10. RESOURCE REQUIREMENT:

10.1 Physical Resources

10.1.1 Space Requirement:

Norms and standards laid down by All India Council for Technical Education (AICTE) may be followed to work out space requirement in respect of class rooms, tutorial rooms, drawing halls, laboratories, space required for faculty, student amenities and residential area for staff and students.

10.1.2 LIST OF EQUIPMENT

| Sr.No | Name of Equipment | Quantity |
|-------|---|----------|
| 1. | Copying equipment | 01 |
| a) | Copy printer / desk top digital duplicator | 01 |
| b) | Photocopier with advanced features | 01 |
| 2. | Scanner (Electronic stencil cutting machine) | 01 |
| 3. | Communication equipment (Telephone with at least two extensions) | 02 |
| 4. | FAX | 01 |
| 5. | EPBX | 01 |
| 6. | Telephone answering set | 01 |
| 7. | Franking machine for mailing dak | 01 |
| 8. | Computer with interface | 01 |
| 9. | Electronic black board | 01 |
| 10. | Public address system (conference room system) | 01 |
| 11. | CCTV | 01 |
| 12. | Electronic calculator | 05 |
| 13. | Electronic billing machine | 01 |
| 14. | Electronic weighing machine | 01 |
| 15. | Electronic cash register | 01 |
| 16. | Dictation network | 01 |
| 17. | Punching machine (various sizes) | 01 |
| 18. | Staplers (different sizes) | 10 |
| 19. | Card index cabinet | 02 |
| 20. | Strip index | 01 |
| 21. | Cardex | 01 |
| 22. | Lateral filing system | 01 |
| 23. | Binding and punching machine | 01 |
| 24. | Mobile phone | 01 |
| 25. | Other latest machines/equipment related to office and communication | 01 |
| 26 | Lamination machine | 01 |
| 27. | Computer with internet (according to need) | 01 |
| 28. | Cordless phone | 01 |

| Sr.No | Name of Equipment | Quantity |
|-------|--------------------------------|----------|
| 29. | Metal detector | 01 |
| 30. | Fire / security alarms | 01 |
| 31. | Telephone directories | 01 |
| 32. | Business directories | 01 |
| 33. | Year book | 01 |
| 34. | Post office guide | 01 |
| 35. | Railway / air / sea time table | 01 |
| 36. | Office manuals | 01 |
| 37. | Ready reckonor | 01 |
| 38. | Display board | 01 |
| 39. | Atlas | 01 |
| 40 | Cheque writer machine | 01 |
| 41. | Scanner | 01 |

42. Floppies

TYPING LABORATORY

| 1. | Typewriter English (standard) | As per strength |
|-----|--|-----------------|
| 2 | Portable typewriter | 01 |
| 3. | Electronic typewriter | 01 |
| 4. | Stencil duplicator (automatic) | 05 |
| 5. | Tool kit for typewriter | 02 |
| 6. | Demonstration stand | 01 |
| 7. | Models, charts, diagrams and practice books | LS |
| 8. | Filing cabinet with 4 drawers | 02 |
| 9. | Typewriting tables | 32 |
| 10. | Typist chairs revolving with adjustable height | 32 |
| 11. | Miscellaneous (consumable) | LS |
| 12. | Tools and spare parts for typewriter repair | LS |

Note: The equipment provided in typing laboratory is sufficient for increased strength of 30 students also. No extra emoluments are suggested for this laboratory in case strength of students increases from 15 to 30.

STENOGRAPHY LABORATORY

| 1. | Tape recorder - deck type with stereo system and double speakers | 02 |
|----|--|-------------|
| 2. | Tape recorder (small) with cassette playing facilities | 02 |
| 3. | Cassettes containing dictation exercises with varying speed | As per |
| | | requirement |
| 4. | Blank cassettes | As per |
| | | requirement |
| 5. | Stop watch | 10 |
| 6. | Wall clock with centre second | 02 |

| 7. | Glass board with ruling | 01 |
|-----|---------------------------|-------------|
| 8. | Shorthand charts (framed) | As per |
| | | requirement |
| 9. | Chairs | 35 |
| 10. | Lecture stand | 04 |

Note: The equipment provided in Stenography laboratory is sufficient for increased strength of 30 - 45 students also. No extra equipment should be purchased for this laboratory in case strength of students increases from 15 to 30.

