

# IASE UNIVERSITY DIPLOMA/DEGREE/CERTIFICATE COURSES

## Minimum Criteria for Existing and New Centres

IASE University has developed job oriented and Innovative Diploma / Degree / Certificate courses in IT, Management, Engineering, Hotel Administration, Science, Traditional, Veterinary, Paramedical, Fashion Designing and Vocational Programmes in Distance mode. The details of the programmes along with duration are given at appendix attached. The courses will be conducted strictly in accordance with IASE policies and norms.

Applications are invited from organizations / Institutes that meet the following mandatory criteria for recognition as Study Centres.

### Necessary infrastructure required at every Study Centre of IASE:

Particulars	Minimum student-strength 50
Premises	Minimum carpet area – 2000 Sq.ft.
Reception Area	Minimum seating capacity 5 persons
Furniture & Fixtures	3 classrooms, 25 seats per class; 3 cabins for syndicate / sub-group work
Basic facility	Conference room, staff room, toilets, UPS/Generator, Canteen & others.
Air-conditioning	Mandatory for computer Lab
Library	Minimum 500 Books
Hoarding	Suitable place for sign posting
Computer Room	Minimum 15 Computers (Pentium 4) on Lan ,with internet facilities for minimum strength of 50 students (Multiples of 25 computers for each slot of 100 students).
Softwares	Licensed requisite software(s)as per programme(s) being conducted
Teaching & Training Aids	As per programme(s) being conducted.
Placement Cell	Student Support Cell & Placement Cell for all students
Laboratory	Fully equipped lab(s) according to specific programme(s)

**Teaching Staff:** Two permanent faculties and one Director on permanent basis. Adequate subject specialists with appropriate qualification as visiting faculty / part-time / contract basis.

**Non teaching Staff:** Minimum three non teaching staff should be permanently appointed

## IT & MANAGEMENT STREAM

Minimum Infrastructures and facilities should be available at the centre (Please see parameters).

A minimum of 15 Computers with Pentium-IV configuration on LAN and Internet connectivity, (Multiples of 25 computers for each slot of 100 students).

Faculty. one MCA, one MBA and one Coordinator on permanent basis. Others could be subject-specialist with appropriate qualification as visiting faculty / part time faculty.

**Non teaching Staff:** Minimum three non teaching staff should be permanently appointed

Softwares required for IT & Management programmes:

1. Visual Studio
2. Oracle
3. Linux / Unix
4. Win XP
5. MS Office 2003
6. JAVA (Compiler, including Sap. JSP, EJB)
7. Multimedia Software (Photoshop, Flash, DreamWeaver, DPT, CorelDraw, Page Maker)
8. Perl
9. DOT net package
10. AutoCAD
11. Mat lab
12. Tally
13. Turbo – C / TC
14. SQL Software

## BOOKS REQUIRED FOR IT

S No.	Auther Name	Title	Publisher
1	Robert W. Sebesta	Concepts of Programming Language	Addison Wesley, Pearson Education Asia, 1999
2	Ramon A. Mata-Toledo and Pauline K. Cushman	Introduction to Computer Science	Mc Graw Hill International Edition
3	D. Appleby and JJ Vande Kopple	Programming Languages	Tata Mc Graw Hill, India
4	Deitel and Deitel	How to Program C	Addison Wesley, Pearson Education Asia, 1999
5	K. R. Venugopal, Rajkumar	T. Ravishankar: Mastering C++	Tata Mc Graw Hill, India
6	Yashwant Kanetkar	Working with C	BPB Publications
7	Yashwant Kenetkar	Let us C	BPB Publications
8	Bryon Gottfried	Programing with C	McGraw Hill International
9	Alex Leon & Mathews Leon	Fundamentals of Information Technology	Leon Techworld, 1999
10	Vikas Gupta	Comdex Computer Kit	Wiley Dreamtech, Delhi, 2004
11	P. K. Sinha & Priti Sinha	Computer Fundamentals	BPB Publications, 1992
12	V. Raja Raman	Introduction to Computers	PHI, 1998
13	Alex Leon & Mathews Leon	Introduction to Computers	Vikas Publishing House, 1999
14	Norton Peter	Introduction to computers	4th Ed., TMH, 2001
15	M. Morris Mano	Computer System Architecture	Prentice Hall of India
16	Gupta S.P.	Statistical Methods	Sultan Chand and Sons, New Delhi
17	Gupta, S P and Gupta M P	Business Statistics	Sultan Chand , New Delhi
18	Gupta C B	An Introduction to Statistical Methods	(Vikas)
19	Chandan.J.S	Statistics for Business and Economics	Vikas Publishing House Pvt. Ltd
20	Sharma J K	Business Statistics	(Pearson Education)
21	Richard I. Levin and David S.Rubin	Statistics for Management	Prentice Hall of India
22	Levin & Rubin	Statistics for Management	Prentice Hall India
23	Hooda,R.P	Statistics for Business and Economics	Macmillan India Ltd.
24	Gary Nutt	Operating Systems	Pearson Education, 2000
25	D.M. Dhamdhare	Systems Programming and Operating Systems	Tata Mc-Graw Hill
26	Tanenbaum A.S	Modern Operating Systems	PHI Pub
27	Ritchie	Operating Systems	BPB Publications

28	S. Lioschutz	Data Structures	Mc Graw Hill International Edition
29	A.V. Aho., J.E. Hopcroft, and J.D. Ullman	Data Structures and Algorithms	Pearson Education Asia.
30	Sara Baase and Allen Van Gelder	Computer Algorithms	Pearson Education Asia
31	A.V. Aho., J.E. Hopcroft, and J.D. Ullman	Data Structures and Algorithms	Pearson Education Asia
32	A. Michael Berman	Data Structures via C++	Oxford University Press
33	A.R.Venugopal, Rajkumar, T. Ravishanker	Mastering C++	TMH
34	R. Lafore	Object Oriented Programming using C++	Galgotia Publications
35	D . Parsons	Object Oriented Programming with C++	BPB Publication
36	Schildt Herbert	The Complete Reference	Tata McGraw Hill
37	M.Y. Khan and P.K. Jain	Financial Management	Tata Mc-Graw Hill
38	Ranjan Saxena	Marketing Management	Tata McGraw Hill
39	William J. Stanton, Michael J. Etzel, Bruce J. Walker	Fundamentals of Marketing	McGraw Hill
40	E. Balagurusamy	Numerical Methods	Tata Mc Graw Hill.
41	V. Rajaraman	Computer Oriented Numerical Methods	Prentice Hall of India Pvt. Ltd
42	M.K. Jain, S.R.K. Iyenger and R.K. Jain	Numerical Methods for Scientific and Engineering Computation	Wiley Eastern Ltd
43	J.H. Mathews	Numerical Methods for Computer Science	Prentice Hall of India Pvt. Ltd
44	Abraham Silberschatz, Henry Korth, S. Sudarshan	Database Systems Concepts	McGraw Hill
45	A. K. Majumdar, P. Battacharya,	Data Base Management Systems	TMH
46	Bipin Desai	An Introduction to database Systems	Galgotia Publications
47	R. Elmarsi and SB Navathe	Fundamentals of Database Systems	Addison Wesley
48	C. Thomas Wu	An Introduction to OOP with Java	Mc Graw Hill
49	Timothy Wood	An Introduction to Object Oriented Programming	Addison Wesley
50	Deitel and Deitel	Java, How to Program	Pearson Education Asia
51	Cay S. Horstmann and Gary Comell	Core Java	Pearson Education Asia
52	E. Balaguruswmy	Programming with Java	Tata McGraw Hill
53	Zukowski	Mastering Java 2	BPB Publications
54	Herbert Scliildt	Java 2	Tata Mc Graw Hill
55	Julin Case Bradley and Anita C. Millspaugh	Programming in Visual Basic 6.0	Tata Mc Graw Hill
56	Dan Rahmel	Visual Basic 6	Tata Mc Graw Hill
57	Wayne S. Freeze	Visual Basic 6	BPB Publications
58	Sharma R.C.and Mohan K	Business report Writing and Correspondence	Tata McGraw-Hill New Delhi
59	Lesikar R V and Pettit Jr J D	Business Communication: Theory and Application	Tata Mc Graw Hill

60	Taylor Shinley	Communication for Business	Pearson Education
61	Bovee C L et al	Business Communication Today	Pearson Education New Delhi
62	Hargie O et al	Communication Skills for Effective Management	Palgrave
63	Meenakshi Raman	Technical Communication	Oxford University Press
64	Albert Paul Malvino and Donald P. Leach	Digital Principles and Applications	Tata McGraw Hill
65	S. Salivahanan and S. Arivazhagan	Digital Circuits and Design	Vikas Publishing House Pvt. Ltd
66	R.P. Jain	Modern Digital Electronic	Tata McGraw Hill
67	Adel S. Se&a, and Kanneth C. Smith	Microelectronic Circuits	Oxford University Press
68	Igor Hawryszkiewyez	Introduction to System Analysis and Design	Prentice-Hall
69	Jeffrey L. Whitten, and Lonnie D. Bentley	Systems analysis and Design Methods	Tata McGraw-Hill
70	Philip L Weaver	Practical SSADM war 4+A Complete Tutorial Guider	Pitman publishing
71	Mark Lejk, and David Deeks	An Introduction to System Analysis Techniques	Prentice Hall
72	Don Yeates, Maura Shields and David Helmy	System Analysis and Design	Longman group limited
73	M.L. Young	Internet Millennium Edition	Tata Mc Graw Hill
74	Harely Hahn	The Internet	Tata Mc Graw Hill
75	G. Robertson	Hands on HTML	BPB Publications
76	Joel Sklar	Principles of Web Design	BPB Publications
77	Stephen W	Active Server Pages	Techmedia
78	Andrew S. Tanenbaum	Computer Networks	Prentice Hall
79	Behrouz A forouzan	TCP/IP	Tata Mc Graw Hill Pub. Co
80	DE Corner and DL Stevens	Internet working with TCP/IP Volume I-III	Prentice Hall of India
81	Wright and Stevens	TCP/IP Illustrated	Pearson Education Asia
82	Karanjit S. Siyan	Inside TCP/IP	Techmedia
83	Minasi	Mastering LAN	BPB Publications
84	Minoli	Internet, Intranet Engineering	Tata Mc Graw Hill
85	M.A. Miller	Data and Network Communications	Thomson Learning
86	Behrouz A Foruzan	Data Communication and Networking	Tata McGraw Hill
87	Berneard Sklar	Digital Communications	Pearson Education Asia
88	Wayne Tomasim	Electronic Communications Systems	Pearson, Education Asia
89	B.P. Lathi	Modern Digital Analog Communication Systems	Oxford, University Press
90	Fred Harshal	Data Communications Networks	Pearson Education Asia
91	W.A. Sahay	Understanding Data Communication Network	Vikas Publishing House
92	Gilbert Held	Understanding Data Communication	Techmedia
93	Kennedy	Communication Systems	Tata McGraw Hill
94	Hearn & Baker	Computer Graphics	Prentice Hall India
95	Krihsnamurthy N	Introduction to computer Graphics	Tata Mc Graw Hill Edition
96	Zhigang X. & Plastock R.a	Theory and problems of Computer Graphics (Schaum's)	Tata Mc Graw Hill
97	Gonzalez & gonzalez	Digital Image Processing	Pearson Education

