

ERNET India
(An Autonomous Scientific Society under Department of Information Technology, GoI)
Jeevan Prakash Building, 10th Floor,
25, K.G. Marg,
New Delhi-110 001

No. EI-D/Tech/18-46/13
Dated of Tender: 8th Nov 2013
Query Submission Date: 14th Nov 2013
Due Date : 21th Nov 2013 3.00 P.M.
Opening of Bids : 21th Nov 2013 3.00 P.M.

To

Subject : Empanelment of agency for conducting computer training courses.

Sir,

1. **ERNET India**, an Autonomous Scientific Society under Department of Information Technology, Govt. of India, is a Class 'A' Internet Service Provider for the Education and Research community in India.

2. ERNET India is a nodal network for integrating education & research institutions in the country. An Internet service is one of the services being provided by ERNET India to these institutions. The services are provided through 15 Points of Presence (PoPs) located at the premier education & research institutions in the country. All these PoPs are connected on high-speed backbone with international connectivity. More than 800 educational institutions are connected on the Network through these nodes.

As a part of its regular activity, ERNET is engaged in providing different type and levels of training in the field of IT / ICT to its various customers as per specific needs and requirement of the end customer.

3. For the above work, ERNET invites Two part Techno-commercial Sealed offers from reputed and eligible firm/ organization / institute for conducting the training as per tender terms & conditions.

General Conditions

1. Quotations should be submitted in two separate sealed covers. First cover indicating, "COVER FOR TECHNICAL BID" should consist of only technical literature and compliance of all tender terms along with supporting documents or any other information as per tender requirement excluding any commercial/ price details. Technical Bid should contain complete details of training courses offered and commercial terms etc. of the training courses offered. Price column in this cover should be kept blank. Second cover indicating, "COVER FOR PRICE BID" should consist of only price

details strictly as per price bid format. Both the covers should first be sealed separately, and then both the covers should be kept in a single sealed bigger cover. This cover addressed by name to the officer signing this enquiry should be submitted before due date and time.

2. The scope of training covers conducting of training courses on Computer, Networking, system administration, Information security, Basic level I, II & Advance level etc as specified in attached appendix – A, B, C, D,E, F & G.
3. The conduction of all the training courses, lab practical and designing of print material should be done strictly in accordance with attached appendix A, B, C, D, E , F & G. Any deviation may lead to disqualification and / or forfeit of EMD / PBG of bidder.
4. Bids should be valid for a minimum period of 180 days after the due date.
5. Envelope should bear the inscription
6. The Bids must reach the undersigned on or before the due date and time. Bids received after the due date & time is liable to be rejected. In the event of due date being a closed holiday or declared Holiday for Central Government offices, the due date for submission of the bids will be the following working day at the appointed time & venue.
7. The rates should be quoted in Indian Rupees for imparting of training at bidder premises equipped with all training classroom / lab infrastructure facilities with adequate hardware / software, etc. (inclusive of all facilities) All prices shall be fixed and shall not be subject to escalation of any description. The rates must be quoted as per the training courses / bill of materials provide in the specified price bid format.
8. All the software / equipment / simulation tools used in the training environment for conducting the training courses are of latest configuration with minimum of windows-7 operating system, MS office-2010, 2 GB RAM, keyboard, mouse, DVD drive, etc with genuine and licensed copy from the respective OEMs.
9. Govt. Levies like service tax, octroi, WCT etc., if any, shall be paid at actual rates applicable on the date of delivery. Rates should be quoted accordingly giving the basic price, service tax, Sales Tax etc., if any. As applicable.
10. It may specifically be mentioned whether the quotation is strictly as per tender specifications/conditions. If not, deviations must be spelt out specifically. In the absence of this, the quotation may be rejected.
11. The bidder must be registered company / society in India and registration number of the firm along with the LST/CST/WCT No. allotted by the concerned authorities must be submitted in the technical bid.
12. ERNET India reserves the right to accept or reject any bid or cancel the tender proceedings without assigning any reason whatsoever.
13. ERNET India may issue partial or repeat orders for any or all the training courses as per ERNET or its end user requirements.
14. The bidders should quote for services/products strictly as per the tendered specifications giving the exact number of faculties assigned to each type of course and its duration in accordance with

tender requirement. All the technical literature for the proposed training may be enclosed in the bid. Quotations with incomplete technical details shall be rejected.

15. Bidder has the option to quote for Colum A or Colum B or both depending upon their suitability. Bidder must quote for all the line items / training courses of Colum A / B, in whichever the bidder is participating .The bidder not quoting for all the line items of any applied Colum will be summarily rejected.
16. The price schedule is to determine L1, L2, L3 bids and accordingly enter into the rate contract.
- 17. ERNET would empanel two to three bidders for a period of 3 years extendable by another two years.**
- 18. Commercially successful bidders would have to match the lowest rates offered by other empanelled bidders item wise.**
19. The orders would be placed in the ratio 50:30:20(L1,L2 & L3) in case of three successful bidders. However, . In case of two successful bidder i.e. L1, L2, the ratio would be 60:40.In case of single successful bidder 100% order will be awarded to that firm. The order ratio will be in approx only.
20. Incomplete quotations are liable to be rejected.
21. Bidder shall sign all pages of quotation and course material forwarded with the quotation.
22. In case of any discrepancy between rates mentioned in figures and words, the latter shall prevail.
23. ERNET India may waive any minor deviations or may seek any clarification, if so desired.
24. The bidder has to submit the quotes as per price bid format i.e should quote for rate per participant and also per day rate for 25 Participants for appendix – A, B, C, D & 50 Participants for appendix E , F & G.
25. The training will be conducted in batches of not more than 25 candidates in appendix – A, B, C, D & 50 candidates in appendix E,F & G and conduct at least 02 batches concurrently at given location.
26. The training will be completed as per individual course duration (as specified in annexure -I) without any gaps period between the batches or as may be decided by ERNET/End user.
27. ERNET/End user reserves the right to inspect the ongoing training classes / lab sessions and may reject in full or part of training provided by successful bidder and may penalizes or instruct the firm to reorganize that portion of training as per course specific requirements.
28. There is a possibility that some of the nominated personnel may not be able to attend their training in a particular batch due to urgent operational or administrative commitment and therefore, will have to be accommodated in subsequent batches. However in case, there are less than 05 numbers of candidates in any batch of a course at a location.
29. The firm should chalk out & submits a training schedule / time table in advance before commencement of the courses. The date of commencement will be communicated by ERNET as per tender delivery terms.

30. Training has to be conducted tentatively at Delhi, Chandigarh, Dehradun, Guwati ,Railpur ,Ajmer, Jaipur, Hyderabad & Srikakulam district, Andhra Pradesh . However, ERNET India has the right to change the place of training /services within India.
31. Institute/ firms will conduct weekly as well as final test for every participant in consultation with ERNET and forward result to ERNET/End user.
32. Institute firms will take feedback from each of the participants after completions of training and forward them to ERNET within two days from the end of each batch.
33. The firms should clearly mention their valid CST/PAN/TAN Number/service tax number in their technical bid.
34. The prices quoted should stand valid for the period of 3 years from the date of acceptance of offer by ERNET extendable by another 2 years on mutual consent.
35. Bidder or any staff employed by the bidder should not be involved in any litigation process against ERNET or its end customer. Undertaking in this regard should be submitted by bidder before acceptance of every order.
36. Training Approach to be followed by successful bidder:
 - Instructor-Led Training
 - Distribution of training material.
 - Set the interactive classroom environment
 - Hands on Lab
 - Steps-by steps hands on lab with detailed instruction and guides to enforce the entire key concept.
 - Periodic evaluation test
 - Getting feedback of participants
37. Each term and condition mentioned in the tender should be complied individually as whole and any deviation should be brought out clearly in a separate sheet.
38. The documentary evidence in support of tender clause requirements must be submitted along with technical bid.
39. ERNET reserves the right to take any legal action against the bidder in the event of providing any false information or breach of contract as per tender terms and conditions in addition to financial tender penalties.
40. The successful bidder shall submit a **Performance Bank Guaranty (PBG)** of 10% of the value of the purchase order within 10 days of the placement of LOI / purchase order, as per Performa attached as Annexure-II. The Performance Security may be in the form of Demand Draft/Pay Order/Bank Guarantee of any nationalized bank. The Bank Guarantee should be valid for a minimum period of 01 year extendable to cover training period. In case bidder fails to deliver the training as per tender terms within delivery period or provide unsatisfactory training the Performance Security submitted by the

firm is liable to be forfeited. Performance Security shall be released after the end of training. No interest will be payable by ERNET India on the Performance Security.

