall be conducted by the concerned University. In Section A of the Paper, there will be four (4) short answer questions representing all Units/Syllabi i.e. at least one question from each unit. Each question shall be of 2% marks (All Compulsory). In Section B of the Paper, there will be Six (6) long answer questions (Three to be attempted, one from each unit) representing whole of the syllabi i.e. two questions from each unit. Each question shall be of 10 marks.



Syllabus of Value Added Course in Environmental Studies for UG programmes

Course Title: Environmental Education

Credits-2

Contact Hours: 30

Course Code:UEVVAT101Maximum Marks: 50

Internal Assessment: 10 MarksInternal Assessment Duration: 1 Hrs

End Term Examination:40MarksEnd Term Exam. Duration:2 Hrs

Learning objectives: This course attempts to create pro-environment attitude and a behavioural pattern in student community and society that attaches importance and priority to create sustainable life style and awareness on various environmental issues.

Learning outcomes: This course is expected to inculcate a critical thinking on various dimensions of environment through knowledge, skill, critical thinking and problem-solving

Unit 1: Understanding the Environment

- 1.1. Environment: concept, importance and components
- 1.2. Ecosystem: Concept and structure of Ecosystem
- 1.3 Functions of Ecosystem: Food chain, Food Web, Ecological Pyramids and Energy Flow
- 1.4. . Natural resources: Renewable and non-renewable with special focus on renewable energy resources

Unit 2: Natural resources and Environmental Pollution

- 2.1. Air, water and soil pollution: Causes, consequences and control
- 2.2. . Solid waste management: Collection, segregation, transportation and disposal; 3R's
- 2.3. Biodiversity - levels, values ,hot spots,Threats to biodiversity and conservation of Biodiversity
- 2.4 Concept and objectives of Environmental Education , Environmental Ethics

Suggested Reading:

- 1.Asthana, D. K. Text Book of Environmental Studies. S. Chand Publishing.
2. Basu, M.,Xavier, S.Fundamentals Of Environmental Studies, Cambridge University Press,
- 3.Basu, R. N. (Ed.) Environment. University of Calcutta, Kolkata.



4. Bharucha, E. Textbook of Environmental Studies for Undergraduate Courses.

Universities Press

5. Miller T.O. Jr., Environmental Science, Wadsworth Publishing Co. Wagner K.D. Environmental Management. W.B. Saunders Co. Philadelphia, USA 499p

SCHEME OF EXAMINATION

The paper shall be of 50 marks comprising 10 marks for internal assessment and 40 marks for external end semester examination.

Paper pattern (External)

Question paper shall have three sections (A, B and C)

Section A shall comprise of 4 questions of 2 marks each. 2 questions shall be set from each unit of the prescribed course content. All questions shall be compulsory.

Section B shall comprise of 4 questions of 5 marks each. 2 questions shall be set from each unit of the prescribed course content. All questions shall be compulsory.

Section C shall comprise of 3 questions of 12 marks each. 1.5 questions shall be set from each unit of the prescribed course content. Students shall be asked to attempt only one question of 12 marks from this section.



Programme: - Undergraduate programme in Home Science

Semester- I

Course type: - Foundation/ Introductory Course

Course title: - Health and wellness

Course code: - UIISVAT 101

Total credits: 02

M.M- 50 marks

Internal-10 marks

External-40 marks

Objectives of the course:-

1. Familiarize students about physical and mental health.
2. Create awareness of various life style related diseases.

Learning outcomes:-

1. Understand the importance of a healthy lifestyle.
2. Learn about stress management.

Unit-I Introduction to Health & wellness.

Define and differentiate health and wellness. Importance of health and wellness. Education Local, demographic, societal issues and factors affecting health and wellness. Diet and nutrition for health & wellness. Essential components of balanced diet for healthy living with specific reference to the role of carbohydrates, proteins, fats, vitamins & minerals. Malnutrition, under nutrition and over nutrition. Processed foods and unhealthy eating habits. Body systems and common diseases. Sedentary lifestyle and its risk of disease. Stress, anxiety, and depression. Factors affecting mental health. Identification of suicidal tendencies. Substance abuse (Drugs, cigarette, Alcohol), de-addiction, counselling and rehabilitation.

Unit-II Management of Health and wellness

Healthy foods for prevention and progression of cancer, Hypertension, cardiovascular, and metabolic diseases (Obesity, Diabetes, Polycystic Ovarian Syndrome) Types of physical fitness and its Health benefits. Modern lifestyle and hypokinetic diseases; prevention and management through exercise. Postural deformities and corrective measures. Spiritually and mental health. Role of Yoga, asanas and meditation in maintaining health and wellness. Role of sleep in maintenance of physical and mental health.

