

ADD-ON COURSE (2019-20)

RED HAT CERTIFIED SYSTEM ADMINISTRATOR

Course Fee: Rs 4000/-Last date: October 23, 2021

Registration Link
https://forms.gle/KYCd3bBK
MxFKsG7H9

Program Coordiantors

Dr. Madhu Sharma

Dr. Vaishali Singh

Important Details

Date: August 1, 2019 Onwards

Venue: Computer Laboratory 2



ST. XAVIER'S COLLEGE, JAIPUR Haibroi Fort Road, Jaipin - 30/2001, Rapasiban

Department of Computer Science

Certificate Course

Red Hat Certified System Administrator (RHCSA)

Course Instructor



Ravi Sarswat

FOUNDER & CTO

GRRAS SOLUTIONS (P) LTD & GIP

IT CONSULTANT | CORPORATE TRAINER | ENTREPRENEUR | TECHNOLOGY **EVANGELIST**

2019-20

(August to January)



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Hathroi Fort Road, Jaipur - 302001, Rajasthan

Ref SXC/ACAD CS 2019

Date: 25/07/19

Notice

Department of Computer Science

Training and Certificate Program on

"Red Hat Certified System Administrator"

The Department of Computer Science is organizing a six month Training and Certificate Program on "Red Hat Certified System Administrator (RHCSA)" for the students of BCA II Year of the College.

The details of the Program are as follows:

Date of Commencement	1 st August, 2019
Duration	06 Months (03 classes/week)
Time	1.40 pm - 2.40 pm
Venue	Computer Laboratory 2
Course Fee	Rs. 2000
Coordinator	Dr. Madhu Sharma
Assistant Coordinator	Ms. Vaishali Singh

Interested students can give their names and fees to the Program Coordinators by 27^{th} July, 2019.

Sto

Principal

Ref SXC/ACAD/CS/2019

Copy forwarded to the following for information and necessary action:

1. Vice-principal, St Xavier's College, Jaipur

2. Heads of all the Departments, St Xavier's College, Jaipur

3. Website Coordinator, St Xavier's College, Jaipur

4. Principal Office. St Xavier's College, Jaipur

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Hathroi Fort Road, Jaipur - 302001, Rajasthan

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Curriculum

Course Name: RED HAT CERTIFIED SYSTEM ADMINISTRATOR

Course Type: Certificate Course

Course Code: BCA/CC/RHCSA-19

Course Duration: 6 months

Target Audience - UG and PG Students of Computer Science Department

Eligibility criteria

UG and PG Students of Computer Science Department, St. Xavier's College Jaipur Brief Description - The course familiarizes students with an understanding of how the digital media works and develops the critical insights necessary to succeed in e-commerce and digital and social media marketing. Enrich students with the essential principles and practices of marketing in the digital economy by making this course an indispensable part of their knowledge base.

- It is a 6 month course
- Examination: one college level examination and one Professional Certification Examination for "Red Hat Certified System Administrator - RHCSA", offered by Red Hat Academy, a renowned USA based organization.
- Attendance: At least 75% attendance in the course is compulsory to sit in the exam of this course.
- After completion of the Certificate Course, students will get a certificate for the same.

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CURRICULUM



Please find the proposal below for 40 Hours hands-on training on Redhat Certified System Administrator (RHCSA).

Objective of the training

This training tells the in-depth view of Redhat Enterprise Linux and provides instructions for managing Redhat Enterprise Linux and Boot Camp for the Redhat global certification exam of RHCSA.

Duration

RHCSA certification Training - 40 hours

Commercials

Fee per student (for training only) IHR 4000/- (All Including)

Minimum Batch Strength - 20 Students

Program Includes

40 Hours of intensive training

Training delivery by Instructors, GRRAS Solutions

Assignments For students

All require software for training

Hands-on labs and exercises

Boot Camp for RHCSA exam (only for those students who want to take exam)

After completing Training we provide some doubt solving sessions if students require

Guidance

online study materials

Location

College premises

About Certification

Red Hat Enterprise Linux is an open source, protected, smooth and easy-to-use operating system designed to secure, customize and provide flexible and stable foundation for all IT work pressure and deployment. Red Hat launched its certification RHCSA and RHCE which is an entry-level certification; it is the first step that leads you towards the world of Red Hat Enterprise Linux and Open Source Technology environment.

An RHCE certification is earned by a Red Hat Certified System Administrator (RHCSA) who has demonstrated the knowledge, skill, and ability required of a senior system administrator responsible for Red Hat Enterprise Linux systems. The exam is for 3.5 hours and in order to get RHCE (Ex300) certified, candidate must clear RHCSA (Ex200) certification, hands-on-lab exam duration of which is 2.5 hours.