41. EARNEST MONEY DEPOSIT

- i. Each quotation must be accompanied by Earnest Money Deposit of Rs 2,00,000/- (Two lakh) shall be in the form of Demand Draft/Pay Order/Bank Guarantee of any Nationalized Bank taken in the name of Chief Finance Officer, ERNET India, and New Delhi. Bank Guarantee should be valid minimum for a period of 180 days from due date of the quotation. Quotations received without Earnest Money Deposit are liable to be rejected.
- ii. Earnest Money is liable to be forfeited and bid is liable to be rejected, if the tenderer withdraw or amends impairs or derogated from the tender in any respect within the period validity of the tender.
- iii. The earnest money of all the unsuccessful tenderers will be returned after placement of order on the selected vendor. No interest will be payable by ERNET India on the Earnest Money Deposit.
- iv. The EMD of the successful Bidder will be returned after the Bidder provides the performance guarantee, as required in clause 31 of this section.
- v. EMD must be submitted in the Technical Part of the Bid. Non – Submission of EMD will be treated as non-responsive of the bid and bid will be rejected

42. Specific conditions w.r.t bidder organization.

- i) The bidder must be a reputed firm/organization/ Institute.
- ii) The bidder Should be ISO 9001 : 2000 certified. (documentary proof to be attached)
- iii) The bidder firm/organization/Institute should be registered under company registration act 1956 or with registrar of society under society registration act. (documentary proof to be attached)and in existence for last 5 years in India
- iv) Bidder should have conducted similar training courses in last two years. (documentary proof to be attached)
- v) Bidder should have its own/ leased/hired furnished building infrastructure for conducting of training at all the locations where training need to be conducted as per tender for complete duration of training. (documentary proof to be attached)
- vi) Minimum carpet area should be at least 100sq. meters consisting of at least:
 - a.) Two class rooms/ labs to seat 25 students / labs to seat 50 students with system for each student.
 - b.) Bidder should impart training tentatively at following locations as per ERNET/ End user discretion with specific batch formations with max. of 25 persons per batch for
 - 1) Delhi
 - 2) Chandigarh
 - 3) Dehradun
 - 4) Guwahti
 - 5) Raipur

- 6) Ajmer
- 7) Jaipur
- 8) Hyderabad
- 9) Srikakulam
- 10) Mumbai
- 11) Chennai

- c.) The above list of locations is tentative and indicative. However ERNET India can place order for conducting Training in any location across the country.
- vii) Bidder should have decent lab infrastructure with modern facilities and equipments for practical sessions. (documentary proof to be attached)
- viii) The teaching faculty offered by bidder should consist of at least three permanent incumbents who should have been with the bidder organization/Institute for not less than six months from the date of submission of bid. (documentary proof to be attached)
- ix) Bidder should not offer any part-time faculty member for any of the courses without the written permission of ERNET.
- x) The faculty offered by bidder should have the requisite qualifications and minimum experience of two years in the specific field. The names, qualification, experience and other supporting documents of the faculty are required to be provided by the institute/firms along with the technical bid for approval of ERNET. (documentary proof to be attached)
- xi) Bidder should not be allowed to withdraw any faculty without the written permission from ERNET for the complete duration of training.
- xii) Bidder should be fully and completely responsible for any legal/ govt. laws w.r.t hiring of faculty members.
- xiii) The software / equipment / simulation tools used by the bidder for conducting the training courses should be genuine and licensed from the respective OEMs. Bidder should be held responsible for any dispute arising in this regard in terms of intellectual property rights or as may be.
- xiv) The institute/ Firms should also possess and use modern teaching aids such as overhead/ LCD projectors, video projections, audiovisuals etc as per ERNET needs.

43. Scope of work:

- To conduct training as per course content given in appendix A, B, C, D, E, F and G for ERNET or on behalf of ERNET.
- To prepare and provide comprehensive training materials on the subjects in hard as well as soft copies to each and every participant.
- To arrange software / equipment / simulation tools used in the training environment for conducting the training courses with genuine and licensed copy from the respective OEMs.
- To make available the furnished premises for conducting of all training courses with state-of-art classroom and lab infrastructure with modern facilities and equipments for practical sessions.
- To chalk out & submits a training schedule / time table in advance before commencement of the courses in consultation with ERNET.
- To arrange suitable faculty for running of course class and labs practical as per tender requirement.

- To prepare different test papers, conduct regular assessment test and submit the evaluation results to ERNET on per batch basis.
- To prepare and design the feedback form, getting feedback of each participant on this form and submitting filled feedback forms to ERNET.
- To coordinate with batch leader for smooth conduction of training at all the locations.
- To facilitate ERNET in terms of any contractual obligation as may be mentioned in this tender.

44. Payments terms:

- ERNET will release payments on per batch basis for which Institute /Firms will have to submit bills along with feedback forms on completion of each batch.
- The above payments shall be made by ERNET on back-to-back basis, i.e. on receipt of payment by ERNET from its customer/ end user.

45. LIQUIDATED DAMAGE

If the successful bidder fails to deliver the training or any contract obligation within the period specified in the purchase order, ERNET India shall without prejudice to its other remedies, deduct as liquidated damage 2 per cent of the price of the delayed part of the order for every week or part thereof maximum up-to to 10% of purchase order value.

Yours faithfully,

(Praveen Misra)
Project Head

PRICE SCHEDULE FOR THE CONDUCTION OF

To,

The Registrar & CPO,
 ERNET India
 10th floor, Jeevan Prakash Building,
 25, K.G.Marg,
 New Delhi-110001

Tender No. _____ Date of Opening

We _____ hereby certify that we are established firm of manufactures/authorized agents of M/s. _____ With factories at _____ which are fitted with modern equipment and where the production methods, quality control and testing of all materials and parts manufactured or used by us are open to inspection by the representative of ERNET India. We hereby offer to supply the following items at the prices and within the period indicated below:

Column A

S.No.	Description	Qty.	Unit Price (Rate for per participant) (In INR)	Unit Price (per day rates for 25 participants) (In INR)	Tax if any (In INR)	Total (In INR)
01.	Computer Appreciation Course. Course Duration 04 hrs per day & 05 days a week (Monday to Friday)10 working days for a total of 40 hrs durations. Details In Appendix-"A"	1				
02.	Computer Course Module 1 to Module 11 06hrs per day & 06 days a week (Monday to Saturday) 48 working days, a total of 288 Hrs durations. Details In Appendix-"B"	1				
03.	Computer hardware & Networking course 10 AM to 5.30 PM per day (Monday to Friday) a total of 25 working days Details In Appendix-"C"	1				

04.	Computer “system administrative” course 10 AM to 5.30 PM per day (Monday to Friday) a total of 30 working days Details In Appendix-“D”	1				
Grand Total						

Column B

S.No.	Description	Qty.	Unit Price (Rate for per participant) (In INR)	Unit Price (per day rates for 50 participants) (In INR)	Tax if any (In INR)	Total (In INR)
01.	Computer Basic course level –I 10 AM to 5.30 PM per day (Monday to Friday) a total of 7 working days in Appendix- “E” 6 Days a week	1				
02	Computer Basic course level –II 10 AM to 5.30 PM per day (Monday to Wednesday) a total of 3 working days in Appendix- “F” 3 Days a week	1				
03	Advance Computer course 10 AM to 5.30 PM per day (Monday to Tuesday) a total of 3 working days Appendix- “G” 3 days a week	1				
Grand Total						

1. It is hereby confirmed that we have understood the terms and conditions of the tender and have thoroughly examined specifications and are thoroughly aware of the nature of goods required and our offer is to supply goods strictly in accordance with the requirement and terms and conditions of the tender. We agree to abide by the terms and conditions of the tender if the contract is awarded to us.
2. We hereby offer to supply the goods detailed above or such portion thereof as you specify in the purchase order at the price quoted and agree to hold this offer open for acceptance for a period of 180 days from the date of opening of bid.

