

VIVEK P.G. COLLEGE KALWAR, JAIPUR

(Affillated to University of Rajasthan & Govt. of Rajasthan)

F4(179/60)AAKASHI/ANU/2003/89

Tel: 0141-2589596, 2589665 Mob.: +91-9928144609

E-mail: Info@vivekpgcollege.com

आवश्यक सूचना

College Code- 464

दिनांक- 14.11.2024

समस्त (प्रथम सेमेस्टर) विद्यार्थियों को सूचित किया जाता है कि राजस्थान विश्वविद्यालय के ऑन लाईन परीक्षा फॉर्म —2024.2025 दिनांक 14.11.2024 से 25.11.2024 तक भरे जायेगें।

अतः प्रथम सेमेस्टर के विद्यार्थी अपना परीक्षा फॉर्म विश्वविद्यालय की वेवसाइट से भरकर निम्न कमानुसार महाविद्यालय में जमा करवाये।

- परीक्षा फॉर्म एवं नामांकन फॉर्म की दो कॉपियाँ।
- 10वीं एवं 12 वीं की अंकतालिका की फोटो कॉपी।
- ABC I.D. एवं आधार कार्ड की फोटो कॉपी।
- प्रवजन प्रमाण पत्र (Migration Certificate) (राजस्थान बोर्ड के अलावा) नोट— परीक्षा फॉर्म भरते समय प्रथम सेमेस्टर के विद्यार्थी केवल इन Skill Enhancement Courses and Value Added Courses में से केवल इन्हीं Course का ही चयन करे।
- 1- SEC-51 T-101 (COMPUTER FUNDAMENTAL)

2-VAC- 51 F-101 (ANANDAM-I)

- परीक्षा फॉर्म उपरोक्त दस्तावेजों सहित 50 प्रतिशत शिक्षण शुल्क सहित जमा करवाये।
- <u>अधिक जानकारी के लिए महाविद्यालय की वेबसाइट–www.vivekpgcollege.com / College</u> Administrative Office से सम्पर्क करे<u>।</u>

Important Notice

Date- 14-11-2024

College Code-464

All students (For Semester- Ist) are hereby informed that your upcoming Online Examination Form 2024-25 (University of Rajasthan) will be available starting from 14-11-2024 to 25-11-2024. Fill Examination form before the Last date.

Attach and Submit Required Documents with Examination form-

- Examination form with Enrolment form in 02 copies.
- Photocopy of 10th, 12th Marksheets.
- Photocopy of ABC I.D & Aadhar Card.
- Migration Certificate (for Other Borad Student's only)

Note-

- Choose Subject's for Skill Enhancement Courses/Value Added Courses
- 1- SEC-51 T-101 (COMPUTER FUNDAMENTAL) 2- VAC- 51 F-101 (ANANDAM-I)
- Deposit 50% Tuition Fee with Examination Form.
- For more Information visit to college website- <u>www.vivekpgcollege.com/</u> College Administrative Office.

PRINCIPAL
VIVEK PG COLLEGE
KALWAR, JAIPUR-303706

SEC-51T-101 – Computer Fundamentals

Semester	Code of the Course	Title of the Course/Paper			NHEQF Level	Credits
1/11	SEC-51T-101	Computer Fundamentals		5	2	
Level of Course	Type of the Course	Credit Distribution Theory Practical		Offered to NC Student	Delivery Type of the Course	
Introductory	Skill Enhancement	2	-	Yes	30 Hours The	ory
Prerequisites	XII Pass					
Objectives of the Course:	 XII Pass Objectives of the Course – To provide students with a comprehensive understanding of Information Technology and its evolution, including the different generations of computers and types of computer systems. To familiarize students with the architecture of a computer system, encompassing the CPU, ALU, memory, input/output devices, and hardware-software interactions. To introduce students to various operating systems, such as UNIX, Linux, Windows, and their types, enabling them to comprehend the significance of operating systems in computing. To acquaint students with different programming languages, including low-level and high-level languages, procedural programming, object-oriented programming, functional programming, scripting languages, and their respective applications. To enable students to utilize the Internet effectively, including web browsing, understanding domain names and URLs, utilizing email services, participating in online communication, and exploring e-commerce and m-commerce platforms. To educate students about social, legal, and ethical aspects of information technology, raising awareness about cyber threats, cybercrime prevention, and the importance of data security. To provide insights into various cyber threats and attacks, such as computer viruses, malware, identity theft, phishing, and SQL injection, and to equip students with preventive measures against such threats. 					