COMMUNICATION AND PHRD LABORATORY

| Sr.No | Name of Equipment | Quantity |
|-------|--|----------|
| 1. | Stools | 30 |
| 2. | Display board / screens | 02 |
| 3. | Sound recording and playing system | 01 |
| 4. | Audio cassettes | 60 |
| 5. | Overhead projector | 01 |
| 6. | Transparencies slides | 100 |
| 7. | TV - VCR and camera for video recording | 01 each |
| 8. | English spoken course by World Wide Publishers | 01 set |
| 9. | PA system for group discussion / presentation | 01 |
| 10. | A Quiz room equipped with: | |
| | a) Two way audio system | For 30 |
| | b) Back projection system | students |
| | c) Timer System | 1 |
| | d) Slide Projector | 30 sets |
| | e) LCD Projector | 1 |
| | | 1 |
| 11. | Conference Hall for interview Practices | 1 |
| 12. | Mattress for Yoga exercises | 30 |
| 13. | Acclimatized Hall for exercises | 1 |
| 14. | Physical Exercise Equipment: | |
| | a) Multi gym | 2 |
| | b) Sports equipment | LS |
| | | |

NOTE:I

In addition to above laboratories, computer centre will be required for effective implementation of the course.

Provision for overhead projector, TV with VCR facility slide cum strip projector, TV with VCR facility slide cum strip projector, CD/DVD player along with TV monitor, photocopier, PC-XT facilities, duplicating machines, drafting machines etc has also to be made.

10.1.3 Furniture Requirement

Norms and standards laid down by AICTE be followed for working out furniture requirement for this course.

10.2 Human Resources Development:

Weekly work schedule, annual work schedule, student teacher ratio for various group and class size, staffing pattern, work load norms, qualifications, experience and job description of teaching staff workshop staff and other administrative and supporting staff be worked out as per norms and standards laid down by the AICTE.

REFERENCE AND OTHER GENERAL BOOKS RECOMMENDED FOR COMMUNICATION SKILLS, MANAGEMENT AND COMPUTER

BOOKS ON ENGLISH AND COMMUNICATION SKILLS

- The complete Idiot's guide to speaking in Public with Confidence; by Laurie E. Rozakis.
 Pub: Prentice- Hall of India Pvt Ltd., New Delhi-110 001
- Effective Business Communication; by Asha Kaul Pub: Prentice-Hall of India Pvt. Ltd., New Delhi-110 001
- 3. Every day Dialogues in English; by Robert J. Dixoson Pub: Prentice-Hall of India Pvt Ltd., New Delhi-110 001
- 4. Complete Course in English by: Robevt J. Dixson Pub: Prentice-Hall of India Pvt. Ltd., New Delhi-110 001
- 5. The Essence of Effective Communication By: Ron/Landlow/Fergus Ranton Pub: Prentice-Hall of India Pvt. Ltd., New Delhi-110 001
- 6. A Course in Phonetics and Spoken English; By: J Sethi, PV Dhamija Pub: Prentice-Hall of India Pvt. Ltd., New Delhi-110 001
- 7. Business Communication & Customer Relation; By: RK Madhukar Pub: Vikas Publishing House Pvt Ltd., New Delhi-110 014
- 8. Perspectives of Communication and Communication Competence by MV Rodriques Pub: Concept Publishing Company, New Delhi-110 059
- 9. Business Communication By: Rajendra Pal & JS Korlahalli Pub: Sultand Chand & Sons, New Delhi-110 002
- 10. Reading and Advanced Writing Skills in English By MK Kohli & AL Kohli Pub: Kohli Publishers, Chandigarh-160 002
- 11. Business Communication by Urmila Rai & SM Rai Pub: Himalaya Publishing House, Delhi-110 002
- 12. English Grammar, Reading and Writing Skills (English Communication) For IX + X; By AL Kohli Pub: Kohli Publishers, Chandigarh 160 002