3. Bid security for an amount equal to Rs./- is enclosed in the form of Bank Draft/Pay Order/ Bank Guarantee.

(Signature and seal of Manufacturer/Bidder)

Dated _____ 2010

PROFORMA FOR BANK GUARANTEE FOR CONTRACT PERFORMANCE

(To be stamped in accordance with stamp Act)

(The non-judicial stamp paper should be in the name of issuing Bank)

(As per clause nos. 3.19 of Section – 3)

Bank Guarantee No.....

Ref.....

Date.....

To

ERNET India
Department of Information Technology,
Govt. of India.
10th floor, Jeevan Prakash Building,
25, K.G.Marg,
New Delhi-110001

Dear Sirs,

In consideration of the ERNET India, Department of Information Technology (hereinafter referred as the '**Owner**', which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to M/s

.....(herein referred to as the '**Contractor**', which expression shall unless repugnant to the context of meaning thereof, include its successors, administrators executors and assigns), a Contract Bearing No.....dated..... valued at -----for.....and the Contractor having (scope of Contract) agreed to provide a Contract Performance of the entire Contract equivalent to(-----per cent) of the said value of the Contract to the Owner.

We having its (Name & Address) Head Office at.....(hereinafter referred to as the '**Bank**', which expression shall, unless repugnant to the context or meaning thereof, include the successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Owner, on demand any and all money payable by the Contractor to the extent ofas aforesaid at any time up to(day/month/year) without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the owner the Bank shall be conclusive and binding notwithstanding any difference between the Owner and Contractor or any dispute pending before any court, tribunal or any authority.

The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Owner and further agrees that the guarantee herein contained shall continue to be enforceable till the Owner discharges this guarantee. The owner shall have the fullest liberty, without affecting in any way the liability of the Bank under this guarantee, to postpone from time to time the exercise of any powers vested in then or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Owner and the Contractor or any other course of or remedy or security available to the Owner. The Bank shall not be relieved of its obligations under these

presents by any exercise by the owner or by any other matters or thing whatsoever which under law would, but for this provision, have the affect of relieving the Bank. The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Owner may have in relation to the Contractors liabilities.

Notwithstanding anything mentioned herein above our liability under this guarantee is restricted to Rs.....and it shall remain in force up to and including shall be extended from time to time for such period), as may be desired by M/son whose behalf this guarantee has been given.

WITNESS

BANK

Signature.....

Signature.....

Name.....

Name------(Bank's Rubber Stamp)

Official address.....

Designation with Bank Stamp

Attorney as per Power of
Attorney No.....

Date.....

Course Contents for Computer Appreciation Course

Appreciation Course is proposed to touch upon computer fundamentals, provide beginner level skills in MS Office suite and touch upon internet and email usage. The topics proposed to be covered in this course are as follows:-

- a. Computer fundamentals and working in Windows Vista/Windows-7.
- b. To create and manage documents in MS Office Word 2007 / Word 2010.
- c. To create and manage data using MS Office Excel 2007 / Excel 2010.
- d. To create Presentations using MS Office Power Point 2007 / Power Point 2010.
- e. Basic functioning in Office Outlook 2007 / 2010, Access and Publisher.
- f. Fundamentals of internet and email.
- g. Basic data, information and cyber security.

At the end of Appreciation Course the personnel should be able to:-

- a. Understand the working of computers.
- b. Work on the windows Vista and Windows 7 operating system.
- c. Scan & print documents, connect & Remove peripherals, basic troubleshooting etc.
- d. Use various productively tools such as MS Word, MS Excel, MS PowerPoint, MS Outlook and MS Publisher.
- e. Should be able to browse internet, print web pages, send e-mails with attachments, and download file & attachments using web browsers like Internet Explorer, Mozilla Firefox & Google Chrome.
- f. To understand concept of information, data and cyber security and measures to prevent data theft.

Module-1 : BASICS OF HARDWARE & NETWORKING

Duration 36 hrs { Theory=26hrs+ Practical + 10 hrs }

- i) Introduction to Computers:**
 - a. Introduction to pc.
 - b. Key functions of a PC.
 - c. Portable and Desktop computers.
 - d. Notebooks, Tablet PC. Personal Digital Assistants (PDAs)

- ii) Inside the PC:**
 - a. Central Processing Unit (CPU),
 - b. Motherboard Layout,
 - c. Motherboard Form Factors,
 - d. BIOS and CMOS,
 - e. Hard drive Structure, Hard Disk Internals,
 - f. Floppy Drives,
 - g. PC Display Screens.

- iii) Operating System features:**
 - a. Microsoft Operating Systems.
 - b. Overview of Windows xp & 7:
 - c. Windows Administrative Tools.

- iv) PC & Os features:**
 - a. Identifying PC Ports,
 - b. Identifying PC components,
 - c. Cleaning and Preventive maintenance,
 - d. Configuring Windows xp & 7.

- v) Configuring Windows xp & 7:**
 - a. Using Advance Startup Options,
 - b. Setting Account and Password Policies,
 - c. Creating Local Users.
 - d. Creating and configuring groups.

- vi) Hardware maintenance:**
 - a. Electrical Circuits,
 - b. Hazards,
 - c. Maintenance Toolkit,
 - d. Preventive Maintenance,
 - e. Maintaining Display Devices.

- vii) Managing Windows XP & 7:**
 - a. Management Consoles,
 - b. Using Remote Services,

c. Managing File and Folder Permissions and Shares.

viii) Introducing to Networking:

- a. Overview of LAN and it's uses & benefits,
- b. Overview of WAN & Internet,
- c. Physical Topologies.
- d. The OSI Model,
- e. Overview of Transport Protocols.

ix) Network components:

- a. Overview of Networks components.
- b. Intranet works and Internetwork Devices.
- c. Overview of Routers,

x) Networking Management:

- a. Building a Peer-to-peer Network,
- b. Testing Network connectivity,
- c. Matching components to the OSI Model,
- d. Configuring TCP/IP.

xi) Ensuing Security:

- a. Physical Access Controls,
- b. Encryption Technologies,
- c. Overview of firewalls and proxy servers,
- d. Auditing Security related Events in Windows xp & 7,

Module-2: INSTALLING AND CONFIGURING WINDOWS 7 CLIENT

Duration 32 hrs { Theory =16 hrs + Practical = 16 hrs}

i) Installing , upgrading and migrating to Windows 7 :

- a. Preparing to installation of windows 7.
- b. Performing a clean Installation of Windows 7,
- c. Upgrading and Migrating to Windows 7,
- d. Performing Image-based Installation of Windows 7,
- e. Configuring Application Compatibility
- f. Installing and Configuring Windows 7.

ii) Configuring disks and device drives:

- a. Partitioning Disks in Windows7,
- b. Managing Disk Volumes,
- c. Maintaining Disks in Windows 7,
- d. Installing and Configuring Device Drivers,
- e. Configuring Disks and Device Drivers,

iii) Configuring file access and printer on Windows 7 Clients:

- a. Overview of Authentication and Authorization
- b. Managing File Access in Windows 7.