<b>98</b>	Jain V.K	Fundamentals of Digital Image processing	Pearson Education
<b>99</b>	Roger, S. Pressman	Software Engineering-A Practitioner's Approach	McGraw Hill
<b>100</b>	R.E. Fairley	Software Engineering Concepts	McGraw Hill
<b>101</b>	Jalota	An Integrated Approach to Software Engineering	Narosa Publishing House
<b>102</b>	Payer, T.A.	Introduction to simulation	McGraw Hill
<b>103</b>	Spriet, W.A.	Computer Aided Modeling and Simulation	Academic press
<b>104</b>	J.P. Hayaes	Computer Architecture	McGraw-Hill
<b>105</b>	Harvey G. Cragon	Memory Systems and Pipelined Processors	Narosa Publication
<b>106</b>	V. Rajaranam & C.S.R. Murthty	Parallel Computers	PHI
<b>107</b>	R.K. Ghose Rajan Moona & Phalguni Gupta	Foundation of parallel processing	Narosa Publications
<b>108</b>	Kai Hwang and Zu	Scalable parallel Computers Architectures	McGraw-Hill
<b>109</b>	Stalling W.	Computer Organization & Architecture	PHI
<b>110</b>	Kai Hwang	Advanced Computer Architecture	McGraw-Hill.
<b>111</b>	J. Kanter	Management/Information Systems	PHI
<b>112</b>	Robert G. Murdick & Joel E. Ross & James R. Claggett	Information Systems for Modern Management	PHI
<b>113</b>	Jim A. Carter	Developing E-Commerce Systems	PHI
<b>114</b>	Eframi Turban, Jae Lee, David King, K. Michale Chung	Electronic Commerce	Pearson Education
<b>115</b>	Vivek Gupta	E-Banking: Global Perspective	ICFAI University Press
<b>116</b>	Sandeep Singhal	The Wireless Application Protocol, Writing Applications for Mobile Internet	Pearson Education
<b>117</b>	Albert Paul Malvino	Electronic Principles	McGraw Hill
<b>118</b>	G.K. Mithal	Electronics Devices and Circuits	Khanna Publishers, Delhi, 2000
<b>119</b>	Sadra and Smith	Microelectronic Circuits	Oxford university Press, 1999
<b>120</b>	R.P. Punagin	Basic Electronics	Tata McGraw Hill
<b>121</b>	Jacob Millman and Christos C. Halkias	Electronic Devices and Circuits	Tata Mc-Graw Hill Publishing Company Ltd., 2000
<b>122</b>	Donald A. Neamen	Semiconductor Physics and Devices	McGraw Hill, 1997
<b>123</b>	Shukla & Grewal	Advanced Accounts	
<b>124</b>	S.N. Maheshwari	Advanced Accountancy, Vol. I & II	
<b>125</b>	Sharma & Bhardwaj	Book-keeping & Accountancy	
<b>126</b>	Sharma, Shah & Agrawal	Financial Accounting	

127	C. I. Liu	Elements of Discrete Mathematics	Tata McGraw Hill publishing Company Ltd., 2000
128	Richard Johnsonbaugh	Discrete Mathematics	Pearson Asia 2001
129	John Truss	Discrete Mathematics for Computer Scientists	Pearson Education, Asia, 2001
130	Robert J. McEliece	Introduction to Discrete Mathematics	Tata Mc. Graw Hill, India
131	Lipschutz	Discrete Mathematics	Tata Mc. Graw Hill India
132	Kenneth H. Rosen	Discrete mathematics and Applications	Tata Mc. Graw Hill, India

### List of Computer Hardware/ Software Specification

S.No	Items/Particulars	Specification	
		Components	Model/Detail
1	Server Computer		
2	Computer terminals	Color Monitor	17"
		Mother Board	Intel Desktop Mother Board DG965RY
		Processor(CPU)	Core 2 Duo 2.8 GHz E4400
		Floppy Disk	1.44MB
		Hard Disk	120 GB
		RAM	512 MB DDR 2 PC533
		Combo Drive	SONY CDRW + DVD-ROM COMBO DRIVE
		Optical Mouse	-
		Keyboard	PS/2 mouse, (Multimedia Support)
		Cabinet	-
3	Computer System Software	1.Windows XP Operating System	
		2.Windows 98 Operating System	
		3.Windows ME Operating System	
		4. Windows 2000 Operating System	
		5.Windows 2003 Operating System	
		6.Windows 2003 Server Operating System	
		7.Red Hat Linux	
4	Computer Application Softwares	1.Microsoft Visual Studio	
		2. Turbo C++	
		3.MS Office Package	
		4.Dot NET Frame Work	
		5. Norton Antivirus	
		6. MacAfee Anti virus Software	
		7. JAVA Package(JDK)	
		8. AutoCAD	
		9. Adobe Photoshop	
		10. Acrobat Reader	
		11.Emulator 8086	
		12.ORACLE Edition	
		13.SQL Server Edition	
		14.Matlab	
5	LCD Projector with Projector Screen	-	
6	Laser Printer		
7	Online UPS		
8	Fire Extinguisher		

# BOOKS REQUIRED FOR BBA

## Management Foundation

- Essentials of management Koontz.
- Management Robin's & Coulter
- Principles and practice of Management L.M. Prasad

## Economic Environment

- Business Environment Francis Clerunilam
- Modern Economic Theories K.K. Dewett & Adarch
- Macroeconomics H.C Ahuja
- Macroeconomics Dornboush & Fischev
- Business Papers & Magazines

## Marketing Management

- Marketing Management Philip Kotlar
- Marketing Management Varshney and Gupta
- Marketing Management Rajan Saxena

## Computer Awareness

- Fundamentals of Computers V. Rajaraman
- Computer System Architecture M. Mono
- Computer Fundamentals B. Ram
- Mastering Office 2000 Professional edition by Marquis
- MS Office 2000 G. Courter & A. Marguis

## Consumer Behaviour

- Consumer Oriented Business Design Sulzmaeir
- Competitive Strategies for Service Organization Baltom
- Assessing Business Excellence Porier
- Consumer Behavior in Indian Context Ramesh Kumar
- Consumer Behavior Loudon & Bella Brtta
- Consumer Behavior Kanirk & Schiffman

## Data Base System

- Database Management 4<sup>th</sup> edition Mcfaddm
- System: Design implantation and Management Rob Coronet
- System: Design implantation and Management Elmsari, Nawethe
- System: Design implantation and Management C.J Date

## Customer Relationship Management

- The CRM Handbook Jill Dyche
- The Handbook of key customer Relationship Management (Pearson Education)

## Brand Management

- Compadium of Brand management SA Chunawala
- Strategic Brand Management Jean, Noel Kapferer

### **Communication in Business Management**

- Business Communication-Theory and Applications Lesikar, RV and J.D. Pettitt Jr.,  
Homewood III, Richard D. Orwin
- Communication and Research for Management Michael VP.

### **International Financial Management**

- Multinational Financial Management A. Shapiro
- International Finance Yadav and Jain
- International Financial Management Kim & Kim
- International Financial Management J. Madura
- International Financial Management A. Baskley

### **Human Resource Management**

- Personal Management and Human Resource Management C.S Venketta  
Ratnam , Tata McGraw Hills
- Personal Management Monappa and Sayaddin
- Human Resource Management De Cenzo & Robbins
- Managing Human Resources, Productivity, quality of work life profits Cascio WF
- Designing and managing Human Resource Management Parikh U & Rao TV.

### **Advertising and Sales Promotion Management**

- Advertising Management S.K Batra & S.H.H. Kazmi
- Advertising Promotion Belch
- Advertising Management Sarojit Dutta
- Brand Positioning Strategies for competitive Advantage Sengupta, Subroto

### **Sales Management**

- Sales and Distribution Management Dr. Matin Khan
- Strategic Marketing Problems Kerin & Peterson
- Sales Management John I. Lyithe
- Salesmanship & Sales Management P.K Sahu & Raut
- Basics of Distribution Management: A Logistic Approach Satish K. Kapoor &  
Purva kansal

### **Capital Markets**

- Investment : Analysis & Management Francis
- Security Analysis & Portfolio Management Jorden & Fischer
- Portfolio Management Barua, Verma & Raghunathan
- Manual of Merchant Banking Dr. J.C Verma
- Nabhi's Manual for Capital issues, SEBI and Mutual fund
- Capital Market Management V.A. Abhadhani

### **International Marketing**

- International Marketing : Analysis and strategy Onkvisit, Sak and Shaw
- Global Marketing Management Keegan, Waren
- International Marketing Trapstra, Vern and Sathy R.
- International Marketing Philip R. Cateora
- International Marketing Management Varsheny and Bhattacharya

### **Indian system in Business**

- Economic Environment and business
- Macro Economics Analysis
- Indian Economy  
Sundharam

M. Adhikary  
Edward Shapiro  
Rudder Dutt & KPM

### **Operation Management**

- Production & Operation Management
- Quantitative Business Decisions

S.N Chary  
V.K Kapoor

### **Information Technology in Management**

- Management Information Systems
- Management Information Systems
- Management Information Systems

Jawadekar  
Devis & Olson  
K.C Landon & J.P Landon

### **Macro Economics**

- Modern Economics
- Managerial Economics
- Managerial Economics
- Managerial Economics

H.L Ahuja  
Mote, Gupta PAI  
D.M Dwivedi  
Peterson & Lewis

### **Personnel Management**

- Personnel Management
- Personnel Management

Mamoria & Gankar  
Flippo

### **Financial Management**

- Financial management
- Essentials of Financial Management

I.M Pandey  
Prasanna Chandra

### **Behavioural Techniques in Organization**

- Organizational Behaviour
- Organizational Behaviour
- Organizational Behaviour
- Organizational Behaviour
- Organizational Behaviour

L.M Prasad  
S.S Khanka  
Mirza S. Saiyaddin  
Robbins  
Luthane

### **Business Policies**

- Business Policy and Strategic Management
- Corporate Strategy
- Business Policy and Strategic Management

Azhar Kazni  
Satish Seth  
L.M Prasad

### **Internet and E-Commerce**

- Data and computer communications
- HTML,DHTML, Java Script, Perl CGI
- Mastering the Internet  
Gregor
- Electronic Commerce in Managerial Perspective  
David

William Stalling  
Ivan Bayros  
Glee Harrhcadly, Pat Mc  
Efaaim Turban, Jaclee,  
King, H. Michael Chury

### Books for Department of Management

SL NO.	Title	Auther Name	Publisher	No. of Copies
1	Bookkeeping and Accountancy	Jain, Khandelwal, Pareek	Ajmera Book Publications	5
2	Business Research	Sangeeta Agarwal		3
3	Organisation Design for Excellence	Arun Kumar Sen & Jitendra Kumar Mitra	Prentice - Hall of India	3
4	Organisational Behaviour	Aswathappa, K.	Tata Me Graw Hill	3
5	Human Relation & Organisational Behaviour	Dwivedi R.S.	Oxford & IBH	4
6	Personnel Management	Monappa, A. & Saiyadain M.	Tata McGraw Hill	3
7	Financial Management (for M.Com and MBA)	M. D. Agarawal & N.P. Agarawal	Ramesh Book Depot, Jaipur	3
8	Commercial Law	Arun Kumar Sen & Jitendra Kumar Mitra	World Press	3
9	Behavioral process in organizations	Pareek U & other	Oxford & IBH	3
10	Cost accounting	B. Banrejee	World Press	1
11	Cost accounting	S.N. Maheswari	Sultan chand & sons	3
12	Cost accounting	Jain, Khandelwal, Pareek	Ajmera Book Publications	4
13	Element of industrial law	Kapoor N.D.		3
14	Textbook of Industrial law	Chawala R.C. , Garge K.C.		3
15	International Business Management	A.R. Negandhi	Prentice hall of India	4
16	The Story of my experiment with Truth	M.K. Gandhi	Navjivan Pub. Hou	2
17	Information System	Simkin Marg G		3
18	Indian Mercantile Law including Industrial Law	Rustom S. Davar and Khorshed D. P. Madon	Progressive Coporation Pvt. Ltd., Bombay	4
19	Special Functions	Gokhroo et.al	Navakar Prakashan, Ajmer	2
20	Mathematical Theory of Statistics	Kapoor and Saxena	Navakar Prakashan, Ajmer	2
21	Cultural Heritage of India	V. Shivramkrishan	Bhavan's Publication	3
22	Management Process & Organisation Behavior	L.M. Prasad	S. Chand & Sons	3
23	Research Methoology	Sanseeta Agarwal		3
24	International Business Management	A.R. Negandhi	Prentice hall of India	2
25	English Punctuaion Dictionary	Jone Daniel	Cambridge Press	1
26	Making Writing Simple	J.B. Priestley		1