REFERENCES :

1. Physical Activity and Health by Claude Bouchard, Steven N. Blair, William L. Haskell.
2. Mental Health workbook by Emily Attached & Marzia Fernandez. 2021.
3. Mental Health workbook for women; Exercises to Transform Negative Thoughts and improve Well-being by Nashay Lorick, 2022.
4. Lifestyle Diseases Lifestyle Diseases Management, by C. Nyambichu & Jeff Lumiri, 2028
5. Physical Activity and Mental Health by Angila Clow & Sarah Edmunds, 2013

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NOTE FOR PAPER SETTING:

Question paper shall have (A, B and C) sections

Section A shall comprise of 4 questions of 2 marks each.

2 questions shall be set from each unit of the prescribed course content.

All questions shall be compulsory.

Section B shall comprise of 4 questions of 5 marks each.

2 questions shall be set from each unit of the prescribed course content.

All questions shall be compulsory

Section C shall comprise of 3 questions of 12 marks each.

1.5 Questions shall be set from each unit of the prescribed course content.

Students shall be asked to attempt only 1 question of 12 marks from this section .

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Programme: Under Graduate Programme in History (FYUGP)

Course Type: Value Added Course (Semester I, II)

Course Title- Understanding India

Course Code: UHTVAT-101

Total Credits: 2

Total Marks: 50

Total Teaching Hours: 30

Objectives of the Course: To make students aware about the trajectories of Historical and Cultural development of India and the making of Unity in Diversity. To understand the major forms and phases of freedom struggle. To make students aware about the major contributors to our struggle for independence. To make students aware about the major contribution of India to world civilization in the field of Science and Technology.

UNIT I

- I. Bharatavarsha: Concept and its Evolution: Vedic, Epic and Puranic traditions and the making of Modern India
- II. State and Imperial formation: Rise of Janapadas, The Mauryas, the Kushanas, the Guptas, Pallava, Cholas and Vijayanagara empire
- III. Origin and Growth of Major Religious Streams: Vedic, Jainism, Buddhism, Bhakti and Sufism, BrahmoSamaj, Arya Samaj, Religious philosophy of Sri Aurobindo
- IV. Development of Literary Traditions: Panini, Kalidasa, Veda Vyasa, Valmiki

UNIT-II

- I. India's Contribution to the World; Medical science: Charaka, Sushruta
- II. Mathematics and Astronomy: Aryabhatta, Baudhyana, Brahmagupta, Ramanujam
- III. Physics: Kanad, P.C.Ray, Raman
- IV. Flagship Programmes: Jan Dhan Yojana, Skill India Mission, Make in India, Atamnirbhar Bharat.



Suggested Readings:

- Basu, D. (2012) 'Introduction to the Constitution of India', New Delhi, Lexis Nexis.
- Bhikku, Parekh (1989). Colonialism, Tradition and Reforms: An Analysis of Gandhi's Political Discourses, New Delhi, Sage Publications.
- Bipan Chandra (1987). India's Struggle for Independence, Penguin, Delhi.
- Dhar, P.K. (2000): Growing Dimensions of Indian Economy. Kalayani Publishers. New Delhi.
- Dhingra, I.C (2020): Indian Economy, Sultan Chand & sons, New Delhi.
- Dutt, R. and Sundharam (2018): Indian Economy, S. Chand & Co. Ltd., New Delhi.
- Gautam A (2009): Advanced Geography of India, Sharda Pustak Bhawan, Allahabad.
- Godschalk, D.R. (et.al.) (1999): Natural Hazard Mitigation Recasting Disaster Policy and Planning, Island Press, Washington, D.C.
- Gore, M. S. (2002) Unity in Diversity: The Indian Experience in Nation-Building. Rawat Publication, Jaipur.
- Government of India, Economic Survey (Annual), Economic Division, Ministry of Finance. New Delhi.
- K. Roy, C. Saunders and J. Kincaid (2006) (eds.) 'A Global Dialogue on Federalism'. Volume 3 Montreal, Queen's University Press.
- Kabir, Humayun (1946). Our Heritage, National Information and Publications Ltd., Mumbai.
- L. Rudolph and S. Rudolph, (2008) 'Explaining Indian Institutions: A Fifty Year Perspective, 1956-2006', Volume 2, New Delhi, Oxford University Press.
- M. Singh, and R. Saxena (2011) (eds.), 'Indian Politics: Constitutional Foundations and Institutional Functioning', Delhi: PHI Learning Private Ltd.
- Malik, S. C. (1975). Understanding Indian Civilization: A Framework of Enquiry. Indian Institute of Advanced Study, Shimla,
- Ministry of Human Resource Development.
- Ministry of Skill Development and Entrepreneurship.
- Misra, S.K and Puri (2020), V.K.: Indian Economy, Himalaya Publishing House. Mumbai