- c. Managing Shared Folders,
 - d. Configuring File Compression,
 - e. Managing Printing,
 - f. Configuring File Access and Printers on Windows 7 Client computers
- iv) Configuring network connectivity:**
- a. Configuring IPu4 Network Connectivity,
 - b. Configuring IPu6 Network Connectivity,
 - c. Implementing Automatic IP Address Allocation ,
 - d. Overview of name resolutions,
 - e. Troubleshooting Network Issues,
 - f. Configuring Network Connectivity
- v) Configuring Wireless network connections:**
- a. Overview of Wireless Networks,
 - b. Configuring a Wireless Network,
- vi) Securing Windows 7 Desktops:**
- a. Overview of Security Management in Windows 7,
 - b. Security Windows 7 Client Computer by Using Local Security policy Settings,
 - c. Security Data by using Encryptions File System (EFS) and Bitlocker,
 - d. Configuring Application Restrictions,
 - e. Configuring User Account Controls,
 - f. Configuring UAC, Local Security Policies, EFS, ad Applocker,
 - g. Configuring Windows Firewall,
 - h. Configuring Security Setting in Internet Explorer 8,
 - i. Configuring Windows Defender,
 - j. Configuring Windows Firewall, Internet Explorer 8 Security and Windows Defender.
- vii) Optimizing and maintaining Windows 7 Client computers:**
- a. Maintaining performance by using the windows 7 Performance Tools,
 - b. Maintaining Reliability by Using the Windows 7 Diagnostic Tools,
 - c. Backing Up and restoring data by Using Windows backup,
 - d. Restoring a Windows 7 System by Using System restore Points,
 - e. Configuring Windows Update,
 - f. Optimizing and Maintaining Windows 7 Client Computers.

Module-3 MS WORD 2007/10

Duration 32 hrs {Theory=16 hrs+ practical = 16 hrs}

- i) Creating opening, and saving documents:**
 - a. Launching Word,
 - b. Creating a new document.
 - c. Opening and existing documents,
 - d. Your different documents views,
 - e. Saving and closing documents,

- ii) Entering and editing text:**
 - a. Typing in Word
 - b. Selecting text,
 - c. Moving around your document
 - d. Cutting, copying, and pasting,
 - e. Finding and replacing text,
 - f. Saving keystrokes with quick parts,

- iii) Setting up the document: margin, page breaks, and more:**
 - a. Choosing paper size and layout,
 - b. Setting document margins,
 - c. Adding page background features,
 - d. Adding header and footer
 - e. Working with multiple columns,
 - f. Line numbers,
 - g. Hyphenation

- iv) Formatting text, paragraphs, and headings:**
 - a. Formatting basics,
 - b. Formatting Characters,
 - c. Formatting paragraphs,
 - d. Creating bulleted and numbered lists,
 - e. Setting tabs.
 - f. Using word's rules,
 - g. Fast formatting with format painter,
 - h. Formatting with styles,
 - i. Modifying styles,
 - j. Managing style sets.

- v) Themes and templates:**
 - a. Choosing a template
 - b. Choosing a template

- vi) Spelling, grammar, and reference tools:**
 - a. Turning on spelling and grammar checking,
 - b. Checking spelling
 - c. Checking grammar and style,
 - d. Controlling autocorrect,
 - e. Exploring words research tools
 - f. Accessing Words thesaurus,
 - g. Translating text,

h. Checking your word's count.

vii) Printing Word document:

- a. Quick and easy printing,
- b. Print preview,
- c. Choosing a printer,
- d. Printing to an Adobe PDF file,
- e. Faxing with Word,
- f. Changing print setting,
- g. Printing envelopes,
- h. Printing tables,
- i. Setting print options,

viii) Planning with outlines:

- a. Switching to outline view,
- b. Promoting and demoting headings,
- c. Moving outline items,
- d. Showing parts of your outline.

ix) Working with long documents:

- a. Navigating a large documents:
- b. Understanding sections,
- c. Creating a table of contents,
- d. Creating an index,
- e. Navigating with hyperlinks,
- f. Cross- referencing your documents
- g. Cross- referencing figures
- h. Creating footnotes and endnotes,
- i. Inserting citations and creating a bibliography
- j. Working with a master document.

x) Organizing your information with tables:

- a. Creating tables,
- b. Moving around a tables,
- c. Selecting ports of table,
- d. Merging and spitting cells,
- e. Adjusting columns width and row height,
- f. Formatting tables,
- g. Doing math in table

xi) Adding graphics, video and sound to your documents:

- a. Drop caps, text boxes, and word art,
- b. Working with picture and clipart,
- c. Working with smart art
- d. Working with shapes
- e. Inserting charts and graphs,
- f. Inserting sound, video, and other objects,
- g. Adding captions and figure numbers to graphics,

- xii) Mass mailing with mail merger:**
 - a. Saving Word documents as web pages,
 - b. Creating a web page from scratch,
 - c. Web page design tips,
 - d. Blogging from Word,
 - e. Setting web options

- xiii) Creating forms with word:**
 - a. Creating a paper form,
 - b. Creating a computer form,
 - c. Setting properties for content controls,
 - d. Testing your form.

- xiv) Word's XML connection:**
 - a. What's XML and why should I care?
 - b. XML and Word's new file format,
 - c. Tagging information with content controls,
 - d. Attaching an XML schema to your document,

- xv) Adding & reviewing comments, changes, and protecting documents:**
 - a. Adding comments,
 - b. Tracking changes while editing,
 - c. Accepting and rejecting changes,
 - d. Removing all comments and tracked changes,
 - e. Combining and comparing documents.
 - f. Protecting your document from changes,

- xvi) Customizing Word with macros and other tools:**
 - a. Customizing the quick access toolbar,
 - b. Creating keyboard shortcuts,
 - c. Personalizing work options
 - d. Changing Word's display.
 - e. Customizing the save documents setting.
 - f. Changing editing options.

- xvii) Changing your security setting:**
 - a. Using digital signatures,
 - b. Customizing trust centre settings:
 - c. Showing warnings,
 - d. Removing personal information.

- xviii) Introducing macros and visual basic:**
 - a. Showing the developer tab,
 - b. Recording macros,
 - c. Running macros,
 - d. Reading visual basic code,
 - e. Using digital signatures,

xix) Creating your own themes and templates:

- a. Designing your own themes,
- b. Designing document templates,
- c. Using global templates.

Module-4: MS EXCEL 2007/10

Duration 34 hrs { Theory=20 hrs + Practical = 14 hrs }

i) Creating and navigating worksheets:

- a. Crating a basic worksheet,
- b. Editing data,
- c. Navigating in Excel,
- d. Saving files,
- e. Operating files

ii) Adding information to worksheets:

- a. Adding different types of data,
- b. Quick ways to add data.

iii) Moving data around a worksheets:

- a. Selecting Cells,
- b. Moving cells around,
- c. Adding and moving columns or rows.

iv) Managing worksheets and workbooks:

- a. Worksheets and workbooks,
- b. Find and replace
- c. Spell check.

v) Formatting Cells:

- a. Formatting cells values,
- b. Formatting cell appearance.

vi) Smart Formatting tricks:

- a. The format painter.
- b. Styles themes.
- c. Conditional formatting

vii) Viewing and printing worksheets:

- a. Controlling your view,
- b. Printing.
- c. Controlling pagination.

- viii) Building basic formulas:**
 - a. Crating a basic formulas
 - b. Formula shortcuts,
 - c. Copying formulas,

- ix) Math and statistical functions:**
 - a. Rounding numbers,
 - b. Group of numbers,
 - c. General math functions,
 - d. Trigonometry and advanced math,
 - e. Advanced statistics,

- x) Financial functions**
 - a. The world of finance,
 - b. Financial functions,
 - c. Depreciation,
 - d. Other financial functions,

- xi) Manipulating dates, times and text:**
 - a. Manipulating text,
 - b. Manipulating dates and times,
 - c. Math with dates and times,
 - d. Date and time functions,

- xii) Lookup, reference and information functions:**
 - a. The basic lookup,
 - b. Advanced lookup,
 - c. Information functions,

- xiii) Advanced Formula writing and troubleshooting:**
 - a. Conditions in formulas,
 - b. Descriptions names for cell reference,
 - c. Variable data tables,
 - d. Controlling recalculation,
 - e. Solving formula errors

- xiv) Tables & List management:**
 - a. The basic of tables,
 - b. Sorting and filtering a table,
 - c. Dealing with duplicate rows,
 - d. Performing table calculations,

- xv) Grouping and outlining data:**
 - a. Basic data grouping,
 - b. Grouping timesavers.