<b>27</b>	How should one Read a Book	Virginia Woof		<b>1</b>
<b>28</b>	A Bookish Topic	R.K. Narayan		<b>1</b>
<b>29</b>	The Civilization of Today	C.E.M. Joad		<b>1</b>
<b>30</b>	The Gift of the Magi	O.H. Henry		<b>1</b>
<b>31</b>	The Renunciation	R.N. Tagore		<b>1</b>
<b>32</b>	The Fly	Katherine Mansfield		<b>1</b>
<b>33</b>	The Eyes Are Not Here	Ruskin Bond		<b>1</b>
<b>34</b>	The Rocking Horse Winner	D.H. Lawrence		<b>1</b>
<b>35</b>	The Capital of the World	Ernest Hemingway		<b>1</b>
<b>36</b>	An Anthology of English Essay	R.P. Singh	OUP	<b>3</b>
<b>37</b>	An Anthology of English Short Stories	R. P. Singh	OUP	<b>3</b>
<b>38</b>	Word for Word	Clark S. & Pointon	OUP	<b>2</b>
<b>39</b>	Phonetics in English	Bansal R.K. & Harrison	Orient Longman	<b>2</b>
<b>40</b>	Word Power	Blum Rosen	Cambridge University Press	<b>2</b>
<b>41</b>	Improve Your Writing	Arora V.N. etal	OUP	<b>2</b>
<b>42</b>	American English Pronouncing Dictionary	John Alveyblrideh	OUP	<b>1</b>
<b>43</b>	English Pronouncing Dictionary	Jons Daniel	Cambridge University Press	<b>1</b>
<b>44</b>	Cost and Management Accounting	M.N.Arora	Vikash Pub	<b>3</b>
<b>45</b>	Implimenting Statergic management	Ansoff, H, Igor	PHI	<b>2</b>
<b>46</b>	Decision support system- An organisational Perspective Addition	Keen, Peter G.W.	Wesley Pub	<b>3</b>
<b>47</b>	Computer Based Information System Network	Krober, Donald & Huge		<b>2</b>
<b>48</b>	Decision support Expert systems- Management Presp.	Turban, Efrain	Mc millan Pub.	<b>2</b>
<b>49</b>	Company Law	R.S.Naulkha	Adarsh Prakashan	<b>2</b>
<b>50</b>	Commercial Law	R.S.Naulkha	Adarsh Prakashan	<b>2</b>
<b>51</b>	Statistics for Business and Economics	Chandan J.S.	Vikash Pub	<b>2</b>
<b>52</b>	The Fourth Eye	Khandwala P.	Wheeler Pub	<b>2</b>
<b>53</b>	Behavioral process at work	Udai Pareek	Oxford & IBH	<b>2</b>
<b>54</b>	Business Environment and policy	Francis Cherunilam	Himalaya Pub	<b>3</b>
<b>55</b>	Business Environment	k. Aswathappa	Tata Me Graw Hill	<b>3</b>
<b>56</b>	Essential of Business Environment	k. Aswathappa	Himalaya Pub	<b>3</b>
<b>57</b>	Business Communication - Theory and Application	Lesikar R.U. & Pettie Jr J.D.	Tata Me Graw Hill	<b>3</b>

<b>58</b>	Computers and Information Management - A primer for Practicing Managers	Bhatnagar S.C. & Ramnaik	PHI	<b>4</b>
<b>59</b>	Business Research	Cooper	Tata Me Graw Hill	<b>2</b>
<b>60</b>	Modern Production and Operation management	Buffa & sharin	jhon Willey	<b>2</b>

## ENGINEERING STREAM

1. The University will consider your request to conduct Diploma Programmes only if the said parameters are implemented.
2. Minimum Infrastructure and facilities as stated above should be available at the centre.
3. Minimum area required at the Centre 3000 sq. ft.

Infrastructure	As laid down by AICTE & approved Polytechnic Colleges The Centre should have a tie up with the nearest Engineering College / Polytechnic College. The Diploma students with the support and guidance of the faculty of study centre can utilize the facilities available for practical training during non-working hours / holidays at the Engineering College / Polytechnic College.
Basic Infrastructure requirements	The Study Centre must have the basic infrastructure such as Lab, Library, Computers, equipments and other facilities to conduct the programmes at its own Institute, in addition to the tie-up with another Engineering / Polytechnic College.

If some arrangement for use of lab or other facilities of other Institution(s) are made, details thereof with a copy of MOU / Agreement / Permission (to be enclosed)

- ❖ Name and address of the Hospital / Lab / Organization (Enclose documents / profile)
- ❖ Number of practical classes to be conducted per semester
- ❖ The charges per class / student
- ❖ Schedule of classes (Timings and days)

### Books required for Engineering

S. No	Title	Authors Name	Publisher	No. of Copies
1	Database Management System	Post	Tata McGraw-Hill	2
2	Schaum's Outline Series: Fundamentals of Relational Database	Toledo	Tata McGraw-Hill	3
3	Datastructure, Algorithms & Object Oriented Programming	Heileman	Tata McGraw-Hill	2
4	Perl Developer's Guide	Peschko	Tata McGraw-Hill	2
5	PERL: A Beginner's Guide	Wyke	Tata McGraw-Hill	3
6	Oracle 9i: Complete Reference		Tata McGraw-Hill	3
7	SQL: The Complete Reference	Groff	Tata McGraw-Hill	3
8	SQL: A Beginner's Guide	Houlette	Tata McGraw-Hill	3
9	Relational Database- Theory & Practice		BPB Publication	3
10	Teach Yourself PL/SQL in 21 Days		BPB Publication	4
11	Teach Yourself PERL in 21 Days		BPB Publication	4
12	Teach Yourself SQL in 21 Days		BPB Publication	4
13	Teach Yourself SQL Server in 21 Days		BPB Publication	4
14	Mathamatics (Class 11th & 12th)	R.D. Sharma		4 Sets
15	Abstract Algebra	Gokhroo et.al	Navakar Prakashan, Ajmer	2
16	Mathematical Theory of Statistics	Kapoor and Saxena	Navakar Prakashan, Ajmer	2
17	Mathematical Modelling	R.P. Mauriya	Navakar Prakashan, Ajmer	2
18	Database System Concepts	Korth & Sudarshan & silbercchatz	McGraw Hill	3
19	Integral Transforms	Dr.D.C.Gokhroo and Dr. J.P.N.Ozha	J.P.H.	4
20	Differential Equations	Dr.D.C.Gokhroo and Dr. S.R. Saini and Dr. R.K. Kumbhat	Navkar Publications	4
21	Special Functions	Dr. R.K. Saxena and Dr.D.C.Gokhroo	J.P.H.	4
22	Differential Equations	M.N. Kapoor	Pitamber Publications Ltd.	4
23	Engineering Mathematics (Part-I)	Gaur & Kaul		4
24	Engineering Mathematics (Part-II)	Gaur & Kaul		4
25	Engineering Mathematics (Part-I)	Jain & Rawat		4
26	Engineering Mathematics (Part-II)	Jain & Rawat		4
27	Circuit Theory	A.Chakarvort		4

		y		
28	Electrical Machinery	P.S. Bimbhra		4
29	Basic Electrical Engineering	Mehta & Gupta		4
30	Basic Electrical Engineering	Anwani (Hans)		4
31	Fundamental of Electrical & Electronics	B.L. Theraja		4
32	Electronics Devices and Circuit	Millman, J. and Halkias C.C.	Tata Me Graw Hill, New Delhi	4
33	Electronics -I	H.P. Tiwari		4
34	Electronics -II	H.P. Tiwari		4
35	Physics Course Vol I, III	Berkeley	Tata Mc Graw Hill	2 Sets
36	Mechanics	J.C. Upadhyaya	Ram Prasad & sons	2
37	Optics & Atomic Physics	D.P. Khandelwal	Shivlal Aggarwal & Co.	2
38	Practical Physics Vol. I & II	Gupta & Kumar	Pragati Prakashan	4 Sets
39	Statistical and thermal Physics	Loknathan and Gambhir	Prentice Hall of India	2
40	Thermal Physics	Kittel and Kroener	CSS	2
41	Advanced Quantum Mechanics	ID Gupta	Satya Prakashan	2
42	Engineering Physics	Dr. G.D. Ladiwala	CBC, Jaipur	7
43	Quantum mächenics	Singh, Bagde and Singh	S. Chand & Company	2
44	Solid State Physics	R.L. Singh	Kedar Nath & Ram Nath & Co.	2
45	How things work- The Physics of everyday 3rdED	Louis A Bloomfield	John wiley	1
46	Experiments in Engineering Physics	Avadhanulu, Dhani & Pokley	S. Chand	4
47	Introduction to LASER'S (Practical & Theory )	Kshirsagar & Avadhanulu	S. Chand	2
48	optics	N.Subrahmanyan & Brijlal	S. Chand	3
49	Text book of Engineering Physics	Avadhanulu & Kshirsagar	S. Chand	5
50	Modern Engineering Physics	A.S.Vashudeva	S. Chand	5
51	Digital Technology	Virender kumar	new age international	3
52	Op-Amplifier and Linear Integrated Circuits	Ramakant Gayakawad	PHI	3
53	Principles of electronics	V.K.Metha	S.Chand	5
54	Solid State Physics	S.O.Pallai	new age international	3
55	Introduction to Electrodynamic	David J. Griffith		2
57	Introduction to LASER'S	Ghatak & Thyagarajan	IIT Delhi	4
58	Feynman Lecturers on Physics	Feynman,	Narosha pub.	2sets

	VOL I,II,III	leighton & sands		
59	Introduction to Superconductivity	Charles Kittle	Willey India	2
60	Practical Physics	Indu Prakash		2
61	Mechanics	D.S. Mathur		4
62	Heat and Thermodynamics	Subrahmanya m & Brijlal	S.Chand	4
63	Organic Chemistry	B.S.Bahal & Arun Bahal		4
64	An English Miscellany	R.K.Tongue & Shiv K. kumar	Oxford uni. Press	5
65	Communication Skills for Engineers and Professionals	P.Parasad	Kataria & sons	4
66	English Comprehension for technical Students	P.lindsay & A sleet	Macmillan India	3
67	Engineering Practical Physics	Dr. G.D.Ladiwala	CBC Jaipur	4
68	Structure of Technical English	A.J.Herbert	ELBS	5
69	E- Writing	Booher	Macmillan India	3
70	Good Grief, Good Grammer	Booher	Macmillan India	3
71	Thinking Clock Wise	Stauffer	Macmillan India	3
72	English Hindi Dictionary	Camil Bulcke	S,Chand	2
73	English Hindi Dictionary	B.Kapoor		1
74	Numerical Analysis	J.L.Bansal		2
75	Numerical Methods	V. Rajaraman		2
76	Engineering Mathematics I	Gaur & Kaul		4
77	Engineering Mathematics II	Gaur & Kaul		4
78	Fundamental of Electrical Network	B.R.Gupta & Vandana singhal	Wheelers Pub.	5
79	Network Analysis	G.K. Mithal		5
80	Electrical Machine	Nagrath & Kothari	TMH	1
81	Fundamental of Electrical Mechines	B.R.Gupta	new age international	4
82	Electronic and Electronic measurement and measuring instruments	A.K.Sawhney	Dhanpat rai & sons	6
83	Electrical Engineering Materials	B.D.Indu	Jain brothers	2
84	An introduction to Electrical Engineering Materials	C.S.Indulkar & S.Triuvengadam		
86	A Laboratory course in Electrical Mechines	D.R.Kohali & S.K.Jain		3
87	A Laboratory course in Electrical Mechines	V.N.Mittlal & A.K.Mittal		3
89	Electronic Device and Circuit Theory	Robert L. Boyletead & Louis Nashelshky	PHI	2
90	Digital Logic and Computer Design	M.Morris & M.Mano		4