Please feel free to revert to me for any clarifications.

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Course Content of RHCSA Certification Training

Red Hat Certified System Administrator (RHCSA)

Lecture 1.

- Introduction to Open Source
- Understanding of Operating System
- History and the future of Linux
- Why Linux is best in compare to Windows
- Uses of Linux in latest technologies
- RedHat Certifications
- Requirement of RedHat Certifications
- Introduction of Advanced Certifications

Lecture 2.

- Understanding of File system and File types in Linux
- Understanding of disk partitions, MBR and BIOS Boot Loader & Booting Process of Linux

Lecture 3.

- Installation of Operating System
- Understanding of installation process Installation By CD, Network or on Virtual Machine

Lecture 4.

- Working with CLI & GUI
- Managing Login & Logout in System
- Working with Shell in Linux
- Working with basic commands (cd, ls, pwd, history, mkdir, touch, man, pinfo, rm,
- cp , mv, date, cal, cat, ping)
 Creating and managing files using vim editor and gedit editor

Lecture 5.

- Working with Linux File system
- Understanding of inode number, inode table and structure Creating and using Symbolic link (Soft Link & Hard Link)

- User Administration part-1
- Understanding of user account and accessing
- Creating and managing users (useradd, usermod, userdel)
- User account management by using files (passwd, shadow, group, gshadow)
 Creating and managing group (groupadd, gpasswd, chage, chfn)

Lecture 7.

- User Administration part- 2
- Understanding of configuration files (/etc/default/useradd, /etc/login.defs)
- Accessing user account using (su, su commands)
- Managing user account sessions
- Monitoring system login (w, last, lastb, /var/log/secure)

Lecture 8.

Understanding of Basic Permissions &umask

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Numerical & Symbolic Method

Special Permission (Sticky Bit, SUID, SGID)

Lecture 9.

Managing user accessibility to the system

Access Control List (ACL Permissions) SUDO Permissions

Lecture 10.

Managing searching using Find , grep, head & tail Commands Working with I/O Redirection Operator

Working with awk, sed, diff, file

Archiving and copying files between system using Tar, scp@rsync

Lecture 11.

Understanding and uses of partitions

Advanced file system Management (ext2, ext3, ext4, xfs)

Creating disk partition using (fdisk&gdisk)

Working with mkfs, blkid, mount & mount options df and du

Permanent Mounting of partitions (/etc/fstab)

Lecture 12.

Creating and using swap &vfat file system

Creating and using Logical Volume Manager (LVM)

Working with pvcreate, vgcreate, lvcreate, pvremove, vgremove, lvremove commands

Lecture 13.

Managing LVM using Ivextend , Ivremove, vgremove , pvremove commands

Creating and using lym snapshot

LVM recovery

Basic understanding of RAID

Lecture 14.

Understanding of Process

Process management and monitoring

Process life cycle and states

Killing and scheduling process, vmstat, uptime, top, sar

Managing process priority (nice &renice command)

Understating of Kernel

Updating and managing Kernel

Boot Loader management

Lecture 16.

Understanding and managing of Services

What is Service

System Services, System Target services

Password Crack Mechanism

Cron Job Scheduling using crontab

Lecture 17.



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- Understanding of Authentication Server
- What is centralized Authentication and types
- Introduction of LDAP
- Introduction of Kerberos
- Configure Client of LDAP & Kerberos

Lecture 18.

- Analyze Log Messages
- Understanding of syslog and rsyslog
- Understanding of rsyslog files
- /var/log/messages, /var/log/dmesg, /var/log/secure, /var/log/maillog

Lecture 19.

- Understanding and installing of Software Understanding of RPM packages Installing software through RPM command
- Installing software through YUM command
- Install software from Internet

Lecture 20.

- Understanding of Virtualization
- Creating and using of Virtual Machines
- Creating virtual machine on Vmware
- Basic understanding of KVM and libvirt

Lecture 21.

- Creating and using Shell Scripting
- **Output Generation Scripts**
- Input Generation Scripts
- Positional Parameter Scripts
- If Else in Scripts
- For Loop In Scripts
- Creating user environment.

Scenario based Examples of Shell Scripting

Lecture 23.

Basic understanding of Docker and Container

Lecture 24.

