



## DIPLOMA IN BANKING TECHNOLOGY

### Rules & Syllabus 2010

#### OBJECTIVE

With the thrust on market orientation, globalization, financial and banking sector reforms and competition in the financial sector, banking / finance professionals face the challenge of continuously innovating and improving their products and services. Currently banks provide more or less similar products and services. In the face of competition, retaining market has become all the more difficult. Banks can improve upon their business only if bank employees specialize in one or more products and services and carve out a niche for themselves. Further, the need for continuous improvement in the service provided calls for excellence in the performance and specialization. The Institute has, therefore, introduced various diplomas to help the employees of banks / financial institutions to acquire the required specialisation and competence.

Information Technology has impacted banking operations and business substantially. Facilities such as internet banking, ATMs, mobile banking etc. are being used for serving the customers. As banks adopt technology to meet challenges of customer service, the bank staff has to be technically competent. The Diploma in Banking Technology course will equip the bankers to face the challenges arising in advanced banking technology.

#### ELIGIBILITY

(i) Members of the Institute

OR

(ii) Person intending to develop a career in a banking technology, though they may not be members of the Institute.

#### SUBJECT OF EXAMINATION

(1) Information Technology, Data Communications and Electronic Banking

(2) Design, Development and Implementation of Information Systems

(3) Security in Electronic Banking

(In addition to the above three papers, the candidates would be required to submit a Project Report on subjects relating to banking technology. The details are given after the syllabus.)

#### EXAMINATION FEES / REGISTRATION FEES

	For Members	For Non-Members
First two attempts	Rs. 4000/-	@Rs. 5500/-
Subsequent each attempts	Rs. 2000/-	Rs. 2000/-

@Includes registration fee for Rs.500/-

## MEDIUM OF EXAMINATION

Examination will be conducted in English only.

## PATTERN OF EXAMINATION

- (i) Question Paper will contain descriptive type questions to test :
  - Conceptual grasp
  - Problem solving and decision making ability
  - Analytical / logical development / application of theoretical foundations
- (ii) Examination will be held in offline mode only.

## DURATION OF EXAMINATION

The duration of the examination will be of three hours.

## PERIODICITY AND EXAMINATION CENTRES

- (i) The examination will be conducted normally twice a year in May / June and November / December on Sundays.
- (ii) Examination **will be conducted on three consecutive Sundays** (one paper on each Sunday).
- (iii) A list of Examination centers will be provided along with the Examination Application Form.

## PASSING CRITERIA

- (i) Pass : Minimum marks for pass in every subject - 50 out of 100 marks.
- (ii) **Candidate securing at least 45 marks in each subject with an aggregate of 50% marks in all subjects of examination in a single attempt will also be declared as having completed the Examination.**
- (iii) Candidates will be allowed to retain credits for the subject/s they have passed in a attempt till the expiry of the time limit for passing the examination as mentioned below :

## TIME LIMIT FOR PASSING THE EXAMINATION

- (i) Candidates will be required to pass the examination within a time limit of 2 years (i.e. 4 consecutive attempts). Initially a candidate will have to pay examination fee for 1st block of one year i.e. for two attempts. In case a candidate is not able to pass examination within the 1st block of one year, candidate should necessarily submit the examination application form for subsequent attempt, without any gap on payment of requisite examination fee. If they do not submit the examination form immediately after exhausting the first block, the examination conducted will be counted as attempt for the purpose of time limit for passing.
- (ii) Candidates not able to pass examination within the stipulated time period of two years are required to re-enroll themselves afresh by submitting a fresh Examination Application Form. Such candidates will not be granted credit/s for subject/s passed, if any, earlier.
- (iii) Attempts will be counted from the date of application irrespective of whether a candidate appears at any examination or otherwise.