91	Digital Principles and Applications	Malvino and Leach		4
92	Electrical Power	S.L.Uppal		2
93	Generation of Electrical Energy	B.R.Gupta		5
94	Generation of Electrical Power	Soni, Gupta & Bhatanagar		4
95	Electrical Power Distrubution	A.S.Pabla		2
97	Electrical Power	Singh & Khamchanda ni	TMH	3
98	Digital Electronic	Morris Mano		5
99	Microprocessor	B.Ram		4
101	Optimization Theory and Application	S.S.Rao	Wiley Eastern limited	2
102	Electrical Machine	Nagrath & Kothari		3
103	Power System Analysis and Design	B.R.Gupta		5
104	Nonconventional Resources of Energy	Dr. A.N.Mathur		4
105	Electrical Power System	C.L.Wadhwa		2
106	16-Bit Microprocessor	Bery		4
107	16-Bit Microprocessor	Gibson		4
108	Control System Engineering	I.J. Nagrath and Gopal	new age international	3
109	High Voltage Engineering	Thaper		3
111	Electric Drivers	G.K.Dubey		5
112	Utilization of Electric Traction Electric Power	H. Partab		4
113	Computer Oriented Numerical Methods	Rajaraman V.	Pearson Edu	3
114	Network Analysis	M.E. Van Valkenburg	PHI	3
115	Circuit Analysis	Soni, Gupta	Dhanpat rai & sons	1
116	Discrete Matematics	Liptschutz Seymour	Mc Graw Hill	3
117	Data Structure Using C++	A.M.Tenebaum	Prentice Hall of India	3
118	Computer Organisation	Stallings	Prentice Hall of India	3
119	An introduction to DataBase System	Date C.J.	Addision Wisley	3
120	Data Base Concept	Korth	Mc Graw Hill	3
121	Object Oriented Modelling and Design	James Rambuayt etal	Prentice Hall of India	3
122	Object Oriented Programming with C++	Balaguruswamy	TMH	2
123	Software Engineering	pankaj Jolete	Norasha Pub.	2
124	Mastring C++	Venugopal	THM	5
125	Software Engineering	Pressman	Mc Graw Hill	2
126	Visual C++	John paul	Mc Graw Hill	2
127	Computer System Architecture	Morris Mano	Prentice Hall of India	3

<b>128</b>	The Intel Microprocessor, Architecture, Programming and Interfacing	B.B.Brey	Prentice Hall of India	1
<b>129</b>	ISDN	Stallings W.	Prentice Hall of India	2
<b>130</b>	Optical Fiber Communication	Senior	Prentice Hall of India	2
<b>131</b>	Celluar and mobial Communication	Lee	Mc Graw Hill	2
<b>132</b>	Nural Network, Fuzzylogic & Genetic Alogrithms Synthesis and Application	Rajesh Khanna & Rai	Prentice Hall of India	2
<b>133</b>	Fundamental of Satellite Communication	Rajo Rao	Prentice Hall of India	2
<b>134</b>	Data and Computer Communication	Stalling Willison	Prentice Hall of India	1
<b>135</b>	The Most Complete Refrence Using Linux		QUE Pub	2
<b>136</b>	Physics (Class XI & XII)	Kumar, Mittal		3 sets
<b>137</b>	Inorganic Chemistry	M.P. Sahani	Nutan Publication	3
<b>138</b>	Organic Chemistry	M.P. Sahani		3
<b>139</b>	Visual Basic Q5	Mansfield	Galgotia	2
<b>140</b>	Communication System	S. Thykinl		2
<b>141</b>	Introduction to Unix & Linux	Muster	TMH	2
<b>142</b>	Digital Logic and Computer Design	M.Mano	Prentice Hall of India	2
<b>143</b>	Disrete Structure of computer Sciences	Lery L.S.		2
<b>144</b>	Computer Graphics	Donald Heme & M.P. Becker		3
<b>145</b>	Introduction to Language and Theory of Computation	John C. Martin	THM	3
<b>146</b>	Introduction to Algorithms	Thomas h. Coreman	PHI	2
<b>147</b>	Distributed Operating System	P. K. Sinha	THM	2
<b>148</b>	Artificial Intelligence	Rich E and Enight K	THM	2
<b>149</b>	TCP/IP Related protocols	Uyless Black	McGraw Hill	2
<b>150</b>	Advanced Computer Architecture	Kai Hwang	McGraw Hill	1
<b>151</b>	Modern VLSI Design	Wolf	PHI	2
<b>152</b>	Neural Network & Fuzzy System	Bart Kosko	PHI	2
<b>153</b>	Embedded System Design	Health, Steve	Newnes	2
<b>154</b>	Wireless Digital Communication	Kamilo, Feher	PHI	2

### Electrical Engineering

SN	Equipments Required	Qty.
1	P. N. JUNCTION DIODE	2
2	TRANSISTOR CHARACTERISTICS	1
3	MOSFET CHARACTERISTICS APP.	1
4	L.E.D CHARACTERISTICS APP.	1
5	PHOTO TRANSISTOR CHARACTERISTICS	1
6	PHOTO DIODE CHARACTERISTICS	1
7	EMMITER FOLLOWER AMPLIFIER	1
8	TRANSISTOR PUSH PULL AMP.	1
9	COMPLI. SYMMETRY AMPLIFIER	1
10	OP. AMPLI. VOLTAGE CURRENT CON.	1
11	OSCILLATOR	1
12	PHASE SHIFT OSCILLATOR	1
13	OP. AMPLIFIER WEIN BRIDGE OSCI.	1
14	U.J.T. RELAXTATION OSCILLATOR	1
15	STUDY OF OPER. AMP. AS SCHMITT TRIGGER	1
16	CLIPPING CIRCUIT	1
17	CLAMPING CIRCUIT	1
18	STUDY OF OPERATION AMP. INTER. & DIFF.	COMB. 1
19	MONO STABLE MULTIVIBRATOR	1
20	ASTABLE MULTIVIBRATOR	1
21	BIASTABLE MULTIVIBRATOR	1
22	BASIC LOGIC GATE	1
23	PASSIVE FILTER	1
24	ACTIVE FILTER	1
25	I.C. OP-AMPLIFIER	1
26	FREQUENCY COUNTER UNIVERSAL	1
27	FUNCTION GENERATOT	2
28	AUDIO OSCILLATOR	2
29	T.V. TRAINER WITH TUBE OUT	1
30	POWER SUPPLY	4
31	SIGNAL INJECTOR	2
32	TRANSISTOR TESTOR	2
33	MULTI METER DIGITAL BIG	6
34	OSCILLOSCOPE	4
35	OVER HEAD PROJECTOR SCREEN	1
36	OVER HEAD PROJECTOR	1
37	ELECTRICAL FURANCE	1
38	ELECTRICAL OVEN	1
39	SOLDERING IRON 65 W	2
40	SOLDERING IRON 25 W	10
41	SOLDERING IRON 18 W	10
42	VOLTMETER AND AMETER	20
43	MULTIMETER DIGITAM SMALL	10
44	NIPPER CUTTER	10
45	W. M. SCREW DRIVER	10
46	COMBINATION PLIER	10
47	SIDE CUTTER	10
48	LONG NOSE PLIER	10
49	NEON TESTER	10
50	PRECISION DRIVER	10
51	SCREW DRIVER	20
52	KNIFE CUTTER	10

53	PHOTO DIODE & LAMP HOLDER FOR P.D.	1
54	PHOTO TRANSISTOR & LAMP HOLDER P.T.	1
55	OP AMPLIFIER V.I.& I.V. CONVERTOR	1
56	PWE CABLE COMP. BORD	1
57	SEMI CONDUCTOR	1
58	HARTLY OSCILLATOR	1
59	ZEENER DIODE	1

<b>Mechanical Engineering Workshop</b>		
<b>SL. NO.</b>	<b>Equipments List</b>	<b>Qty.</b>
1	Lath Machine 8'	1
2	Lathe Machine 4.5'	1
3	Shaping Machine 24"	1
4	Radial Drilling Machine	1
5	Lath Machine 6'	1
6	Milling Cutter Machine	1
7	Surface Grinder	1
8	Abrasive Machine(Pipe Cutter)	1
9	Gauge Slipe	1
10	Carbide Wear Block 1mm, 2mm	4
11	Gauge Snape Go & No Go	1
12	Gauge Pluge Single	1
13	Gauge Telescope	1
14	Dial Test Indicator	1
15	Sine Bar 125mm.	1
16	Sine Bar 250 mm.	1
17	Pipe Stock & Dies	1
18	Pipe Bender	1
19	Dile Vernier Caliper	1
20	Screw Thread Micrometer	1
21	Dapth Micrometer	1
22	Rule Steel 15 cm.	17
23	Try Squire Blade 10 cm.	17
24	Caliper Out Side Spring 15 cm.	17
25	Caliper In Side Spring 15 cm.	17
26	Caliper In Side Spring(Hermaprodite) 15 cm.	17
27	Divider Spring 15 cm.	17
28	Scraper 15 cm.	17
29	Punch Centre 10 cm.	10
30	Screw Driver 19 cm.	17
31	Cold Chisel 10 cm.	17
32	Hammer Ball With Handle 0.45 kg	13
33	Hammer Ball Pein With Handle 0.22 kg	17
34	File Flate 25 cm.	17
35	File Flate Smooth Cut 25 cm.	17
36	File Half Round Second Cut 25 cm.	17
37	Hacksaw Frame Adjustable 20- 30	12
38	Safety Goggles	17
39	Dot Slote Punch	17
40	Rule Steel 30 cm.	2
41	Rule Steel 60 cm.	4
42	Straight Edge 45 cm.	2
43	Universal Scibing Block 22 cm.	2
44	Block Vee Paid 7cm & 15cm With Clamp	2