- xvi) Templates:**
 - a. Understanding templates,
 - b. Creating a new workbook form a template,

- c. Creating templates,
- xvii) Creating basic charts:**
 - a. Overview of charts in Excel,
 - b. Basic tasks with charts,
 - c. Practical charting,
- xviii) Formatting and perfecting charts**
 - a. Charts style and layouts,
 - b. Adding chart elements,
 - c. Selecting chart elements,
 - d. Formatting chart elements
 - e. Improving your charts,
 - f. Advanced charting
- xix) Inserting graphics:**
 - a. Adding pictures to a worksheet,
 - b. Excel's clipart library,
 - c. Drawing shapes,
- xx) Scenarios and goal seeking:**
 - a. Using scenarios,
 - b. Using goal seek,
 - c. Solver,
- xxi) Pivot tables:**
 - a. Summary tables revisited,
 - b. Building pivot tables,
 - c. Multi-layered pivot tables,
 - d. Fine-tuning pivot table calculations,
 - e. Filtering a pivot table,
 - f. Pivot charts
- xxii) Protections your workbooks:**
 - a. Understanding Excel's safeguards,
 - b. Data validation,
 - c. Locked and hidden cells
- xxiii) Worksheet collaboration**
 - a. Preparing your workbook,
 - b. Adding comments,
 - c. Tracking changes,
 - d. Sharing your workbook.
- xxiv) Exchanging data with other programs:**
 - a. Sharing information in windows,
 - b. Embedding and linking objects,
 - c. Transferring data.

xxv) Connecting worksheet to the web:

- a. Putting worksheets on the web
- b. Using hyperlinks:

xxvi) Automating tasks with macros:

- a. The macro recorder;
- b. Macro security,
- c. Crating practical macros,

Module-5: MS Power Point 2007/10

Durations 26 hrs { Theory=14hrs + Practical = 12 hrs}

i) Crating a basic presentation:

- a. Beginning a new presentation,
- b. Choosing a theme for your presentations
- c. Adding text,
- d. Adding more slides,
- e. Moving around slides,
- f. Adding speaker notes,
- g. Crating and printing handouts,
- h. Saving and closing a presentation,
- i. Running a presentation,

ii) Editing slides:

- a. Editing slides:
- b. Reversing on actions(undo)
- c. Finding and replacing text automatically,
- d. Spell check and other editorial tools
- e. Adding special characters.

iii) Formatting an aligning your text:

- a. Automating text formatting
- b. Manually formatting text appearance,
- c. Manually aligning and indenting text,
- d. Formatting text boxes,

iv) Formatting and laying out your slides:

- a. Changing slides layout,
- b. Changing background color.
- c. Reapplying themes. Color and fonts

V) Editing your slides show.

- a. Viewing multiple slides,

- b. Adding deleting and moving slides.
- c. Entering slides from
- d. Editing slide and layout masters,
- e. Creating slide masters and layout masters,
- f. Adding headers and footers,

Vi) Adding charts, diagrams, and tables:

- a. Crating charts,
- b. Crating diagrams,
- c. Crating tables,

i) Delivering presentations:

- a. Setting up a slideshow.
- b. Slideshows for multiple audiences,
- c. Presenting your slideshow,
- d. Creating power point shows,
- e. Emailing your presentation,
- f. Packaging presentation for CD
- g. Presentation over the web
- h. Converting to other formats,
- i. Optimizing presentation

ii) Printing presentations:

- a. Printing slides (one slide per pate)
- b. Handouts (multiple slides per pate)
- c. Overhead transparencies,
- d. Speaker notes,
- e. Presentation outline.
- f. Tent cards

iii) Putting image and documents on slides:

- a. Drawing on slides
- b. Modifying drawing
- c. Working with multiple drawing
- d. Adding pictures from other programs
- e. Modifying drawing
- f. Working with multiple drawing
- g. Adding pictures from other programs
- h. Adding pictures from other programs
- i. Modifying pictures,
- j. Adding documents from other programs.

iv) Adding sound and video

- a. Adding sound
- b. Adding video

v) Slide transitions and animated effects:

- a. Slide transitions,

b. Custom animations

vi) Make your slides clickable:

- a. Adding links
- b. Adding actions
- c. Editing links and actions

vii) Customizing PowerPoint:

- a. Customizing how PowerPoint looks
- b. Customizing how PowerPoint behaves,
- c. Customizing the way your slideshows run,
- d. Installing add-ins

viii) Macros

- a. Creating and editing macros
- b. Running macros

ix) Collaborating with others:

- a. Preparing for collaboration,
- b. Sending out a file for review,
- c. Reviewing with comments,
- d. Finalizing presentations,
- e. Security.

Module-6 : MS Access 2007/10

Duration 36 hrs { Theory=20 hrs + Practical = 16 hrs }

- i) Creating your first database:**
 - a. Understanding Access database,
 - b. Getting started,
 - c. Saving and opening Access database
 - d. The navigation pane.

- ii) Building smarter tables:**
 - a. Understanding data types,
 - b. Design view
 - c. Access data types,
 - d. The primary key
 - e. Six principles of database design

- iii) Mastering the datasheet:**
 - a. Datasheet Customization
 - b. Sorting searching, filtering
 - c. Datasheet navigation
 - d. Advance editing
 - e. Printing the datasheet.

- iv) Blocking bad data:**
 - a. Data integrity basics,
 - b. Input masks,
 - c. Validation rules
 - d. Lookups

- v) Linking tables with relationship:**
 - a. Relationship basics,
 - b. Using a relationship
 - c. More exotic relationship
 - d. Relationship practice

- vi) Queries that select records**
 - a. Query basics
 - b. Crating queries
 - c. Queries and related tables,

- vii) Essential query tricks:**
 - a. Calculated fields,
 - b. Queries functional
 - c. Summarizing data
 - d. Query parameter

viii) Quires that updates records

- a. Understanding action queries,
- b. Update queries
- c. Append queries
- d. Delete queries

ix) Analyzing data with crosstab queries and pivot tables.

- a. Understanding crosstab queries,
- b. Updates queries
- c. Pivot tables
- d. Pivot charts

x) Crating reports:

- a. Report basics
- b. Printing preventing and exporting a report
- c. Formatting a report
- d. Filtering a report
- e. Filtering and sorting a report

xi) Designing advanced reports

- a. Improving reports in design view
- b. The report wizard
- c. The label wizard
- d. Fine-tuning reports with properties
- e. Expressions
- f. Grouping

xii) Crating simple forms:

- a. Form basics
- b. Sorting and filtering in a form
- c. Creating better layouts
- d. The form wizards

xiii) Designing advanced forms:

- a. Customizing forms in design view
- b. Taking control of controls
- c. Forms and linked table

xiv) Building a navigations systems

- a. Mastering the navigating pane
- b. Building forms with navigations smarts,
- c. Linking to related data

xv) Automating tasks with macros:

- a. Macro essential
- b. Macro and security
- c. Three macro recipes
- d. Managing macros

- e. Connecting macros to forms
- f. Conditional macros.

xvi) Sharing a database with multiple users:

- a. Opening up your database to the world
- b. Preparing your database
- c. Playing well with others
- d. Data corruption
- e. Security your database.

xvii) Importing and exporting data:

- a. Using the clipboard
- b. Import and export operations.