## “CLASS OF PASS” CRITERIA

- (i) The Institute will consider the FIRST PHYSICAL ATTEMPT of the candidate at the examination as first attempt for awarding class. In other words, the candidate should not have attempted any of the subject/s pertaining to the concerned examination any time in the past and has to pass all the subjects as per the passing criteria and secure prescribed marks for awarding class. Candidate reenrolling for the examination after exhausting all permissible attempts as per the time limit rule will not be considered for awarding class.
- (ii) First Class : 60% or more marks in aggregate and pass in all the subjects in the FIRST PHYSICAL ATTEMPT.
- (iii) First Class with Distinction : 75% or more marks in any individual subject and 60% or more marks in the aggregate and pass in all subjects in the FIRST PHYSICAL ATTEMPT.

## PROCEDURE FOR APPLYING FOR EXAMINATION

Examination Application Forms will be available at the Institute's website [www.iibf.org.in](http://www.iibf.org.in) which could be downloaded and filled in. The application forms will be also available at the Institute's zonal offices, Corporate Office and also at such other centres / offices as may be notified from time to time. Examination Application Forms duly filled in (for the detailed instructions refer the Examination Application Form) along with requisite examination fee should be submitted to the respective zonal office at Mumbai, Chennai, New Delhi, Kolkata. The Institute accepts no responsibility for delay or inconvenience arising from the candidate's failure to reach the Examination Application Form in time or if the form is incomplete or failure to furnish all the essential information about himself / herself and the details of his / her examination.

## STUDY MATERIAL

The Institute has published study books to facilitate study and they will be available at outlets / showrooms / distributors of M/s. Macmillan Publishers India Ltd. The price of each book and detail list of outlets is mentioned below.

Candidates may purchase directly from outlets / showrooms / distributors of the above.

Candidates who purchase books directly from outlets of publishers will be offered a discount of 20% on the cost price of the book. Candidates desirous of purchasing books by post will not be offered any discount. However the postage will be borne by publishers. Candidates would be required to send their indent to publishers' outlet along with a Demand Draft for the cost of book/s. The Demand Draft should be drawn in favor of M/s. Macmillan Publishers India Ltd. **(No cheques will be accepted).** **Candidates are requested not to send any request for the purchase of books to the Institute's Zonal Offices / Corporate Office.**

Name of the Book	Price
Information Technology, Data Communications & Electronic Banking, 2 <sup>nd</sup> edn., 2007	Rs.495/-
Design, Development & Implementation of Information System, 2 <sup>nd</sup> edn., 2007	Rs.410/-
Security in Electronic Banking, 2 <sup>nd</sup> edn., 2007	Rs.280/-

## ADDRESSES OF MACMILLAN PUBLISHERS INDIA LTD.

### **New Delhi**

2/19 Ansari Road, Daryaganj,  
New Delhi - 110002  
Phone : (Oil) 23273624 / 23273814 /  
23263969 / 23289442 / 23289443  
E-mail : mildel@macmillan.co.in

### **Kolkata**

Unit No 302, L&T Chambers, (3rd Floor),  
16 Camac Street, Kolkata - 700017  
Phone : (033) 22834480-85  
E-mail : milcal@macmillan.co.in

### **Chennai**

240 Lloyds Road, Chennai 600086  
Phone : (044) 28353372 / 28353174  
E-mail : rnillo@macmillan.co.in

### **Bangalore**

12-12/A, Shrunagar Shopping Centre,  
M. G. Road, Bangalore - 560001  
Phone : (080) 25583777  
E-mail : milbgl@macmillan.co.in

### **Bhopal**

76 Malviya Nagar, TT Nagar,  
Bhopal - 462003  
Phone : (0755) 2553895  
E-mail : milbho@macmillan.co.in

### **Chandigarh**

First Floor, SCO Number, 449-450,  
Sector 35C, Chandigarh - 160022  
Phone : (0172) 2611651 / 5088291  
Email : milchd@macmillan.co.in

### **Coimbatore**

136 Sarojini Street, Ram Nagar,  
Coimbatore - 641009  
Phone : (0422) 2230940 / 2237805  
E-mail : milcbe@macmillan.co.in

### **Cuttack**

Maitree Vihar, Link Road, Cuttack -753012  
Phone : (0671) 2311979 / 2331979  
E-mail : milcut@macmillan.co.in