45	Try Square Blade Adjustable 15 cm.	2
46	Angle Plate 10 cm.*20 cm.	1
47	Sprite levels 10cm*20 cm.	1
48	Punch Hollow 6 cm. to 19 cm.	1
49	Punch Letter 3cm. Set	1
50	Punch Number Set 3 mm.	2
51	Punch Round Set 33*44 cm.	2
52	Portable Hand Drill,0 to 6 mm.	2
53	Drill Brass Hand,0 to 12 mm.,65cm.	2
54	Drill Twist (S.S.),3 mm to 15 mm.	1
55	Drill Twist (S.S.),1.5 mm to 12 mm.	1
56	Taps & Dies Complete Set	1
57	File Warding Smooth 15cm.	4
58	File Knife Edge Smooth 15cm.	4
59	File Cant Saw Smooth 15cm.	4
60	File Feather Edge Smooth 15cm.	4
61	File Tringular Smooth 15cm.	2
62	File Round Second Cut 20cm.	8
63	File Square Second Cut 15cm.	4
64	Feeler Gauge 10 Blades	1
65	File Tringular Second Cut 20cm.	8
66	File Flate second Cut 30cm.	8
67	File Flate Bastrade 20cm.	8
68	File Flate Bastrade 30cm.	8
69	File Swiss Type Needle Set(12 piece)	2
70	File Half Round Second Cut 25 cm.	8
71	File Half Round Bastrade 25cm.	4
72	File Round Bastrade 30cm.	4
73	Grinder 1hp.	4
74	Drilling Machine (Capacity 1inch.)	3
75	Power Hacksaw Complete	1
76	Welding Transformer 350W	1
77	Anvil 50kg.	2
78	Surface Plate	2
79	Motor Single Phase A.C., 1hp.,220V	4
80	Motor Three Phase,A.C.,1hp. 400V	4
81	Motor Three Phase,A.C.,2hp. 400V	3
82	Motor Three Phase,A.C.,3hp.,400V	1
83	Spanner Monkey	2
84	File Hand Second Cut 15cm.	8
85	Card File	8
86	Stone Oil	4
87	Stone Carborandurm	2
88	Iron Soldring 350gm.	2
89	Spanner Adjustable 15cm.	2
90	Clamp 'C' 10cm.	2
91	Cold Chisel Cross Dimond 9cm.	8
92	Clamp Tool Maker	2
93	Clamp 'C' 5cm.	2
94	Scraper Flate 15cm.	8
95	Reamer Paraller 16mm to 12mm(Set of 5)	1
96	Reamer Adjustable 9mm,12mm,19mm(Set Of 3)	1
97	Appolo Box Spanner(Set in mm.)	1
98	Scraper Half Round 15cm.	8

99	Combination Set 30cm.	2
100	Scraper 3 Corner	8
101	Extractor Stud Ezy-out	2
102	Pipe Wrench 40cm.	1
103	Glass Magnifying	2
104	Pipe Wrench 40cm.	1
105	Wheel Dresser(One For 4Unit)	1
106	Wing Compass 25cm,30cm	2
107	Chisel Cold Round Nose 9mm	8
108	Screw Pitch Gauge	1
109	Pipe Vice No. 4	2
110	Reamer Taper,4mm to 9mm(Set of 4)	1
111	Wire Gauge Metric Standrad	1
112	Drill Twist t/s 6mm to 25mm*1.5mm	1
113	Snips Straight 25cm.	2
114	Pipe Wrench 30cm.	1
115	Sleeve Drill Morse0-1,1-2,2-3	1
116	Leather Apron	1
117	Adjustable Pipe Die 0-2.5cm	1
118	Setting Hammer With Handle	2
119	Vice Bench Jaw 12cm.	1
120	Machine Vice 10cm.	1
121	Prick Punch	2
122	Interchangeable Ratchet Socket Set.	1
123	Machine Vice 15cm.	2
124	Pipe Cutter	1
125	Stilson Wrenches 20cm.	2
126	Pipe Face To Gripe 50mm	2
127	Adjustable Spanner 38cm. Long	1
128	Lathe Tools Bit 6mm*75mm	12
129	Lathe Tools Bit 9mm*85mm	12
130	Lathe Tools HSS Tipped Set	2
131	Lathe Tools Bit 7mm*75mm	12
132	Arm Strong Type Tool Bit Hoder Rh.	2
133	Arm Strong Type Tool Bit Hoder Lh.	2
134	Arm Strong Type Tool Bit Holder Straight	2
135	Vernier Caliper With Thumb Block	1
136	Angle Plate 10 cm.*20 cm.	1
137	Punch Letter 3cm. Set	1
138	File Cut Saw Smaooth 15cm.	6
139	File Square Second Cut 15cm.	4
140	Electric Furnace	1
141	Electric Oven	1
142	Soldring Iron	2
<b>Extra Tools</b>		
1	Magnetic Scibing Block	1
2	Welding Rod	1Pkt.
3	Knife Edge File 15 cm. Long Smooth Cut	9
4	Flate Bastred Sigle Cut file 15 cm. Long	9
5	Number Set	1
6	Plain Vice 25 cm. Long	8
7	Flate File 25 cm.	8
8	Flate File Second Cut	4

## Equipments Required in Physics Lab (Engineering Stream)

S. No.	Name	Quantity
1	Physical Balance	01
2	DC Ammeter with stands 3A	05
3	DC Ammeter with stands 5A	05
4	Battery Charger with meter	01
5	Battery eliminator	04
6	Drawing board wooden	06
7	Electromagnet	06
8	DC Galvanometer with Stand	06
9	Lenses	20
10	Magnet Bar (2")	06
11	Magnet Bar (3")	06
12	Magnet Bar (4")	06
13	LCR AC Circuit apparatus	01
14	LCR Resonance apparatus	01
15	Fresnel Biprism apparatus	01
16	J.J. Thomson apparatus	01
17	Plank's apparatus	01
18	Semiconductor Diode	01
19	Band Gap apparatus	01
20	Newton's Ring apparatus	01
21	Ballistic galvanometer	01
22	Hall effect apparatus	01
23	DC Micro ammeter with stand	06
24	DC Milli ammeter	06
25	Mirrors (convex and concave)	24
26	Mirror strips	12
27	Optical bench metal with all accessories	01
28	Post office box	01
29	Prism glass 1.5	11
30	Prism glass 2.0	12
31	Resistance Box ( $1\Omega$ to $1000\Omega$ )	04
32	Resistance wire	200gm
33	4 way keys	06
34	Rheostats	06
35	Screw gauge	03
36	Glass slab	12
37	Sodium lamp	01
38	Transformer for sodium vapor lamp	02
39	Sodium lamp wooden box	02
40	Sprit level	03
41	Stop watch	06
42	Thermometer	06
43	Traveling microscope horizontal	01
44	Thermocouple	04
45	Searls apparatus	00
46	Carry foster bridge	01
47	Compass box SMALL	00
48	Compass box Big	06
49	Copper wire	800 gm
50	Hoarse shoe magnet	??
51	Spectrometer	01
52	One way key	12
53	Two way Key	12
54	Vernier Calipers	06
55	Weight box (Physical)	02
56	Photo cell apparatus	02

57	Moving galvanometer with mirror	02
58	Polarimeter	01
59	Tangential galvanometer	01
60	Potentiometer apparatus	01
61	Decimal resistance box	01
62	Nodal slide assembly	01
63	Milli Voltmeter	06

**Extra Material:**

1.	Optical Bench	03
2.	Sodium Vapour Lamp	01
3.	Sodium wooden Box	01
4.	Nodal slide Assembly	01

## HOTEL ADMINISTRATION COURSES

Particulars	Minimum Requirement
Premises	Minimum area 3000 sq ft.
Front Office & Reception	Front Office Practical lab with Reception Area & Bell Desk
Housekeeping	Practical Lab with furnished Rooms, all toilet attachments / equipments.
Cleaning	Basic cleaning & serving equipments like vacuum cleaner, housekeeping trolleys etc.
Food & Beverages	Food & Beverages Service Labs with mock Restaurant / Service Lab.
Mock Bar	Mock bar with sample liquors (empty bottles would do).
Conference	Conference facility (which can be used as banquet hall).
Food Lab	Food Production Lab with well equipped Kitchen (Indian & International)
Bakery	Bakery & Confectionery Section
Library	Minimum 500 books as per syllabus.

In addition to the above infrastructure, the center must have a tie-up with a hotel to impart practical training to its students.

A copy of such tie-up or MOU with a Hotel should be enclosed along with the Self Assessment Form mentioning the details of practical classes to be conducted.

# BOOKS REQUIRED FOR HOTEL ADMINISTRATION

## Basic food productive

- Theory of Cooking K.Arora
- Modern Cooking Thangam E. Ceserani
- Theory of Cooking Kinton & Ceserani
- Practical Cookery Kinton & Ceserani
- Basic Baking SC Dubey
- Professional Baking Wayes Gissler
- Indian Cooking Prasad
- A Test of India Madhur jaffrey

## Food & Beverage Services

- F & B Service Manual Sudhir Andrews
- F & B Services Liticarp
- The Waiter John Fuller
- Wine encyclopedia Grossmann
- Wine guide Larousse
- F & B Operation & Management Brian Varghege
- Bar Altendent Handbook Bar Tenderer

## Front office operators

- Front office Training manual Sudhir Andrews
- Managing front office operations Kasavara & Brooks
- Front office operations & Management Ahmed Ismail
- Managing Computers in Hospitality Industry Michael kasavara & Caheill Front-office
- Front-office operations Collr Div & Chris Baird
- Front-office operations & Management S. Bhatnagar

## Hotel Housekeeping

- Hotel, Hostel and Hospital Housekeeping Joan C Brasons and Margarel
- Managing Housekeeping operations Margarel kappe & Aleeta Nikehk
- Hotel Housekeeping Sundhir Andrews
- The professional Housekeeping Tucker Schneider, VMR

## Computer Fundamentals

- Fundamentals of Computers, Prentice Hall India
- Mastering Microsoft Office Lonnie E, Moseley, BPB Publication

## Hotel Law

- Hospitality Law Dr. Jag Mohan Negi
- Hospitality, Sales and Marketing Philip Kotler
- Marketing Management Rama Swamy
- Hospitality Sales and Marketing Dr. Jag Mohan Negi

## Human Resource Management:

- Human Resource Management Dr. Jag Mohan Negi

## Principal of Management

- Principal of Management L.M Prasad

- Marketing Management
- Business Organizations
- Marketing Management
- Personal Management

Philip Kotler  
 Sherlekar  
 Rama Swamy  
 C.B. Mamorie

### **Hotel Accountancy**

- Principals of Accountancy
- Advanced Accountancy
- Double Entry Bookkeeping

N. Vinayakan  
 Shukla, Grewal  
 T.S Grewal

### **Food Microbiology & Nutrition**

- Food & Nutrition
- Food Microbiology
- Food Science
- Fundamentals of Food & Nutrition

Dr. M. Swaminathan  
 P.M . Mishra  
 Polter & Hotchkiss  
 Mudambi & Rajgopal 4<sup>th</sup> edition  
 2001

### **Business Communication**

- Business communication
- Business communication
- Basic Grammar

K.K Sinha  
 Pal & Korkoalhi  
 Wren & Martin

### **Hygiene & Sanitation in the Hospitality Industry**

- Hygiene & Sanitation

Hodder

### **Tourism Management**

- Profile of Indian Tourism
- Tourism Today
- Tourism Principals & Practices
- Tourism & Cultural Heritage of India

Shalini singh  
 Ratandeep Singh  
 A. k. Bhatia  
 Ram Acharya

## PARAMEDICAL STREAM

**Any health care organization fulfilling the following minimum mandatory criteria either by itself or in collaboration with a diagnostic centre / hospital may apply for recognition as a study centre of IASE University.**

### **General:**

- a) Hospital with not less than 30 beds (excluding newborn beds) for diploma courses and 75 beds for degree courses and offering at least general medicine, general surgery, obstetrics and gynecology and pediatric services.
- b) Centre must have: faculty for counseling in communication and computer skill as prescribed in the curriculum.
- c) Must have two classrooms to accommodate at least 25 students each for Diploma and 4 classrooms for Degree courses.
- d) Must have reference library with prescribed reference books in adequate numbers.
- e) Appropriate Labs, equipments, Models, and charts for teaching Anatomy, Physiology & Biochemistry at the centre.
- f) May have audio visual teaching aids such as OHPs, slide projectors, audio video media players.
- g) Must have minimum of 5 computers for every 20 students.
- h) Wards: 2 or 3 General Wards (10 Beds each) & Private Wards.
- i) Ambulance.
- j) Operation Theatre.
- k) Minor OT.