Dy. Registrat
(Academic)
University of Rajasthan
JAIPUR Page 5 of 155

Examination Scheme-

Regular Students -

Туре	Paper code and Nomenclature	Duration of Examination	Maximum Marks (CA + EoSE)	(CA + EoSE)
Theory	SEC-51T-101 –Computer	1 Hrs-CA	10 Marks-CA	4 Marks-CA
	Fundamentals	1 Hrs-EoSE	40 Marks-EoSE	16 Marks-EoSE

The question paper for Computer Fundamentals will be so set that it has 40 multiple-choice questions (Bilingual) of one mark each. The duration of the question paper will be I hour. The examinees will have to give their answers on an OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

Non-Collegiate Students -

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-51T-101 –Computer Fundamentals	1 Hrs	50 Marks	20 Marks

The question paper for Computer Fundamentals will be so set that it has 50 multiple-choice questions (Bilingual) of one mark each. The duration of the question paper will be 1 hour. The examinees will have to give their answers on an OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

Busta

Py Registrar
(Academic)
University of Rajasthan
JAIPUR

Page 6 of 155

Detailed Syllabus

SEC-51T-101- Computer Fundamentals

Unit - I

Introduction to Information Technology: Evolution and generation of computers, Type of computers, Micro, mini, mainframe and Super computer, Architecture of a computer system: CPU, ALU, Memory (RAM, ROM families, Cache Memory, Input/Output Devices, Pointing Devices, Hardware and Software

Operating System and Programming Languages: Concept of Operating System, Need, Types of Operating Systems, Batch, Single User, Multi-Processing, Distributed and Timeshare operating systems, Introduction to UNIX, Linux, Windows, Window NT, Virtual Machine, Programming Languages, Low Level and High Level, Generation of Languages, 3 GL and 4 GL languages, Procedural Programming Languages, Object Oriented Programming languages, Functional Programming Languages, Scripting Languages, Logic Programming Languages, Command Line Interface and Graphical User Interface

(8 Hours Lecture)

Unit -II

The Internet: History and Functions of the Internet, Working with Internet, Web Browsers, World Wide Web, Uniform Resource Locator and Domain Names, Uses of Internet, Search for Information, Email, Chatting, Instant Messenger Services, News Group, Teleconferencing, Video Conferencing, E-Commerce and M-Commerce, E-services -Online Banking, Online Payment Modes, Mobile Wallets, Social Networking Sites, E-Learning/Online Educations, Cloud-Based Storage, Digital Signature Manage an E-Mail Account, E-Mail Address, Configure E-Mail Account, Login to an Email, Receive Email, Sending Email, Sending Files as Attachments, address book, Downloading files

(8 Hours Lecture)

Unit -III

Social, Legal, Ethical Matters and Network Security: Types of Cyber Threats, how to identify Safe Websites/ Portals, Secure Seals (Verisign/Trust pay etc.), Secure Browsing Habits and Mailing Etiquettes, Social, Legal and ethical aspect of IT, Effects on the way we work Socialise, Operational Areas, Cyber Crime, Prevention of Cyber Crime, Cyber Law, Indian IT Act, Intellectual Property Right, Software Piracy, Copy right and Patent, Software Licencing, Proprietary Software, Free and Open-Source Software, GPL Licence,

(7 Hours Lecture)

Unit-IV

Cyber Security Threats: Security Threats and Attacks (Passive, Active), Types and Effects, Computer Virus, Malware, Adware, Ransomware, Spyware, Emotet, Identity Theft, Denial of Service, Man in Middle, Phishing, MySQL/SQL Injection, Password Attacks

Network Security: Risk Assessment and Security Measures, Assets and Type (Data, Applications System and Network), Security issues and Security Measure (Firewall,

> Pi Vans Dy. Registrar (Academic) University of Rajasthan
> JAIPUR Page 7 of 155

(7 Hours Lecture)

Suggested Books and References -

- 1. Introduction to Computers by Peter Norton, McGraw-Hill Education
- 2. Computer Fundamentals by P.K. Sinha and Priti Sinha
- 3. Fundamental of Computers, Anita Goel
- 4. Fundamental of Computers, V. Rajaraman
- 5. Computer Fundamentals and Programming in C, Reema Thereja
- 6. Computers: Understanding Technology by Floyd Fuller and Brian Larson
- 7. Computer Science: An Overview by J. Glenn Brookshear
- 8. Discovering Computers by Misty E. Vermaat, Susan L. Sebok, Steven M. Freund, and Jennifer T. Campbell.
- 9. Computers Are Your Future by Catherine Laberta
- 10. The Elements of Computing Systems: Building a Modern Computer from First Principles by Noam Nisan and Shimon Schocken
- 11. How Computers Work by Ron White and Timothy Edward Downs
- 12. The Complete Idiot's Guide to the Internet by Peter Kent and Joe Kraynak
- 13. Cybersecurity for Beginners by Raef Meeuwisse.
- 14. Cybersecurity: The Beginner's Guide by Dr. Erdal Ozkaya and Hispasec Sistemas

Course Learning Outcomes:

By the end of the course, students should be able to:

- 1. Students will gain a strong foundational knowledge of Information Technology and the historical progression of computers, leading to a broader perspective on technological advancements.
- 2. Students will be able to comprehend the architecture of a computer system, including the roles of CPU, ALU, memory, and input/output devices, fostering a deeper understanding of hardware-software interactions.
- 3. Students will acquire knowledge of different operating systems and programming languages, allowing them to make informed decisions while selecting appropriate tools for various applications.
- 4. Students will develop proficiency in using the Internet for research, communication, and e-commerce purposes, enhancing their digital literacy skills.
- 5. Students will understand the importance of social, legal, and ethical aspects of IT and be able to make responsible and secure choices while using technology.
- 6. Students will be able to identify potential cyber threats and adopt preventive measures to safeguard personal and organizational data from cyber-attacks.
- 7. By the end of the course, students will be equipped with essential skills and knowledge to navigate the digital world safely, making them more confident and informed users of technology.