### **Guwahati**

S. C. Goswami Road, Pan Bazar,  
Guwahati -781001  
Phone : (0361) 2516564 / 2633529  
E-mail : milguw@macmillan.co.in

### **Hubli**

Suvidha Annexe, F-17 Block A,  
389 Keshawapur, Hubli - 580023  
Phone : (0836) 2361944  
E-mail : milhub@macmillan.co.in

### **Hyderabad**

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1st Floor, Chapel Road, Abids,  
Hyderabad - 500001  
Phone : (040) 23212867 / 66633233  
E-mail : milhyd@macmillan.co.in

### **Jaipur**

B-48 Sankar Marg,  
Opp. Imliwala Phatak,  
Lai Kothi Scheme,  
Jaipur - 302015  
Phone : (0141) 2741308  
E-mail : miljai@macmillan.co.in

### **Lucknow**

17/1 Mudra Building,  
Madan Mohan Malviya Marg,  
Lucknow-226001  
Phone : (0522) 2209780 / 2208810  
E-mail : milluc@macmillan.co.in

### **Madurai**

6-A Sarojini Street, Chinna,  
Chokkikulam, Madurai - 625002  
Phone : (0452) 2530207 / 2527731  
E-mail : milmdu@macmillan.co.in

### **Mumbai**

Unit No. 404, Antariksh Makwana Road,  
Andheri (E), Mumbai 400059  
Phone : (022) 28526228 / 29 / 30

### **Mumbai**

Mercantile House, Magazine Street,  
Reay Road (East), Mumbai - 400010  
Phone : (022) 23724401 / 23726017 /  
23741423  
E-mail : macray@bom3.vsnl.net.in

### **Nagpur**

House No. 158, 1st Floor,  
Near Kasturba Library,  
Sadar Extension Area,  
Nagpur - 440001  
Phone : (0712) 2531241  
E-mail : milnag@macmillan.co.in

### **Patna**

Sinha Library Road, Patna - 800001  
Phone : (0612) 2232550 / 22242348  
E-mail : milpat@macmillan.co.in

### **Pune**

8 Shreenad Apartments,  
2030 Sadashiv Peth,  
Tilak Road, Pune - 411030  
Phone : (020) 24329872 / 3  
E-mail : milpun@macmillan.co.in

### **Thiruvananthapuram**

Narayana Towers, Vazhuthacaud,  
Thiruvananthapuram - 695014  
Phone : (0471) 2328314  
E-mail : miltvm@macmillan.co.in

### **Visakhapatnam**

30-15-138, 2nd Floor,  
Binayaka Complex, Dabagardens,  
Visakhapatnam - 530020  
Phone : (0891) 2745384  
E-mail : milviz@macmillan.co.in

## TUTORIAL / CONTACT PROGRAMMES

Tutorial / Contact programmes will be organized by the Institute / accredited Institutions. For further details candidates may get in touch with Zonal Office or logon to the Institute's website [www.iibf.org.in](http://www.iibf.org.in).

## SYLLABUS

The details of the prescribed syllabus which is indicative are furnished below. However, keeping in view the professional nature of examinations, all matters falling within the realm of the subject concerned will have to be studied by the candidate as questions can be asked on all relevant matters under the subject. Candidates appearing for the Examination should particularly prepare themselves for answering questions that may be asked on the latest developments taking place under the various subjects of the said examination although those topics may not have been specifically included in the syllabus. The Institute also reserves to itself the right to vary the syllabus / rules / fee structure from time to time. Any alterations made will be notified from time to time. Further, questions based on current developments in banking and finance may be asked.

Candidates are advised to refer to financial news papers / periodicals more particularly "IIBF VISION" and "BANK QUEST" published by the Institute.