**The Study Centre is required to maintain different Infrastructure and well equipped Labs, faculty, Library for each programme under paramedical stream separately, as per norms of IASE.**

## MEDICAL LABORATORY TECHNOLOGY (CMLT/ DMLT / BMLT)

- a) In addition to the general criteria specified above the centers must have functional laboratory offering routine hematology, Biochemistry, Microbiology, Pathology and services and training lab.
- b) Centre must have at least one Pathologist with DCP or MD and Microbiologist / Biochemist with M. Sc. available for counseling and to supervise practical for 200 hrs. per batch per semester.
- c) Centre must have a senior technician with BMLT or equivalent qualification.
- d) Additional equipment such as auto analyzer will be additional qualification
- e) Functional Lab must have an average of 150 specimens daily for reporting

List of equipments required :

1. Semi / automatic analyzer	-	1 Number
2. Colorimeter	-	2 Numbers
3. P Meter	-	2 Numbers
4. Test Tubes (Centrifuge and long tubes)	-	500 each
5. Test Tube Rack Stand	-	2 Numbers
6. Pipettes (0.1 ml, 0.2 ml, 1ml, 5 ml, 2ml, 10ml, 25 ml)	-	5 each
7. Auto pipettes (100 ml, 500 ml, 1000 ml)	-	2 each
8. Weighing Balance, (Digital)	-	2 numbers
9. Hot plate	-	1 Number
10. Water bath	-	2 Numbers
11. Standard reagents for practical		
12. ESR Tubes	-	10 Numbers
13. Microscope (one may be Columbus or equivalent)	-	3 Numbers
14. Hemoglobin meter	-	5 Numbers
15. Cell Counter (Manual)	-	1 Number
16. Centrifuges	-	3 Numbers
17. Microphone	-	1 Number
18. Hot air/ oven	-	1 Number
19. Incubator	-	1 Number
20. Culture Plates	-	10 Numbers
21. Culture Media		as per requirement

### Books required for CMLT / DMLT /BMLT

SL NO.	NAME OF BOOKS	AUTHOR'S NAME
1	Anatomy for students	Gray's
2	Human Anatomy	B.D.Chaurasia
3	Principle of Anatomy & Physiology	Tortora
4	Text Book of Medical Lab Technology	Ramink Sood
5	International Clinical Pathology	J.S.Chauhan
6	Naidanik Chikitsa Mahta	V.H.Talib
7	Medical Lab Practical	B.B.Ahlawat

## **PHYSIOTHERAPY (CPT/DPT)**

- a) In addition to the general criteria given above the Centre must have following equipments / facilities.
1. Electrical Traction (Lumber & Cervical Separately)
  2. Electrical Stimulator
  3. SWD (Shot Wave Diathermy)
  4. IFT(Interferential Therapy)
  5. TENS (Transcutaneous Electrical Nerve stimulator)
  6. PWB (Paraffin Wax Bath)
  7. CPM (Continuous Passive Movement) Machine
  8. IR Lamp (Infra Red Lamp)
  9. Ultra Sound
  10. Hydro collateral Bath
  11. Respirator / Suction Machine
  12. Shoulder Wheel
  13. Medicine Ball – 1 Pond, 2 pond, 5 pond
  14. Dumbbell Set
  15. Grip Exerciser
  16. Auxiliary crutches (Medium, Small and Large size).
  17. Static Bicycle
  18. Parallel Bar – With Mirror Attached
  19. wooden couch – 5 (3'\*9')
  20. Walking Aids – Walker, Medium / Big Size
  21. Tripod
  22. Crutches / Gutter Crutches
  23. Cold pack unit
  24. Over head puffy system
  25. Quadriceps Table Or Deloemis Table
  26. Suspension Therapy Unit
  27. Peg Board
  28. Goniometers 360 ( Finger, Spine, Upper / Lower extremity)
  29. Crepe bandages of different sizes
  30. Hand Splints
  31. One set of orthosis for lower limbs –HKFO, KFO, AFO.
  32. Tilt Board

### Books required for CPT / DPT

SL	NAME OF BOOKS	AUTHOR'S NAME
1.	Anatomy for Students	Gray's
2.	Human Anatomy Vol. I	B.D.Chaurasia
3.	Human Anatomy Vol. II	B.D.Chaurasia
4.	Human Anatomy Vol. III	B.D.Chaurasia
5.	Concise Medical Physiology	Chaudhary
6.	Principle of Exercise Therapy	M.Dena Gardiner
7.	Practical Exercise Therapy	M.Hollis
8.	Medical Pharmacology	K.D.Tripathy
9.	Medical Bio Chemistry	M.N.Chatergy, Rana Sindhe
10.	Text Book of Pathology	Harsh Mohan
11.	Text book of Obstratics	D.C.Dutta
12.	ENT	P.L.Dingra
13.	Ophthalmology	A.K.Khurana
14.	Orthopedics	J.Maheshwari
15.	Massage for Therapist	M.Hollis
16.	Anatomy & Physiology	Ross Willson
17.	Devidson Principle & Practice for Medicine	Devidson
18.	Joint Structure & Function	Pamella K Lenvengi
19.	Text book of Microbiology	Ananthnarayan & Panicker
20.	Manual Pract Anatomy Vol I	G.J.Romanes
21.	Manual Pract Anatomy Vol I I	G.J.Romanes
22.	Pediatrics	O.P.Ghai
23.	Cash's Test Book for Physiotherapist	(All 4 volumes)
24.	Appley's Orthopaedics	

### Radio Imaging Technology (CRIT/DRIT/ BRIT)

- a) In addition to the general criteria mentioned above the centre must have at least 300 MA or above. X-ray machine with image intensifier of its own or with collaboration.
- b) One Portable X-ray machine of 60 MA or above.
- c) Ultrasound machine of its own or with collaboration.
- d) Access to modern imaging services such as CT scan, Ultra sound, MRI, conventional x-ray machines, Mammography, DSA and Fluoroscopy machine for adequate exposure to the students
- e) One Radiologist with MD or DMRD available for 160 hrs of counseling per batch per semester.
- f) One B.Sc. Radiographer or equivalent.
- g) Desirable to have a part time Physicist available for counseling as required
- h) CG Machine
- i) Adequate load such as minimum of 25 X-rays and 5 Ultrasounds, per day of its own or with collaboration
- j) Dark room facility

# Veterinary Stream

## Labs required

### Clinical (One examination type room 10'\*12')

- Examination Table (ordinary -1)
- Stethoscopes – 2
- Clinical Thermometers – 12
- Blood Pressure Apparatus – 1
- Travis – 1
- Ropes of double width and length for control of animals
- Hypodermic injection Needles (50 ml, 20 ml, 10 ml, 5 ml, 2 ml)
- GNS (Drip sets each – 1 doz, disposal)

### Surgery (one O.T. type room 8'\*10\*)

- Artery forceps - 12 (Straight, curved, long etc.)
- Allis tissue forceps – 4
- B.P. Handles No. 4 – 6 (each 2)
- Surgical Blades for B.P. Handles No. 4 – 6 - 12
- Suturing Needles of different sizes (Straight, curved etc. – 1 packet each)
- Vulva Suturing Needles – 4
- Suturing Threads – 10 Rolls
- Scissors (Straight, curved ) – 06
- Teaf syphon – 1 Dozen
- Needle Holders – 2
- Vaginal speculums – 1
- Electric Heater – (for boiling of syringe and needles automatic). – 1
- Groove Directors – 2
- Ordinary dressing table – 1
- Vistery knife – 2
- Distokia set – 1
- Burdizo (Indian) – for cattle – 1
- For Sheep & Goat – 1
- Bandages – 6' – 4' – 3' – 2 doz. (each size)
- Cotton (surgical) 500gm – 6 Bundles
- Antiseptic lotions – Sevlon, Dettol, Betadin etc.
- P.P. (Pot per manganate) – 1 ltr. – 1 Pack
- Antiseptic Cream – Loraxin, Hemex, Betadin, Soframycin etc.

### Laboratory Instruments

- Microscope (olumpus Binocular) – 1 with stage light
- Student microscopes – 4
- Haemocytometer – 1 set (kit)
- Haemoglobino Meter Kit – 1 set
- Centrifuge machine electronic (ordinary) – 1
- Test tubes – 10 doz.
- Sprit lamps or Bunson ----- - 10
- Glass Slides – (1 packet of 1000 S)
- Sprit – 5 liters

### A.I. Instruments

- Kryojar for LN2 – 03 Litre, 01 Litre
- AI Gun – (Medium and Mini size) each 6

- Sheaths – (Medium and Mini Guns) – 2 packets
- Semen Straws – as per requirements

### **Dairy Instruments**

- Milk Collection bottles – 2 Dozen
- Gurher Centrifuge machine (Electric and hand driven) – 1 each
- Milk Butynametter – 10 Pcs
- Pippetts – for-
  - (a) Milk
  - (b)  $H_2SO_4$
  - (c) Amyl Alcohol
- $H_2SO_4$  (Cone) – 1 Litre  
Amyl alcohol - 1 Litre
- Hydrogen per oxide - 1 Litre

### **General Items**

- Table Cloths -
- Towels -
- Soaps –

### **Building**

- Office – 1
- Class room – 2
- Ministerial room – 1
- Pharmacy room – 1
- Medicine room

# SCIENCE STREAM

SL.No.	Chemicals Required in Bio-Technology Lab
1	Acetone
2	Tetra methyl para Phenylenediamine dihydro chloride
3	Bisacrylamide
4	Acrylamide
5	Formaldehyde
6	Metanol
7	Ethyl Alcohol
8	Nicotanic Acid
9	Thaimine
10	Pyridoxine
11	Glycine
12	Ascorbic Acid
13	2,4-Dichloro Phenol
14	Indol Acetic Acid
15	Kinetine
16	NAA
17	BAP
18	Gibberlic Acid
19	Cholestrol
20	70% Isopropanol
21	C-Silica Gel
22	Tryptone
23	Cesium Chloride
24	Ethidium Bromide
25	Restriction Endonucleases (E.Coli)
26	Restriction Endonucleases (Bam HI)
27	Cetylc trimethylammonium Bromide
28	Chloroform
29	Triton X-100
30	n-Butanol
31	Coomassie Brilliant Blue Dye

<b>32</b>	Guanidinium Thiocyanate
<b>33</b>	Taq Polymerase
<b>34</b>	10X Buffer
<b>35</b>	dNTP
<b>36</b>	MgCl <sub>2</sub>
<b>37</b>	Nuclease free water
<b>38</b>	EDTA (Disodium dihydrate)
<b>39</b>	Sarkosyl
<b>40</b>	50X TAE Buffer
<b>41</b>	Sephacryl
<b>42</b>	Rnase Solution (500 Units)
<b>43</b>	Sodium Acetate
<b>44</b>	Titanic Buffer (TE)
<b>45</b>	Tris Base (Tris HCL)
<b>46</b>	Lithium Acetate
<b>47</b>	Beta Meccapto ethanol
<b>48</b>	AP1 Buffer
<b>49</b>	AP2 Buffer
<b>50</b>	AP3 Buffer
<b>51</b>	Wash Buffer
<b>52</b>	Elution Buffer
<b>53</b>	2,4 Dichlorophenoxy Acetic Acid (Solid)
<b>54</b>	Mercuric Chloride
<b>55</b>	Nin Hydrin
<b>56</b>	Xylene Cynoll
<b>57</b>	Bile Salt
<b>58</b>	Bromophenol Blue
<b>59</b>	Glycine
<b>60</b>	Liquid Nitrogen Container
<b>61</b>	Polyethylene
<b>62</b>	50X TAE Buffer
<b>63</b>	10X TBF Buffer
<b>64</b>	Bromocrysol Green
<b>65</b>	Protenase K
<b>66</b>	Phenol Red (Crystal)