- 13. English Grammar, Reading and Writing Skills (English Language & Literature) For IX + X; By AL Kohli Pub. Kohli Publishers, Chandigarh-160 002
- 14. English Grammar, Reading and Writing Skills For IX + X; By AL Kohli Pub. Kohli Publishers, Chandigarh-160 002
- 15. English Grammer, Reading Writing Skills For Class XI; By AL Kohli Pub. Kohli Publishers, Chandigarh-160 002
- 16. Spoken English-A Hands-on-guide to English conversation Practice by MC Srivassan Publisher Vikas Publishing House Led.
- 17. Management of Public Relations and Communication By Sailesh Sengupta Pub. Vikas publishing House, Pvt. Ltd.
- 18. Business Correspondence & Report Writing By RC Sharma & Krishna Mohan Publishers: Tata Mc Graw Hill Publishing Co. Ltd., New Delhi.
- 19. Developing Communication Skills by Krishna Mohan & Meera Banerji; Publishers MC Millan Pvt. Ltd.
- 20. Effective Business Communication By MV Rodriques; Publisher: Concept Publishing Company, New Delhi-110 059
- A Handbook of Pronunciation of English Words (with two Audio Cassettes) By J. Sethi & DV Jindal Pub. Prentice-Hall of India Pvt. Ltd., New Delhi.
- 22. Speaking English Effectively By Krishna Mohan & NP Singh Publisher MC Millian India Ltd.
- 23. Communication Skills By Leena Sen Pub. Prentice-Hall of India Pvt. Ltd., New Delhi.
- 24. Business Communication By Asha Kaul Pub. Prentice-Hall of India Pvt. Ltd., New Delhi.

MANAGEMENT & ENTREPRENEURSHIP DEVELOPMENT

- 1. Computer-Aided Production Management By PB Mahapatra; Publisher: Prentice Hall of India Pvt Ltd., New Delhi-110 001
- 2. Management By Stephen P.Robbins & Mary Conlter Publisher: Prentice Hall of India Ltd., New Delhi-110 001

- 3. Essentials of Management By Harold Keontz & Heinz Weihrich Publisher: Prentice Hall of India Ltd., New Delhi-110 001
- 4. Engineering Management by Fraidoon Mazda Publisher: Addison Wesley Longman, New Delhi-11—92 Pearson Education
- 5. Basic Managerial Skills for All By E.H. Mc Grath; SJ; Publisher: Prentice Hall of India Ltd., New Delhi-110 001
- 6. Office Organization & Management By SP Arora Publisher: Vikas Publishing House (P) Ltd., New Delhi
- 7. The Essence of Total Quality Management By Adrian Buckley & John Bank Publisher: Prentice Hall of India Ltd., New Delhi-110 001
- Human Relation-A Practical Guide for improving Inter-Personal Skills By Madan Satiya Publisher: Vikas Publishing House Pvt Ltd., New Delhi
- 9. Entrepreneurship Development-Prepared by CPSC for Technician Education, Manila Publisher: Tata-MC Graw-Hill Publishing Co. Ltd.,
- 10. Engineering Economics By R. Panneevselam Publisher: Prentice Hall of India Ltd., New Delhi-110 001
- 11. Engineering Development By S.S. Khanka Publisher: S.Chand & Company Ltd.
- 12. Entrepreneurship-New Venture Creation By Dacad H. Halt; Publisher: Prentice Hall of India Ltd., New Delhi-110 001
- 13. Principles of Management & Administration By D. Chandra Bose Publisher: Prentice Hall of India Ltd., New Delhi-110 001
- 14. Management Theory & Practice By JS Chandan, Pub.Vikas Publishing House Pvt. Ltd., New Delhi-160 014
- 15. An Introduction to Accountancy By SN Maheshwari & SK Maheshwari Publsiher: Vikas Publishing House Pvt. Ltd., New Delhi-160 014
- 16. Entrepreneurship Development in India By Dr. CB Gupta & Dr. NP Srinivasan Publisher: Sultan Chand & Sons, New Delhi-2
- 17. Entrepreneurship and Small Business Management By Dr. CB Gupta Dr. SS Khanna Publisher: Sultan Chandi & Sons, New Delhi-110 002

- 18. Advances to Small Industries & Small Borrowers By Gohal Swaroopi Publisher: Sultan Chand & Sons Publication, New Delhi-110 002
- The Practice of Entrepreneurship By Geoffrey G. Meredith, Robert E. Nelson & Philip A Neck Pub. Sultan Chand & Sons, Delhi-110 002
- 20. Advance to Small Industries & Small Borrowers-A Practical Guide By Gopal Swaroop; Pub. Sultan Chand & Sons, New Delhi-2
- 21. Management Text and cases By R. Satya Rajat and A. Parthasarthy Pub. Prentice-Hall of India Pvt. Ltd., New Delhi.
- 22. Team Building and total Quality: A Guide Book for TQM Success By Milan GH Pub. Narosa Publishing House Pvt. Ltd., New Delhi 110002