## SYLLABUS

### PAPER - I : INFORMATION TECHNOLOGY, DATA COMMUNICATIONS AND ELECTRONIC BANKING

#### SECTION A : Information Technology

1. Computer technology
2. Computer Peripherals (including Touch Screen)
3. Software Technology - Operating System : Latest O/S like LINUX, Windows XP Data base Systems : RDBMS like Oracle, SQL
4. Computerization in Banks

#### SECTION B :

5. Data Communication and Communication products
6. Computer Networks - including Integrated Service Digital Network, Remote Access Server
7. Network Components
8. WAN Communication Environment - including Information Super Highway

#### SECTION C :

9. Information System Planning
10. Information System Analysis and Design
11. Information System selection and Procurement
12. Information System Implementation and Management

#### SECTION D :

13. Technology Policy Guidelines in India Technology Upgradation in Banking Sector, Dr.A.Vasudevan 1999.  
Report on Internet Banking, S. R. Mittal, 1999.  
IT Act 2000  
Cyber Law 2000

Report of the Advisory Group of Payment and Settlement System - Part I & II, M. G. Bhide, Sep,27, 2000.

Report on Working group on Electronic Money - Zarir J. Cama - July 2002

Committee on Payment Systems - Dr. R. H. Patil - Oct 2002

Report of the Committee on Computer Audit - A. L. Narasimhan - Dec 2002

Working Group on Cheque Truncation and E-cheque - Dr. Barma - July 2003

RTGS Regulations 2004

#### 14. Current Trends in IT in Banks

Global Networks :

ARPANET

NFSNET

INTERNET

USENET NEWS

RTGS, SFMS, SEFT, PDO / NDS / SSS / CFMS

#### 15. Plastic Wallet Technology

#### 16. E-commerce

#### 17. Public Key Infrastructure

### **PAPER - II : DESIGN, DEVELOPMENT AND IMPLEMENTATION OF INFORMATION SYSTEMS**

#### **SECTION A :**

1. MIS and its Structure
2. MIS for Operating Management & Strategic Control
3. Decision Support System & GDSS
4. Information Resource Management & Call Centre
5. Front End Tool - ( D2K, SQL \* PLUS, PL / SQL)

#### **SECTION B :**

6. Data Modeling Concepts
7. RDBMS - Oracle / SQL
8. Database Concurrency Recovery & Security Concepts
9. Determination of Data Requirements for Database
10. Operating System - LINUX

#### **SECTION C :**

11. Intranet
12. Data Marts, Data Warehousing, Data Mining
13. IP Addressing
14. OLAP

#### **SECTION D :**

15. Information Resource Management
16. Business Processes Re-engineering
17. Technology led Products and Delivery Channels
18. Centralized Banking Solutions / Core Banking
19. RTGS, SFMS

## PAPER - III : SECURITY IN ELECTRONIC BANKING

### SECTION A :

1. Computer System Security Concerns
2. Physical Security Environment
3. Hardware Security Environment
4. Logical Security Environment
5. Network Security Environment

### SECTION B :

6. Disaster Recovery and Business Continuity
7. Fault Tolerant Systems
8. Network Trouble Shooting

### SECTION C :

9. Overview of Computer Viruses
10. Detection and Prevention of Computer Viruses
11. Anti Virus Policies

### SECTION D :

12. Information System Security Policy
13. System Audit Frame Work
14. System Audit Administration and System Controls
15. Computer Crime
16. Computer Crime Management

## PROJECT WORK

### Operational Modalities of Project Work

The project work is intended to test candidate's virtuosity in Information Technology and judge his ability to independently take charge of project / system development.

The subject of the project is to be chosen by the candidate on consultation with the project guide which should be approved by the IIBF - Project Evaluation Committee.

The project is to be completed within a period of six months from the date of commencement. An illustrative list of subject areas is given below.

- Comparing, analysing, standardization of any of the already implemented software and augmenting / debugging
- Analyse off the shelf software package and parameterising to suit the bank's requirements for implementation
- Writing / developing a package by using one of the existing RDBMS packages.
  - a) Executive Information systems
  - b) Office Automation Systems
  - c) Bank Systems Automation like Fixed Assets, Pension Payments
  - d) Security Check Systems
  - e) Auditing Systems
  - f) Accounting Packages
  - g) Database creating / Data Mining

- h) MIS Designing
- i) Any other area relating to Banking
- Planning and designing a system for full computerisation of a branch / networking of branches with appropriate system re-engineering
- Planning and designing an ATM system / Credit Card System / Telebanking
- Planning and designing Intranet for the Bank.