<b>67</b>	Ammonium Oxalate, A.R.	
<b>68</b>	di-Potassium Hydrogen Phosphate	
<b>69</b>	Sodium Nitrate, A.R.	
<b>70</b>	Agar Powder, Extra Pure	
<b>71</b>	Tryptone	
<b>72</b>	Ferrous sulphate AR	
<b>73</b>	Urea, A.R.	
<b>74</b>	alpha Naphthol	
<b>75</b>	Carbol fuchsin	
<b>76</b>	Basic fuchsin	
<b>77</b>	Nigrosin	
<b>78</b>	Giemsa's stain (M.S.)	
<b>79</b>	Ammonium chloride AR	
<b>80</b>	Sodium thiosulphate	
<b>81</b>	Zinc chloride (powder) AR	
<b>82</b>	Safranin (Dye)	
<b>83</b>	Immersion oil	
<b>84</b>	Dipotassium phosphate	
<b>85</b>	Hydrogen peroxide solution 30% w/v	
<b>86</b>	Ferrous ammonium sulphate AR	
<b>87</b>	Potassium hydroxide (pellets) AR	
<b>88</b>	Sodium hydroxide (pellets) AR	
<b>89</b>	Antibiotic disc	
<b>90</b>	PCR Cloning Teaching Kit	(MBT-006-TS)
<b>91</b>	Gel Extraction Teaching Kit	(MBT-008B-TA)
<b>92</b>	Plant DNA Extraction Teaching Kit (Coloumn Based)	(MBT-011-TS)
<b>93</b>	Agarose Gel Electrophoresis Teaching Kit	(MBT-008B-TS)
<b>94</b>	SDS Polyacrylamide Gel Electrophoresis Teaching Kit	(MBT-010B-TS)
<b>95</b>	Ion-Exchange Chromatography Teaching Kit (Cation Ex.)	(MBT-018-TS)
<b>96</b>	Ion-Exchange Chromatography Teaching Kit (Anion Ex.)	(MBT-023-TS)
<b>97</b>	Indirect ELISA Teaching Kit	(MBT-030-TS)

### Equipments Required for Bio-Technology Lab

SL. No.	Product Name	Quantity
1	Autoclave (Digital with metal covering, Double walled, & temperature 121°C, 15 psi, 750mmx550mm)	1
2	BOD(Digital temperature 700C ± 3°C, front glass door) (510eft)	
3	Vortex	1
4	Micro Pipette	
a	0.5-10µl	2
b	10-100 µl	2
c	100-1000µl	2
5	Blue Cap Bottles	
a	1000 ml	10
b	500 ml	10
c	250 ml	10
d	100 ml	10
6	Slides (1.2 mm)	10 Packets(70 Nos)
7	TLC Chamber	1
8	Magnetic Stirrer (2 EMS)-	1
9	Electrophoretic Apparatus(11/14 Horizontal)	1
10	Petri Plates (Glass)	100
11	Scissors (Medium, Small)	20
12	Culture Slant Bottles	100
13	Dropper with Tit	30
14	Polymerase Chain Reaction T1 Thermocycler	1
15	Wattman Paper No. 1	10 Packets
16	Membrane Filters (0.2 µm)	
a	293 mm	1 Pack
b	142 mm	2 Pack
17	Compound Microscope (Trinocular)	1
18	Compound Microscope (binocular) Light) as above	2
19	Anaerobic Chamber Gas Pack 100 System	1
20	Ultracentrifuge (0°C - 20°C)	1
21	pH Meter (Digital)	1
22	pH Strips	5Pkt
23	Inoculation loops 1µL Disposable	1 Pack
24	Souxlet	1
25	Shaker BOD(Digital with temperature)	1
26	Pipettes	
a	5 ml	5
b	10 ml	5
c	20 ml	5
27	Oven (Doubled walled Temp. range 5°C above ambient to 250°C. Controlled by thermostat/ Digital))	1
28	Deep Freezer (Vertical, Double walled, Digital, Low temperature - 20°C )	1
29	Water Bath (Ambient to 95°C ± 0.5°C controlled by digital controller)	1
30	Weighing Machine ( Digital)	1
31	Centrifuge (5000 rpm)	1
32	Tray(small, large)	18

33	Quartz cuvettes 10mm path length (Rectangular)	2 Pack
34	Forceps	20
35	Freeze (Double Door)	1
36	Inoculation Tubes	10Box
37	Sonicator	1
38	Scalpers	30
39	Elisa Reader	1
40	Laminar Air Flow (Pressure, temperature, UV, 4 X 2 X 2, Horizontal)	1
44	Mixer (Juicer Mixer Grinder)	1
1	Basco Cooler (24X0.5 ml tube)	1 Unit
2	Trays, PP (16X24X9)	3 Packs
3	Cryogenic Vials Box:	3 Packs
4	Micropipette Stand PMMA: (Bench Top)	1 Pack
5	Micro Tips Box (2-200 $\mu$ L)	2 Pack
6	Micro Tips Box (100-1000 $\mu$ L)	2 Pack
7	Parafilm	1 Pack
8	PCR Tubes (0.5 ml) Natural	200 Ps

### Books Required for Bio-Technology & Bio-Informatics

SL NO.	Title	Author	Publisher	Edition	No. of Copies
1	Lehninger Principles of Biochemistry	David L. Nelson, Michael M. Cox	Worth Publisher (Indian Reprint)	4th	2
2	Harper's Illustrated Biochemistry (Harper's Biochemistry)	Robert K. Murray, et al			4
3	Biochemistry	Donald Voet	Wiley		2
4	Medical Biochemistry	John W. Baynes, Marek H. Dominiczak			2
5	Biochemistry	L. Stryer	W.H. Freeman	6th	3
6	Biochemistry	Jeremy M. Berg, et al		5th	4
7	Fundamentals of Biochemistry	J.L. Jain	S. Chand		4
8	Biochemistry	Christopher K. Mathews, et al	Pearson Pub	3rd	3
9	Physical Biochemistry : Applications to Biochemistry and Molecular Biology	David M. Freifelder	Narosa Pub.		3
10	Schaum's Outline of Biochemistry	Philip W Kuchel			6
11	Biochemistry and Molecular Biology	William H. Elliott, Daphne C. Elliott			4
12	Principles and Techniques of Biochemistry and Molecular Biology	Keith Wilson, John Walker			4
13	General Microbiology	Schlegel			6
14	Industrial Microbiology	Cruger & Cruger			8
15	Industrial Microbiology	A.H. Patel			8
16	Text Book of Microbiology	Panikar			6
17	Microbiology: An Introduction	Gerard J. Tortora, et al		8th	2
18	Laboratory Experiments in Microbiology	Ted R. Johnson, Christine L. Case			4
19	Microbiology: A Systems Approach	M. Kelly Cowan, Kathleen P. Talaro			4
20	Microbiology	Lansing M. Prescott, John P. Harley, Donald A.			3

		Klein			
<b>21</b>	Microbiology	P.D. Sharma			4
<b>22</b>	Microbial Genetics	Freifelder			4
<b>23</b>	Microbiology Practicals	R.C. Dubey	S.Chand & co. Ltd.		3
<b>24</b>	Microbiology	R.C. Dubey	S.Chand & co. Ltd.		3
<b>25</b>	Environmental Microbiology	P.D. Sharma			2
<b>26</b>	Food Microbiology	Frazier			5
<b>27</b>	Microbiology	Daniel V. Lim			2
<b>28</b>	Instant Notes in Microbiology	J. NICKLIN			5
<b>29</b>	Biodiversity	Agarwal			2
<b>30</b>	Industrial and Enviromental Biotech	Ahmed			4
<b>31</b>	Introduction to Microbiology	John L. Ingraham, Catherine A. Ingraham			3
<b>32</b>	Genetic	Rastogi			4
<b>33</b>	Basic Molecular and Cell Biology	David S. Latchman			2
<b>34</b>	Biodiversity Conservation	Banerjee			3
<b>35</b>	Human Molecular Genetics	T. Strachan, Andrew P. Read			2
<b>36</b>	Dictonary of Plant Tissue Culture	Brown			2
<b>37</b>	Concepts of Genetics	William S. Klug, Michael R. Cummings		Indian	2
<b>38</b>	Animal Cell Culture & Technology	Butler			3
<b>39</b>	Essentials of Genetics	William S. Klug, Michael R. Cummings			3
<b>41</b>	Intro to Environmental Biotech	Chatterjee			4
<b>44</b>	Genetic	Rastogi			4
<b>45</b>	Cell & Molecular Biology	Rastogi			4
<b>46</b>	Cell Biology	Rastogi			4
<b>47</b>	Basic Molecular and Cell Biology	David S. Latchman			2
<b>48</b>	Biotechnology from A to Z	Bains			4
<b>50</b>	Plant Tissue Culture	Bhojwani			6

<b>51</b>	Molecular Biology of the Cell	Bruce Alberts, Keith Roberts, Julian Lewis, Martin Raff, Peter Walter, Alexander Johnson	Garland		3
<b>52</b>	The Embryology of Angiosperms	Bhojwani			5
<b>53</b>	Molecular Cell Biology	Lodish, Harvey; Berk, Arnold; Zipursky, S. Lawrence; Matsudaira, Paul; Baltimore, David; Darnell, James E.	FreeMan	4th	3
<b>54</b>	Molecular Biology of the Gene	James D. Watson, et al	Pearson Pub (Indian Reprint)	5th	4
<b>55</b>	Dictionary of Plant Tissue Culture	Brown			2
<b>56</b>	Instant Notes in Molecular Biology	P. C. Turner			5
<b>57</b>	Essentials of Molecular Biology	George M. Malacinski			4
<b>58</b>	Molecular and Cellular Biology	Stephen L. Wolfe			2
<b>59</b>	Cell and Molecular Biology	D. Robittes	Lipincatt Williams & Wilkins		4
<b>60</b>	Genes VII	Benjamin Lewin	Oxford		2
<b>61</b>	Genetics: From Genes to Genomes	Leland Hartwell, Ruth C. Veres, Lee M. Silver, Michael L. Goldberg, Ann Reynolds, Anne Reynolds, Leroy Hood			2
<b>62</b>	An Introduction To Genetic Analysis	Anthony J.F. Griffiths			2
<b>63</b>	Concepts of Genetics	William S. Klug, Michael R. Cummings		Indian	2
<b>64</b>	Cell & Molecular Biology	Sheller			4
<b>65</b>	Animal Cell Culture & Technology	Butler			2
<b>66</b>	Principles of Genetics	D. Peter Snustad, Michael J. Simmons			2
<b>67</b>	Genetics: Analysis Of Genes And Genomes	Daniel L. Hartl, Elizabeth W. Jones			1
<b>68</b>	Essentials of Genetics	William S. Klug, Michael R.			2