Module-7 : MS OFF CE ONENOTE 2007/10

Duration 10 hrs { Theory=06 hrs + Practical = 04 hrs}

i) Introduction to Ms OneNote.

ii) Crating and saving a Notebook

- a. Exploring the OneNote. User Interface,
- b. Creating a Notebook
- c. Creating pages, sections, and section groups in a notebook
- d. Saving a page, section, and Notebook

iii) Adding Different Elements to a Page:

- a. Adding media elements to a page:
- b. Inserting links, files, time stamps, and symbols in a page,
- c. Using the pen option to write and draw on a page.

iv) Viewing and sharing a Notebook

- a. Viewing different versions of a Notebook

v) Printing and Sharing a Notebook:

- a. Printing a Notebook,
- b. Sharing a page3 and a Notebook.

Module- 8 : MS OFFICE PUBLISHER 2007/10

Duration 22 hrs { Theory=12hrs + Practical = 10 hrs}.

i) Introductions to desktop publishing and getting started:

- a. Layout and design good practice,
- b. Desktop publishing terminology
- c. The publisher screen,
- d. The ribbons & toolbar,

- e. The page navigator
- f. The status bar.

ii) Working with publisher.

- a. Drawing objects,
- b. Cut, copy and paste,
- c. Working with the clipboard,
- d. Selecting objects,
- e. The format ribbon,
- f. Create, save & print a publication
- g. Print preview & print options
- h. Using help.

iii) Page setup

- a. Page setup options,
- b. Using guides & rulers,
- c. Create and use a background page.
- d. Manage pages

iv) Graphics:

- a. Insert graphics' calendars, advertisements, page parts, placeholders,
- b. Draw a shape,
- c. Format shapes,
- d. Size, adjust & move and nudge,
- e. Layer, order & group objects,
- f. Wrap text with graphics.

v) Text Frames:

- a. Working with text and text boxes,
- b. Format text,
- c. Use styles,
- d. Set tabs,
- e. Set indents, bullets & numbering
- f. Use autocorrect,
- g. Text flow and connections of text boxes,
- h. Text box properties,
- i. Deleting a text box,
- j. Insert business information
- k. Catalogue pages,
- l. Insert and format word Art
- m. Send to background.

vi) Use and format Tables:

- a. Create a table,
- b. Insert a table,
- c. Adjusting columns and rows,
- d. Formatting a table,
- e. Deleting a table

f. Designing for the web.

vii) Other publishing tasks:

- a. Set custom page types,
- b. Create and use headers and footers,
- c. Use page numbering
- d. Create mail merge
- e. Create tables,
- f. Insert external files,
- g. Set page borders,
- h. Use and create colour schemes,
- i. Create and use master pages,
- j. Use design checker
- k. Spellchecked your publications
- l. Manage embedded fonts
- m. Edit business information
- n. Send as e-mail
- o. Publish to web
- p. Create a template,
- q. Pack and go,
- r. Colour models.

Module- 9 : MS OFFICE OUTLOOK 2007/10

Duration 30 hrs { Theory=16hrs + Practical = 14 hrs}.

i) Getting started with Outlook:

- a. Explore the Outlook interface,
- b. Send a simple message,
- c. Read message,
- d. Reply to and forward a message,
- e. Print a message,
- f. Deleting a message,

ii) Composing & organizing messages, customizing message options:

- a. Address a message,
- b. format a message,
- c. Check spelling and grammar,
- d. Attach a file,
- e. Open and save an attachment,
- f. Flag a message,
- g. Organize content with folders,
- h. Modify message setting
- i. Modify delivery options
- j. Change the message format,
- k. Notify others that you will be out of the office,
- l. Create a distribution list,
- m. Insert a hyperlink

iii) Managing & working with contacts:

- a. Add a contact,
- b. Sort and find contacts
- c. Find the geographical locations of a contact,
- d. Manage contents,
- e. Forward contacts,
- f. Edit an electronic business card
- g. Export contacts,
- h. Perform a mail merge,
- i. Link items to business contact manager.

iv) schedule appointments

- a. Explore the Outlook calendar,
- b. Schedule an appointment,
- c. Assign categories and edit appointments,
- d. Schedule a meeting
- e. Reply to a meeting request
- f. Propose a new meeting time,
- g. Manage meetings
- h. Print the calendar

v) Managing task and note on the desktop

- a. Create a task
- b. Edit and update a task
- c. Create a note,
- d. Edit a note
- e. Display a note on the desktop
- f. Assign a task
- g. Reply to a task request
- h. Send a task update,
- i. Track assigned tasks

vi) Setting calendar options:

- a. Set work days and times,
- b. Display an additional time zone,
- c. Set availability options

vii) Tracking work activities using the journal

- a. Automatically record a journal
- b. Manually record a journal entry,
- c. Modify a journal entry.

viii) Sharing folders information's

- a. Specify folder permissions
- b. Delegate access to folders,
- c. Access another user's folder
- d. Send calendar information in an e-mail message

ix) Customizing the Outlook Environment:

- a. Customize the toolbar.
- b. Create a new toolbar
- c. Customize the menu bar,
- d. Customize the quick access toolbar
- e. Customize the to-Do-Bar,
- f. Create a folder home page

x) Locating Outlook Items:

- a. Sort message using multiple criteria
- b. Find messages
- c. Find outlook items using multiple criteria,
- d. Filter messages,
- e. Organize message,
- f. Manage junk e-mail

xi) Working with public folders:

- a. Create public folder,
- b. Add users to a public folder
- c. Post information in a public folder

xii) Personalizing your e-mail

- a. Apply stationery and themes,
- b. Create a custom theme
- c. Create signatures,
- d. Modify signatures,
- e. Configure e-mail message security settings,
- f. Archive messages,
- g. Protect personal folders.

xiii) Organizing Outlook items:

- a. Group items
- b. Create search folders,
- c. Apply conditional formatting

xiv) Managing Outlook data files:

- a. Create a data file,
- b. Add Outlook data files to a mail profile,
- c. Change data file settings

Module- 10: CONCEPT OF INTERNET

Duration 10hrs {Theory=05hrs + Practical = 05 hrs}.

- i) Evolution of web & internet,
- ii) Technologies involved and how the web evolved over the years,
- iii) Web browsers and their working
- iv) Overview & features of internet explorer
- v) Describe the user interface of the internet explorer
- vi) Basic internet service like e-mail, FTP, messengers, search, etc

- vii) Use of internet explorer for browsing, bookmarking, downloading files, e-mailing etc,

Module- 11 COMPUTERS AND INFORMATION SECURITY

Duration 20hrs {Theory=20hrs + Practical = 00 hrs}.

i) **General Information:**

- a. Why is cyber security a problem?
- b. Guidelines for publishing information Online
- c. Understanding internet service providers (ISPs)

ii) **General Security**

- a. Choosing and protecting passwords
- b. Understanding anti-virus software
- c. Understand firewall
- d. Coordination virus and spyware defense
- e. Debunking some common myths
- f. Good security habits
- g. Safeguarding your date
- h. Real- World warnings keep you safe online
- i. Keeping children safe online

iii) **Attached and threats:**

- a. Dealing with cyber bullies
- b. Understanding hidden threats: corrupted software files
- c. Understanding hidden threats :Root kits and bonnets
- d. Preventing and responding to identity theft
- e. Recovering from viruses, worms, and Trojan horses
- f. Recognized and avoiding spyware
- g. Avoiding social Engineering and phishing attacks
- h. Understanding Denial-of-Service Attacks
- i. Identifying hoaxes and urban legends
- j. Avoiding the pitfalls of Online trading

iv) **Email and communication:**

- a. Understanding your computer: Email Clients
- b. Using caution with Email Attachments
- c. Reducing Spam
- d. Benefits and risks of Free Email Services
- e. Benefits of blind carbon copy of (BCC)
- f. Understanding digital signatures
- g. Using Install messaging and Chat Rooms Safely
- h. Staying safe on Social Network Sites

v) **Mobile devices:**

- a. Protecting Portable Devices : physical Security
- b. Protecting portable devices : data Security
- c. Using caution with USB Drives