COMPUTERS

- 1. On Your Marks—Net—Set-Go---Surviving in an e-world by Anushka Wirasinha Publishers Prentice-Hall of India Pvt Ltd.
- 2. Technician's Guide to Programmable Controllers By Richard A. Cox, Publisher Vikas Publishing House
- 3. Database Management Systems by: Alexis Leon, Mathews Lean Publishers Vikas Publishing House.
- 4. Introduction to Artificial Neural Networks By SN Sivanandam & M Paulraj Publisher Vikas Publishing House
- 5. Programming in 'C' By: R Subburaj Pub.Vikas Publishing House
- 6. A first course in Programming with 'C' By T. Jeyapoovan Publishers Vikas Publishing House
- 7. E-Commerce (Electronic Communication for Business) by S. Jaiswal Publishers Galgotion Publication Pvt. Ltd, New Delhi
- 8. Fundamentals of Information Technology By Alexis Leon & Mathews Leon Publisher Vikas Publishing House Pvt. Ltd. New Delhi
- CAD/CAM Computer Aided Design & Manufacturing by Mikeel P. Grover & Emory W. Zinmevs Jr. Publsihers Practice Hall ofIndia Pvt Ltd, New Delhi

- 10. Viscually Leavn PL by Anushka Wiras Inha Publisher Practice Hall of India
- 11. A first Course in Computers By Sanjay Saxena Publisher Vikas Publishing House Pvt Ltd.
- 12. Analysis, Design & Implementation Systems A Transition to objects by Ashok K. Publisher Vikas Publishing House Pvt Ltd.
- 13. Computer-Aided Analysis & Design By S.Ghohal Publisher Prentice-Hall of India, New Delhi.
- 14. Fundaments of Data Structure in C+F By Ellis Hovowita, S. Sahni & Dinesh Mehta Publisher Galgaotia Publication Pvt. Ltd, New Delhi
- 15. Introduction to Computers By Alexis Leon & Mathews Leon Publisher Vikas Publishing House Pvt. Ltd. New Delhi.
- Computer Today By Alexis Leon & Mathews Leon Publishers Vikas Publishing House Pvt. Ltd. New Delhi.
- 17. Introduction to Computer & MS Office By Sanjay Saxena; Publishers Vikas Publishing House Pvt. Ltd. New Delhi.
- 18. Internet for Everyone By Alexis Leon & Mathews Leon Publishers Publishers Vikas Publishing House Pvt Ltd. New Delhi.
- 19. Object Oriented data Structure Using C++ By KS Easwara Kumar; Pub. Vikas Publishing House Pvt. Ltd. New Delhi.
- 20. Programming with Visual Basic G.O. By Mohammad Ajam; Publishers Vikas Publishing House Pvt. Ltd. New Delhi.
- 21. Internet Programming By Kris Jasa & Ken Cope Publisher Galgotia Publication (P) Ltd., New Delhi-110 002
- 22. Software Project Management-A Course Study; By S.A. Kelkar, Publisher Prentice-Hall of India
- 23. Learning MS Office XP By Ramesh Bangia Publisher Khanna Book Publising Co. (P) Ltd, New Delhi-110 006



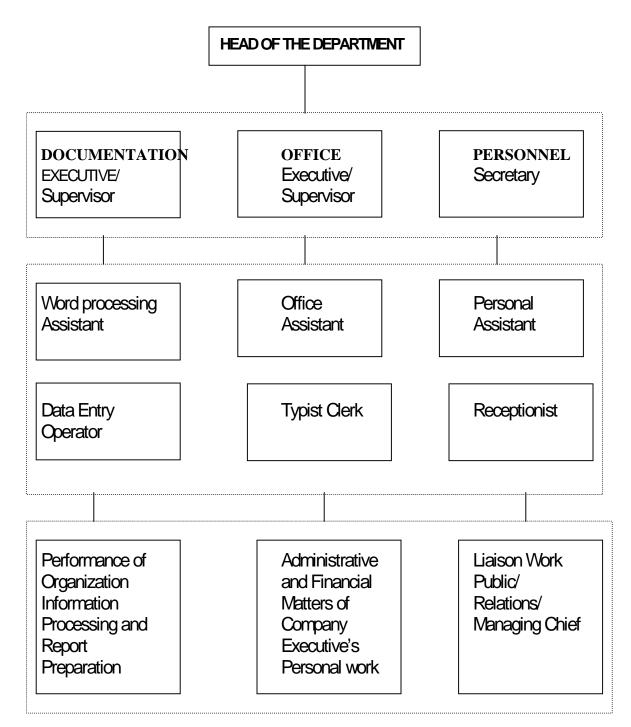


Fig. 1: Hierarchy of Manpower Profile of Modern Office Practice Personnel