		Cummings			
<b>69</b>	Schaum's Outline of Theory and Problems of Genetics	Susan L. Elrod, William D. Stansfield, William Stansfield, Ph.D., Susan Elrod			4
<b>70</b>	Essential Genes	Benjamin Lewin			2
<b>71</b>	Intro to Environmental Biotech	Chatterjee			4
<b>72</b>	Biodiversity Endangered	Chaudhuri			2
<b>73</b>	Fundamental Genetics	John Ringo			4
<b>74</b>	Genetics	P.K. Gupta	Rastogi		4
<b>75</b>	Genetics	Sarine			3
<b>76</b>	Intro to Plant Biotech	Chawala			4
<b>77</b>	Plant Biotech	Chawala			4
<b>78</b>	Genetics	Gardner	Wiley	Indian	2
<b>79</b>	Genetics	Strigburger	Macmillanpul		2
<b>80</b>	Genomes 3	T. A. Brown	Garlands	2nd	3
<b>82</b>	Vertebrate Zoology	Kotpal			3
<b>83</b>	Gene Cloning and DNA Analysis: An Introduction	T. A. Brown	Garlands		3
<b>84</b>	Proteins: Structure and Molecular properties	Creighton, Thomas E	W.H. Freeman & Company		3
<b>85</b>	Instant Notes in Genetics	P. C. Winter			5
<b>86</b>	Immunology	Richard A. Goldsby			3
<b>87</b>	Cellular and Molecular Immunology	Abul K. Abbas, Andrew H. Lichtman			2
<b>88</b>	Immunology	Ivan M. Roitt			4
<b>89</b>	Kuby Immunology	Richard A. Goldsby, Barbara A. Osborne, Janis Kuby, Janis Immunology Kuby, Thomas J. Kindt			4
<b>90</b>	Lecture Notes on Immunology	Reeves			2
<b>91</b>	Plant Biotechnology & Markers	Srivastava			2
<b>92</b>	Cloning and Genetic Engineering	Holly Cefrey			3

<b>93</b>	DNA & Genetic Engineering	Robert Snedden			5
<b>94</b>	Genetic Engineering	Anne Rooney			4
<b>95</b>	Biotechnology	B.D. Singh	Kalyani		4
<b>96</b>	Biophysical Techniques	Updhaya & Updhaya			4
<b>97</b>	Dictionary of Biology	Sarine			2
<b>98</b>	Plant Biotechnology : The Genetic Manipulation of Plants	Adrian Slater, et al			2
<b>99</b>	Plant Biotechnology: A Practical Approach	H. S. Chawla			4
<b>100</b>	Instant Notes in Immunology	Peter Lydyard			5
<b>101</b>	An Introduction to Genetic Engineering	Desmond S. T. Nicholl			5
<b>102</b>	Plant Biotechnology & Markers	Srivastava			1
<b>103</b>	Principles of Gene Manipulation	R.W. Old, S.B. Primrose	Blackwall Scientist		2
<b>104</b>	Cloning and Genetic Engineering	Holly Cefrey			1
<b>105</b>	DNA & Genetic Engineering	Robert Snedden			1
<b>106</b>	Genetic Engineering	Anne Rooney			2
<b>107</b>	Biophysical Techniques	Updhaya & Updhaya			3
<b>108</b>	Biotechnology	P.K. Gupta	Rastogi		3
<b>109</b>	Dictionary of Biology	Sarine			2
<b>110</b>	Biotechnology	Sateesh			3
<b>111</b>	Plant Biotechnology : The Genetic Manipulation of Plants	Adrian Slater, et al			2
<b>112</b>	Basic Concepts of Biotechnology	Khan			2
<b>113</b>	Modern Concepts of Biotechnology	Kumar			2
<b>114</b>	Modern Concepts in Biotechnology	Khan			2
<b>115</b>	Basic Concepts in Biology	Starr			2
<b>116</b>	Plant	H. S. Chawla			3

	Biotechnology: A Practical Approach				
<b>117</b>	Genetics & Genetic Engineering	Meyyan			3
<b>118</b>	Biology Concepts and Application	Starr			2
<b>119</b>	Plant Biotech and its Applications Tissue Culture	Kumar			4
<b>120</b>	Biotechnology DNA to Protein	Thiel			2
<b>121</b>	Protein Folding	T.E. Creighton	W.H. Freeman		2
<b>122</b>	Introduction to Plant Tissue Culture	Razdan			2
<b>123</b>	Tissue Engineering	Bernhard Palsson, Sangeeta N. Bhatia			2
<b>124</b>	Recombinant DNA	James Watson, et al			3
<b>125</b>	Text Book of Biotech	Dass			2
<b>126</b>	Concepts In Biology	Enger			3
<b>127</b>	Biotechnology The Biological Principles	Trevan			2
<b>128</b>	Animal Biotechnology	Ranga			5
<b>129</b>	Biotechnological applications in Environmental Management	Trivedy			3
<b>130</b>	Microbial Biotechnology: Fundamentals of Applied Microbiology	Alexander N. Glazer, Hiroshi Nikaido			2
<b>131</b>	Elements of Biotechnology	Gupta			3
<b>132</b>	Plant Biotechnology: New Products and Applications	John Hammond			2
<b>133</b>	Molecular Biotechnology: Principles and Applications of Recombinant DNA	Bernard R. Glick, Jack J. Pasternak			4
<b>134</b>	Biotechnology DNA to Protein	Thiel			3
<b>135</b>	Tissue Engineering	Bernhard Palsson, Sangeeta N. Bhatia			2
<b>136</b>	Protein Acchitecture- A	A.M. Lesk			2

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<b>138</b>	Developmental Biology	Scott F. Gilbert			3
<b>139</b>	Developmental Biology	P.S. Verma			6
<b>140</b>	Principles of Development	Lewis Wolpert			3
<b>141</b>	Biological Science	D.J.Taylor, N.P.O. Green,G.W.Stout	Cambridge Low Price Edit.		4
<b>142</b>	Methods in Biotechnology	Schmauder			2
<b>143</b>	Instant Notes in Developmental Biology	R. M. Twyman			5
<b>144</b>	Introduction to Applied Biology and Biotech (PB)	Vaidyanath			4
<b>145</b>	Principles of Protein Structure	Schulz			2
<b>146</b>	Methods in Biotechnology	Schmauder			3
<b>147</b>	Biotechnology & Genetics	Tyagi			3
<b>148</b>	Parasitology-Protozoology & Helminthology	K.D. Chatterjee	Chatterjee Medical Publishers		4
<b>149</b>	Foundations of Parasitology	L. S. Roberts and J. Janovy, Jr	McGraw Hill	7th	4
<b>150</b>	Fundamental Concepts of Bioinformatics	Dan E. Krane, Michael L. Raymer			4
<b>151</b>	Microarrays for an Integrative Genomics	Isaac S. Kohane, Alvin Kho, Atul J. Butte, Alvin T. Kho			4
<b>152</b>	Biological Sequence Analysis: Probabilistic Models of Proteins & Nucleic Acids	Durbin, R. Eddy	Cambridge		4
<b>153</b>	Bioinformatics, Biocomputing and Perl: An Introduction to Bioinformatics Computing	Michael Moorhouse, Paul Barry			4
<b>154</b>	Bioinformatics: From Genomes to Drugs	Thomas Lengauer			2
<b>155</b>	Bioinformatics:	Pierre Baldi, Soren			6

	The Machine Learning Approach	Brunak, Sren Brunak			
<b>156</b>	Projects in Bioinformatics	Hari			2
<b>157</b>	Microarray Bioinformatics	Dov Stekel			3
<b>158</b>	Perl Programming for Bioinformatics & Biologists	Jamison			4
<b>159</b>	Computational Molecular Biology: An Introduction	Peter Clote, Rolf Backofen			2
<b>160</b>	An Introduction to Bioinformatics Algorithms (Computational Molecular Biology)	Neil C. Jones, Pavel A. Pevzner			4
<b>161</b>	Bioinformatics A Beginner's Guide	Claverie			5
<b>162</b>	Bioinformatics Genes Proteins and Computers	Orengo			4
<b>163</b>	Computational Genome Analysis: An Introduction	Michael S. Waterman, Simon Tavare, R. C. Deonier, Richard C. Deonier			4
<b>164</b>	Projects in Bioinformatics	Hari			2
<b>165</b>	Microarray Bioinformatics	Dov Stekel			3
<b>166</b>	Perl Programming for Bioinformatics & Biologists	Jamison			3
<b>167</b>	An Introduction to Bioinformatics Algorithms (Computational Molecular Biology)	Neil C. Jones, Pavel A. Pevzner			2
<b>168</b>	Bioinformatics: Sequence and Genome Analysis	David W. Mount	CSHL Press		6
<b>169</b>	Mastering Perl for Bioinformatics	James D. Tisdall			2
<b>170</b>	Discovering Genomics, Proteomics and Bioinformatics	A. Malcolm Campbell, Laurie J. Heyer		2	3
<b>171</b>	Algorithms in Bioinformatics	K. Steinhoefel, et al			2
<b>172</b>	Bioinformatics: Methods and Protocols	Stephen Misener, Stephen A., Ph.D. Krawetz			2

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<b>173</b>	Molecular Bioinformatics: Algorithms and Applications	Steffen Schulze-Kremer			2
<b>174</b>	Bioinformatics and Functional Genomics	Jonathan Pevsner			2
<b>175</b>	Introduction to Bioinformatics	Arthur M. Lesk			5
<b>176</b>	Bioinformatics And Drug Discovery (Methods in Molecular Biology)	Richard S. Larson			2
<b>177</b>	Algorithms in Bioinformatics	K. Steinhofel, et al			2
<b>178</b>	Statistical Methods in Bioinformatics	Warren J. Ewens, Gregory R. Grant			2
<b>179</b>	Bioinformatics: Methods and Protocols (Methods in Molecular Biology)	Stephen Misener, Stephen A., Ph.D. Krawetz			2
<b>180</b>	Molecular Bioinformatics: Algorithms and Applications	Steffen Schulze-Kremer			2
<b>181</b>	Biostatistics	Jasra			5
<b>182</b>	Lecture Notes On Clinical Biochemistry	Smith, A F , Beckett, G J , Walker, S W	Blackwell Science	6th	3
<b>183</b>	Textbook of Microbiology	Dubey & Maheshwary			4
<b>184</b>	Bioinformatics Computing	Bryan Bergeron	Pearson Education		5
<b>185</b>	Zoology	Ramesh Gupta			4
<b>186</b>	Botany	M.P. Kaushik			4
<b>187</b>	Parasitology	Kotpal & Kotpal			5
<b>188</b>	Algee	B.R. Vasistatha			5
<b>189</b>	Fungi	B.R. Vasistatha			5
<b>190</b>	Fungi	Alexopolus			3
<b>191</b>	Perl Developer's Guide	Peschko	Tata McGraw-Hill		4
<b>192</b>	PERL: A Beginner's Guide	Wyke	Tata McGraw-Hill		3
<b>193</b>	Oracle 9i: Complete Reference		Tata McGraw-Hill		2

<b>194</b>	SQL: The Complete Reference	Groff	Tata McGraw-Hill		3
<b>195</b>	SQL: A Beginner's Guide	Houlette	Tata McGraw-Hill		3
<b>196</b>	Relational Database- Theory & Practice		BPB Publication		4
<b>197</b>	Teach Yourself PL/SQL in 21 Days		BPB Publication		4
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<b>202</b>	Animal Biotechnology Advance T.B. on Biodiversity	yadav	oxford & ibh		3
<b>203</b>	Advance T.B. on Biodiversity An principle and Practice	Krishanmurthy	oxford & ibh		3
<b>204</b>	Intrduction to Plant Biotechnology An Manual for Plant Biotechnology	H.S.Chawala	oxford & ibh		3
<b>205</b>	Medicinal Plant, Chemistry and Propereties	H.S.Chawala	oxford & ibh		3
<b>206</b>	Plant Disease	M. Daniel	oxford & ibh		3
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