- d. Securing wireless networks
- e. Cyber Security for Electronic Devices
- f. Defending Cell Phone and PDAs Against Attack

vi) **Privacy:**

- a. How anonymous are you?
- b. Protecting your privacy
- c. Understanding Encryption
- d. Effectively erasing Files
- e. Supplementing passwords

vii) **Safe browsing :**

- a. Understanding your computer: web browsers
- b. Evaluating your web browser's security settings
- c. Shopping safely online :
- d. Browsing safely : Understanding Active Content and Cookies
- e. Understanding Web site Certificates
- f. understanding internationalized Domain Names
- g. Understanding Bluetooth Technology
- h. Avoiding copyright Infringement

viii) **Software and applications:**

- a. Understanding patches
- b. Understanding voice over internet protocol (VoIP)
- c. Risks of file-sharing technology
- d. Reviewing End-User License Agreements
- e. Understanding Your compute : Operating Systems

ix) **Data Hardware security best practices :**

Course contents for computer hardware & Networking course**1. Computer Hardware**

The topics of computer hardware course are proposed to be covered in this course are as follows:

- I. Introduction to basic electronics
- II. Subassembly of OC
- III. Sub assembly of Mother Board
- IV. Type of memory
- V. Familiarization with I/O cards, ports, connectors & cable and their identification
- VI. Booting process
- VII. Setting u of BIOS, CMOS errors
- VIII. Disk Management
- IX. Installation of operating system
- X. Dual booting systems
- XI. Hardware device drivers & applications software
- XII. System maintenance tools, important commands
- XIII. Troubleshooting of pc
- XIV. Upgradation of pc
- XV. Working of SMPS
- XVI. Troubling shooting related to it

2. Networking

- i. Communication over the network
- ii. Application layer functionality and protocols
- iii. OSI transport layer
- iv. OSI network Layer
- v. Addressing the network IPv4
- vi. Data Link Layer
- vii. OSI physical Layer
- viii. Ethernet
- ix. Planning and cabling networks
- x. Configuring and Testing your network
- xi. Introduction of routing and packet forwarding
- xii. Static routing
- xiii. Introduction to dynamic routing protocols
- xiv. Distance vector routing protocols
- xv. RIP version 1
- xvi. VLSM and CIDR
- xvii. RIPV2
- xviii. The routing table A Closer Look
- xix. EIGRP
- xx. Link state routing protocols
- xxi. OSPF
- xxii. LAN Design
- xxiii. Basic switch concepts and configuration

- xxiv. VLANS
- xxv. Spanning tree protocol
- xxvi. Inter-VLAN routing
- xxvii. Introduction to WAN
- xxviii. Basic wireless concepts and configuration
- xxix. Point to point protocol
- xxx. Frame Relay
- xxxi. Network Security
- xxxii. ACLs
- xxxiii. Teleworker services
- xxxiv. IP addressing Services
- xxxv. Network troubleshooting

Course contents for computer "system administrative" course

1. Networking

a) Introduction of Networking

- Networking basis
- Networking Media, Cables & Connectors
- Type of Networks
- Protocols
- OSI Reference Model

b) TCP/IP protocols & Addressing

- What us TCP/IP
- Compression of OSI layer and TCP/IP Suite
- What is networking Addressing
- Functionality of IP TCP, UDP,ICMP Protocols
- Understating FTP, Telnet, SMTP-upper layer protocols
- IP addressing scheme

c) Sub Netting

- Sub netting fundamentals
- Sub netting in class A,B & C

d) LAN IMPLEMENTATION & OPERATIONS

- Configure IP address, net masks and gateway address on hosts
- Implement a LAN

**e) SYSTEM ADMINISTRATION THROUGH WINDOWS SERVER 2003
(BASIC & ADVANCED ADMINISTRATION)**

- Introduction to window Family operating systems
- Loading, installing, setting up and troubling shooting
- Versions of windows server 2003
- DNS (Domain Name server)
 - Configuration
 - Zone Transfers
 - Forwarders
 - DNS Backups
- **DHCP(Dynamic Host Configuration Protocol)**
 - Configuration
 - Reservation
 - DHCP Backup
- **ADS(Active Directory Service)**
 - Installation & UN-installation
 - ADS Backup
- User Management in Windows – 2003
- User Profiles
- OU, Group Policy Auditing

- Group Management
- Registry IIS(Internet Information Services)
- Backup & Restoring Data
- MMC(Microsoft Management Console)
 - DFS (Distributed File System)
 - EFS (Encrypted File System)
- Software Deployment
- Printer Management
- File Server
- Remote Desktop Connection

System Administration through Linux

➤ **Introduction**

i. Linux Ideas and History

An Introduction to Linux and Open Sources: What are the central ideas behind the Linux phenomenon and where do they come from?

ii. Linux Uses Basis

Logging into the system, changing users and editing text files

iii. Running commands and getting help

How to use built-in and online documentation to enhance your experience

iv. Browsing the File System

Understanding the locations of important directories on a Red Hat Enterprise Linux system and navigating them from the command line and using the graphical Nautilus browser

v. User, Groups and Permissions

Reading and setting permissions on files and directories

vi. Using the bash Shell

Basic tips and tricks to make Red Hat Enterprise Linux's default shell work for you. Topics include tab completion, history and an introduction to shell scripting.

vii. Standing I/O and pipes

The ins-and-outs of redirecting output between programs and files.

viii. Text Processing Tools

An introduction to some of the most useful text-processing utilities in Red Hat Enterprise Linux, including grep, cut, sed, sort, diff and patch.

ix. Vim: An advanced Text Editor

How to get the most out of the powerful and flexible vim text editor

- x. Basic system configuration tools**
using Red Hat Enterprise Linux's graphical and text base configuration tools to manage networking printing and date/time settings.
- xi. Investigating and Managing Processes**
Listing terminating and scheduling programmers executions on a Red Hat Enterprises Linux system
- xii. Configuring the Bash Shell**
A discussion of using shell variables and scripts to customize the command –line environment
- xiii. Finding and processing File**
In-depth coverage of using the find command and related utilities to locate and act upon files based on arbitrary criteria
- Xiv Network Clients**
An overview of network tools available in Red Hat Enterprises Linux from web browsers to email client and diagnostics utilities
- xv) Advanced Topic s in Users, Groups and Permissions**
A deeper discussion of how user and group identities are stored on a Red Hat Enterprise Linux system, as well as the introduction of advanced file systems permissions like SetUID and SetGID.
- xvi) The Linux File system In-Depth**
The nut-and-bolts of how Re Hat Enterprise Linux deals with files systems. Topics include partitions, inodes, linking and archiving tools.
- xvii) Essential System Administration Tools**
An introduction to fundamental system administration topics such as installing Red Hat Enterprise Linux, managing software packages, and enhancing security with SE Linux and the net filter firewall.
- xviii) System Initialization**
Define boot process, recover system and manage service startup.
- xix) Package Management**
Manage software on systems using yum, Red Hat Network and rpm.
- xx) Kernel Services**
Explore kernel modules and variants, tune kernel parameters, manage devices and monitor processes and resources.
- xxi) System Services**
Configure and access various consoles to manage system logging, time synchronization, printers and task automation.