Busta

Dy. Registrar
(Academic)
University of Rajasthan
IAIPUR

Page 8 of 155

University of Rajasthan NEP-2020 based Syllabus For

Value Added Courses for Semester I and II in UG Programmes (2 credits/semester for Semester I/II.)

VAC-51F-101/VAC-52F-101

Title of course- A n a n d a m - I			
Nodal Department of HEI to run course	Sociology.		
Nature of course- Independent/Progressive	No		
Number of Seats-	60 students per batch		
Course Code-VAC-51F-101/VAC-52F-101	Credits-02(1Theory OR 2Practical Hours per week)		
Scheme of Examination Maximum Marks Minimum Marks	Annexure-1 (Attached) 50 20		
Is this course is based on Outside Partners/Institutions/Industry/ Govt. Org. etc.?	Yes No		
If Yes, Name of Proposed Outside Partners /Institutions /Industry/ Govt. Org. etc.	Any Government Organization and NGOs		
	Nodal Department of HEI to run course Nature of course- Independent/Progressive Number of Seats- Course Code-VAC-51F-101/VAC-52F-101 Scheme of Examination Maximum Marks Minimum Marks Is this course is based on Outside Partners/Institutions/Industry/ Govt. Org. etc. ? If Yes, Name of Proposed Outside Partners		

Syllabus

- Individual Activities
- Group Activities
- 1 hour lecture per week
- Report of Group Project
- Lecture/Webinar, Interactive Session to be organized in College for students on Anandam Day (Last Working Day of every Month)

Guidelines

- Adopt an area/colony/office to train people about plastic/organic waste disposal.
- Form a group to ensure that injured and sick cows and other animals in your area are taken care
- Adopt an area/colony to rectify issues related to water /electricity/ waste disposal/ road safety/pollution, etc.
- Create a book/food/clothes/mobile/equipment bank and distribute it to the needy.
- To Monitor unauthorized cutting of trees and related issues.
- Engage in massive plantation and aforestation programs.
- Adopt local heritage sites or spots of tourist interest and work for its restoration and publicity on tourist guide maps.
- Coordinate with hospitals / NGOs and organise medical check-up camps for children/women in poor localities.
- Form drug/alcohol de-addiction help-groups and motivate people.
- Organize Vocational Skill Training Programs in juvenile jails and women homes.
- Form a group to help workers/house maids to make cooperatives for small scale loans.
- Form a group to monitor and resolve eve-teasing/ harassment of women, children and old people.
- Form a group to restore and publicise local art-forms like weaving/ dyeing, maandna, folk songs, old manuscripts, etc
- Form age/gender specific groups for collective yoga/meditation in a community, society, hostel,

Pi I Jaw Dy. Registrar (Academic) University of Rajasthan JAIPUR etc.

Examination Scheme:

- Form a group to restore wells/step wells/ponds or other similar water sources.
- Form a group to motivate people to employ rain water harvesting and solar energy harvesting techniques.
- Form a group to maintain a public garden park for the residents of a particular area.
- To train youngsters about computer programming and apps.
- Engage in "Beti Bachao Beti Padhao" programs for over all development and empowerment of girl child in your locality.
- Innovate Design Simple technology using local resources that saves labour time of labourers and poor farmers and impacts their lives positively.
- E-literacy programs, to help organizations/individuals with email and websites, etc.
- Time giving activities to adopted communities for spreading awareness regarding Govt. programmes Schemes.
- Sports activities like yoga, meditation, drills and physical exercises in adopted areas
- Spread awareness about dental care, first-aid training, etc.
- Form group for attending to old people to assist them for market and groceries, etc.

Annexure-1

Programme	e Evaluat	tion Methods:	
	S.No. Parameters		Max. Marks
	1	Entries in Daily Diary	05
	2	Synopsis of Project	10
	3	Participation in Anandam Day (Last working day of every month)	10
	4	Report of Group Project	25

Evaluation of Group Projects (25 Marks)

Total

S.No.	Parameters	Max. Marks
1	Presentation/Video/Photographs submitted with Report	05
2	Media Report of Certificate from Govt. Organization/NGO/Community Forum/ Social Organisation Etc.	10
3	Challenging Issues / Problem Solving/ Innovation addressed in Project Report	10
	Total	25

50

Dy. Registrar
(Academic)
University of Rajasthan
IAIPUR