Comprehensive review and Interview Questions

"Be a part of GRRAS family and see the transformation" THANK YOU FOR MORE INFORMATION VISIT OUR WEBSITE WWW.GRRAS.COM



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Certificate Program on "RED HAT CERTIFIED SYSTEM ADMINISTRATOR" (2019-20)

REPORT

The Department of Computer Science at St. Xavier's College, Jaipur, in collaboration with Grras Solutions Pvt. Ltd., introduced a six-month Certificate Program on "Red Hat Certified System Administrator (RHCSA)" for both undergraduate and postgraduate students. Dr. Madhu Sharma, the Program Coordinator, provided an overview of the program and highlighted its career benefits. The program commenced on August 1, 2019, with a formal welcome from the trainer, Mr. Ravi Sarswat founder & CTO @ GRRAS Solutions (P) LTD & GIP | IT Consultant | Corporate Trainer | Entrepreneur | Technology Evangelist. During the program, participants gained insights into the Linux Operating System, Linux System Commands, the associated editor, and Shell Scripting, essential skills for becoming a System Administrator. Mr. Ravi Sarswat, discussed the current and future scope of the IT industry, emphasizing the program's relevance to the rapidly evolving technical landscape and its alignment with other technologies. The six-month program concluded with 25 participants taking both a college-level examination and a Professional Certification Examination for "Red Hat Certified System Administrator-RHCSA," offered by Red Hat Academy, a reputable organization based in the USA. St. Xavier's College also entered into a Memorandum of Understanding (MOU) with Red Hat Academy and Grras Solutions Pvt. Ltd., providing additional benefits to the participants. The primary aim of the program is to enhance the participants' skills and provide them with broader placement opportunities in the IT industry.



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Certificate Program on "RED HAT CERTIFIED SYSTEM ADMINISTRATOR" (2019-20)

FEEDBACK

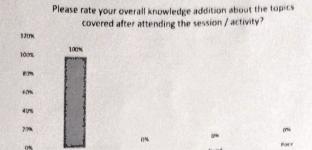
The RHCSA Certificate Program at St. Xavier's College was an invaluable experience. The hands-on training and expert guidance from Mr. Ravi Sarswat equipped me with essential Linux skills, boosting my confidence for a successful career in system administration. Red Hat Certified System Administrator course was great success and with participation of 25 students and with the 100% passing and the feedback form was published and the results were:

- Q1. How satisfied are you with the quality (Content) of the session / activity?
 - a) Highly Satisfied were 80%
 - b) Satisfied were 5%
 - c) Neutral were 10%
 - d) Dissatisfied were 5%
- Q2. How would you rate the quality of the resource persons / guest / speaker?
 - a) Excellent were 90%
 - b) Very Good were 5%
 - c) Good were 5%
- Q3. Please rate your overall knowledge addition about the topics covered after attending the session / activity?
 - a) Excellent were 100%
 - b) Very Good were 0%
 - c) Good were 0%
 - d) Poor were 0%

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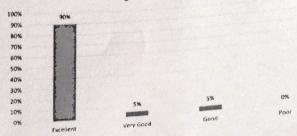


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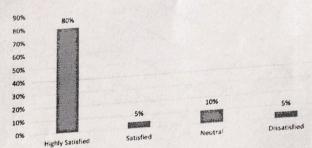


Very Good

How would you rate the quality of the resource persons / guest / speaker ?



How satisfied are you with the quality (Content) of the session / activity?





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Department of Computer Science

Certificate Course on RED HAT CERTIFIED SYSTEM ADMINISTRATOR (2019-20)

RESULT EVALUATION LIST

SN	lo.	Reg	No	Name of the Student	Result
	1	4933		AASTHA GUPTA	PASS
	2	4922		AMAN BUBNA	PASS
	3	5326		AMAN JAIN	PASS
	4	4065		ANANYA JOSHI	PASS
	5	4359		ANGAD SRIVASTAV	PASS
	6	6188		ARINJAI SOGANI	PASS
	7	5706		ARPIT SONI	PASS
	8 4	4945		BHAVYA JAIN	PASS
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12	4	153	(GARIMA MODI	PASS
13	5	054	C	GIRRAJ AGARWAL	PASS
14	5	256	Н	IEENA MAZID	PASS
15	5:	560	J	ATIN PARWANI	PASS
16	59	903	JO	OVINA JACINTA CASTELINO	PASS
17	41	80	M	IAHESH THAPA	PASS
18	49	23	M	USKAN AGARWAL	PASS
19	54	74	PF	RESHIT AGARWAL	PASS
20	51	72	PR	INCY AGARWAL	PASS
21	414	14	PL	JSHPENDRA ACHORA	PASS
22	56	95	RI	TIK JAIN	PASS
23 4	122	20	VA	ARUN NANDWANI	PASS
24 6	27	2	VIJ	JAY JANGID	PASS St
25 5	66	3	YA	SH AGARWAL	PASS No