- xxii) User Administration**
Create, modify and delete users, groups and policy. Escalate privileges. Establish collaborative group directories.
- xxiii) File system management**
Expand storage by adding new file systems and swap space. Configure autofs for on-demand network storage.
- xxiv) Advances file systems Management**
Backup your Data. Manage file systems using Software RAID and Logical Volume Management.
- xxv) Network Configuration**
Configuration dynamic and static network setting for both IPv4 and IPv6.
- xxvi) Installation**
Perform both interactive and automated installations of Red Hat Enterprise Linux.
- xxvii) Virtualization with Xen**
Install the xen environment and create a Para-virtualized user domain running Red Hat Enterprise Linux.
- xxviii) Troubleshooting**
Explore troubleshooting methodologies while defining slandered things to check. Maintain system from different run levels. Utilize the rescue environment of anaconda.
- xxix) System Performance and Security**
Identify how concepts and well formed policy map to configuration and accountability in networking and security administration.
- xxx) System Service Access Controls**
Implement secure access to systems and network services using host-based access, SELinux and system services management.
- xxxi) Network Recourse Access Controls**
Secure access to systems and services using the Net Filter Kernel –level firewall.
- xxxii) Organizing Networked Systems**
Understand and implement organized networked systems using the DNS and DHCP services.
- xxxiii) Network File Sharing Services**
Configure, control and secure access to FTP, NFS and SMB/CIFS (Samba)
- xxxiv) Web Services**

Configure implements and secure access to the Apache Web Server and Squid Proxy Cache.

xxxv) Electronic Mail Services

Configure, implement and secure access to the Send mail and Postfix SMTP servers.

xxxvi) Securing Data

Secure data using fundamental encryption protocols, Public Key Infrastructure, and Digital Certificates Configure and Utilize encrypted remote system administration tools.

xxxvii) Account Management

Understand account management using Name Switch Service and Pluggable Authentication Modules.

Basic Level Computer course I

- SI No. Introduction to Computers**
- 1 What is a Computer?
 - 2 Characteristics of Computers
 - 3 Advantages and Limitations of Computers
 - 4 Application of Computers
 - 5 IPO Cycle
 - 6 The Computer System
 - 7 Hardware
 - 8 Block Diagram of a Computer
 - 9 Software
 - 10 Memory
 - 11 Data Representation
 - 12 Measuring Memory

Introduction to Windows

- 1 The Operating System
- 2 The User Interface
- 3 Using a Mouse
- 4 Introduction to Windows
- 5 The Windows Versions
- 6 Elements of Windows Interface
- 7 Using the Mouse
- 8 Starting a Program
- 9 Minimizing a Window
- 10 Enlarging a Minimized Window
- 11 Manually Resizing a Window
- 12 Moving a Window
- 13 Shutting Down the PC

Managing Data

- 1 Operations on Files and Folders
- 2 To Copy a File or Folder
- 3 To Delete a File or Folder
- 4 To Rename a File or Folder
- 5 To Move a File or Folder

6 To Print a Document

Working with MS Word 2007

- 1 Introducing Word Processing Concept
- 2 Creating Documents
- 3 Saving Document
- 4 Opening an Existing Document
- 5 Closing Document
- 6 Printing Document
- 7 Formatting a Document
- 8 Selecting the Text
- 9 Editing the Text
- 10 Formatting the Text
- 11 Formatting the Paragraph
- 12 Editing and Proofing Tools
- 13 Checking Spelling and Grammar
- 14 Handling Graphics
- 15 Creating Tables and Charts
- 16 Shortcut Keys

Working with MS Excel 2007

- 1 Introduction to MS Excel
- 2 Spreadsheet Concepts
- 3 Creating, Saving, and Editing Workbook
- 4 Inserting and Deleting Worksheet
- 5 Entering Data in a Cell/Formula Copying and Moving
- 6 Handling Operators in Formula
- 7 Introducing Functions
- 8 Describing Different Types of Functions
- 9 Formatting Worksheet
- 10 Changing Font
- 11 Adding Border and Colors
- 12 Changing Date, Number, Character, Currency Formats
- 13 Changing Data Alignment
- 14 Conditional Formatting
- 15 Working with Charts and Graphs
- 16 Creating Charts and Graphs
- 17 Previewing Charts and Graphs
- 18 Modify Charts
- 19 Integrating Word Processor, Spreadsheet, and Web Pages
- 20 Pivot Table

MS PowerPoint 2007

- 1 Creating a Presentation
- 2 Creating, Saving, and Opening Presentation
- 3 Working in Different Views
- 4 Working with Slides

- 5 Adding and Formatting Text
- 6 Formatting Paragraph
- 7 Checking Spelling and Correcting Typing Mistakes
- 8 Printing Presentation
- 9 Drawing and Working with Objects
- 10 Drawing an Objects
- 11 Working with Objects
- 12 Working with Clip Art and Other Pictures
- 13 Inserting Clip Art and Pictures
- 14 Drawing Shapes
- 15 Introducing Slides Show
- 16 Running and Controlling a Slide Show

Computer Security & Network

- 1 Introduction to Computer Security
- 2 Malicious Code Attacks
- 3 Fundamental Principles of a Network
- 4 Introducing the Basic Networking Concepts

Basic Level II

Introduction to MS Office 2010

Sl. No. MSWord2010

- 1 Identify the Elements of the User Interface
- 2 Opening. Creating and Saving a Document
- 3 Editing a Word Document
- 4 Using Formatting Tool Bar
- 5 Inserting Tables in a Word Document
- 6 Automating the Mail Merge

MS PowerPoint 2010

- 1 Getting Started with PowerPoint
- 2 Create a Presentation
- 3 Formatting Text on Slides

MS Excel 2010

- 1 Creating a Basic Excel Worksheet
- 2 Performing Calculations in an Excel Worksheet
- 3 Modifying an Excel Worksheet
- 4 Formatting an Excel Worksheet
- 5 Printing Excel Workbooks

Sl. No. Introduction to OpenOffice Applications

- 1** Working with Writer
- 2** Using Menus and Toolbars
- 3** Opening a Document
- 4** Saving a Document
- 5** Mailing a Document
- 6** Previewing a Document
- 7** Printing a Document
- 8** Formatting Text
- 9** Font and Font Size
- 10** Applying Font Effects
- 11** Spell Checking the Text
- 12** Finding and Replacing Text
- 13** Inserting Graphic Elements
- 14** Insert Numbers and Bullets
- 15** Inserting Special Characters
- 16** Creating and Modifying Charts
- 17** Inserting Hyperlink
- 18** Formatting a Document
- 19** Setting Page Orientation
- 20** Setting Page Margins
- 21** Setting Page Border
- 22** Setting Headers and Footers
- 23** Inserting Fields in a Page
- 24** Using Styles
- 25** Overview of OpenOffice.org Calc
- 26** Getting Started with OpenOffice.org Calc
- 27** Formatting Text and Numbers
- 28** Selecting Cells
- 29** Copying and Pasting Cells
- 30** Text Superscript and Text Subscript
- 31** Conditional Formatting
- 32** Naming Cells
- 33** Formatting Numbers as Text
- 34** Entering Fractions
- 35** Themes for Spreadsheets
- 36** Rounding-Off Numbers
- 37** Managing Rows and Columns
- 38** Inserting Rows and Columns
- 39** Formatting Rows and Columns
- 40** Formatting Cells
- 41** Using Table AutoFormat
- 42** Page Formats and Data Entry Shortcuts
- 43** Formatting a Page

- 44 Inserting Headers and Footers
- 45 Inserting, Reading, and Printing Notes
- 46 Using Data Entry Shortcuts
- 47 Creating and Opening Presentation
- 48 Introducing Impress
- 49 Creating Presentation
- 50 Adding Slides to Presentation
- 51 Adding Gallery to Slide
- 52 Changing the Slide Background
- 53 Editing Slide Text
- 54 Editing Master View
- 55 Saving Presentation
- 56 Opening an Existing Presentation
- 57 Running a Presentation
- 58 Formatting Text
- 59 Applying Character Formatting
- 60 Setting Text Alignment
- 61 Editing Line Spacing
- 62 Adding Bulleted Text Items
- 63 Getting Started with OpenOffice Base
- 64 Overview of Database Concepts
- 65 Explore the Base Interface

Communicating with the Internet

- 1 Introducing the Internet
- 2 History of the Internet
- 3 Using the Internet Explorer
- 4 Sending and Receiving E-mails
- 5 Introducing URL and Domain Name System
- 6 Other Features of Internet