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Hathrof Fort Road, Jaiput



Hathroi Fort Road, Jaipur - 302001, Rajasthan Department of Computer Science

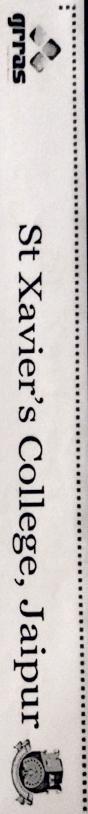
Certificate Course on RED HAT CERTIFIED SYSTEM ADMINISTRATOR (2019-20)

COURSE COMPLETED LIST

SN	o. Reg N	Name of the Student							
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-	2 4922	AMAN BUBNA							
-	3 5326	AMAN JAIN							
	4 4065	ANANYA JOSHI							
5 4359		ANGAD SRIVASTAV							
(6188	ARINJAI SOGANI							
7	5706	ARPIT SONI							
8	4945	BHAVYA JAIN							
9	4155	BLESSY GLORIA HANS							
10	4213	DEEKSHANT SHARMA							
11	4944	DHARVI BANSAL							
12	4153	GARIMA MODI							
13	5054	GIRRAJ AGARWAL							
14	5256	HEENA MAZID							
15	5560	JATIN PARWANI							
16	5903	JOVINA JACINTA CASTELINO							
17	4180	MAHESH THAPA							
18	4923	MUSKAN AGARWAL							
19	5474	PRESHIT AGARWAL							
20	5172	PRINCY AGARWAL							
21	4144	PUSHPENDRA ACHORA							
22	5695	RITIK JAIN							
	1220	VARUN NANDWANI							
24 6	5272	VIJAY JANGID							
25 5	663	YASH AGARWAL							



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St. Xavier's College
Hathro: Fort Road, Jaipu

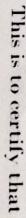


St Xavier's College, Jaipur

Jaipur GRASS SOLUTIONS PVT LTD



DEPARTMENT OF COMPUTER SCIENCE



RED HAT CERTIFIED SYSTEM ADMINISTRATOR TRAINING student of BCA II has successfully completed six month CERTIFICATE PROGRAM 2019-20.

Head of the Department Ms Vaishali Singh

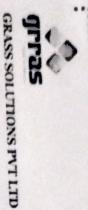
(Grass Solutions Pvt Ltd, Jaipur) Founder & Director Mr. Ravi Sarswat

> **Program Coordinator** Dr Madhu Sharma

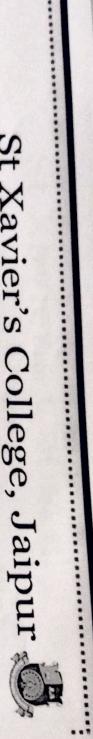
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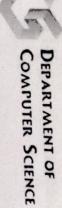
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St Xavier's College, Jaipur







This is to certify that

RED HAT CERTIFIED SYSTEM ADMINISTRATOR TRAINING student of BCA II has successfully completed six month CERTIFICATE PROGRAM 2019-20.

Head of the Department Ms Vaishali Singh

Mr. Ravi Sarswat

Founder & Director

(Grass Solutions Pvt Ltd, Jaipur)

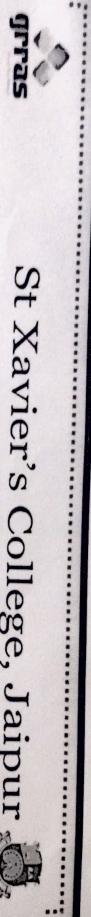
Program Coordinator Dr Madhu Sharma

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DEPARTMENT OF COMPUTER SCIENCE

This is to certify that

Shivendra Singh Sengar

RED HAT CERTIFIED SYSTEM ADMINISTRATOR TRAINING student of BCA II has successfully completed six month

Ms Vaishali Singh Principa

lead of the Department Fort Road, Jaipur St. Xavier's College

- 1 Com Sassan

Founder & Director Mr. Ravi Sarswat

(Grass Solutions Pvt Ltd, Jaipur)

CERTIFICATE PROGRAM 2019-20. 100

Program Coordinator Dr Madhu Sharma

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Department of Computer Science Certificate Course on RED HAT CERTIFIED SYSTEM ADMINISTRATOR (2019-20)

ENROLLED STUDENT LIST

	Class	BCA						
S No	. Reg N	o Name of the Student						
	1 4933	AASTHA GUPTA						
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	3 5326	AMAN JAIN						
4	4 4065	ANANYA JOSHI						
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Department of Computer Science

Academic year 2019-20

Certificate course on RED HAT CERTIFIED SYSTEM ADMINISTRATOR

Course Duration: August to January

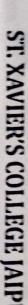
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