This is only illustrative list of areas for the said work and not exhaustive.

#### **Mode of Operation :**

IIBF prescribes following qualification for the experts to act as project guides as under :

#### **From Educational Institutions :**

At the rank of Sr. Lecturer and above with a minimum of 5 years experience in IT area.

OR

#### **From Banking Sector :**

Must be a scale III Officer and above with a minimum of three years service as a Computer Professional in the field of Hardware, Software or Telecommunications.

#### **Guidelines to the candidate to select DBT - Project work**

1. Prior approval for carrying out project has to be obtained from IIBF. Request for Approval of subject area of the project may be submitted when the candidate appears for the last paper to save time.
2. Candidates have to submit the following to IIBF :
  - Project details in the prescribed format.
  - Project Synopsis
  - Project guide registration form
3. Project Evaluation Committee (PEC) will approve the project proposals or suggest modifications and communicate to the candidate
4. IIBF may accept the project guide's name submitted by the candidate or IIBF may allot on its own.
5. Project has to be completed within the time schedule allotted by IIBF. The candidate has to ensure that it is large enough to be of practical value. Project must be relevant to the Banking Technology.
6. Project work can be taken up only after passing three theory papers and should be completed within 6 months. If the candidate is not able to complete the project work within 6 months IIBF may give an extension of further 6 months to complete the project.
7. If due to any reason the candidate could not complete the project work within the said 12 months IIBF may, at its discretions allow the candidate to take up a new project and complete within one additional period of 12 months.
8. Time extension for project completion has to be obtained from IIBF by submitting reasons for extension and time period for extension.
9. In case the candidate fails to complete the project within the time limit stipulated under (7) above, he / she will have to re-register for the diploma foregoing the credits obtained for passing the three theory papers and will have to start afresh.
10. DBT will be awarded only after the project is accepted and the candidate has secured 50% or more marks.

## COURSES OF IIBF

### A. Flagship Courses

- ☞ JAIBB
- ☞ CAIIB
- ☞ Diploma in Banking & Finance

### B. Specialised Post Graduate Diploma Courses (for Member\* and Non-Members\*\*)

- ☞ Diploma in Treasury, Investment and Risk Management
- ☞ Diploma in Banking Technology
- ☞ Diploma in International Banking and Finance
- ☞ Diploma in Urban Co-operative Bank
- ☞ Diploma in Commodity Derivatives for Bankers
- ☞ Diploma for Micro Finance Professionals in collaboration with Sa-Dhan
- ☞ Post Graduate Diploma in Financial Advising
- ☞ Diploma in Home Loan Advising

### C. Specialised Certificate Courses (for Member\* and Non-Members\*\*)

- ☞ Certificate in Trade Finance
- ☞ Certified Information System Banker
- ☞ Certificate in Anti-Money Laundering / Know Your Customer
- ☞ Certificate in Quantitative Methods for Bankers
- ☞ Certificate in Credit Cards for Bankers
- ☞ Certificate Examination in Banking Oriented Paper in Hindi
- ☞ Certificate Examination for SME
- ☞ Certificate Examination in Basics of Banking / Credit Cards for employee of IT Companies

### D. Management Courses

- ☞ Advanced Management Program in collaboration with SIES - Mumbai, Welingkar-Mumbai, IMI-Delhi.
- ☞ Project Management Blended Course with IFMR, Chennai
- ☞ Advanced Diploma in Banking Technology (with PNB-IT) - An entry point qualification
- ☞ CAIIB linked MBA with IGNOU.

### Educational support :

- ☞ Publishing specific courseware for each paper / examination and Workbooks etc.
- ☞ Tutorials through Accredited Institutions, Virtual Classes, e-learning through Portal, Contact Classes or Campus Training - Model Questions and subject updates on the net

### Other activities :

- ☞ Research, Seminars, Conferences, Lectures, etc.
- ☞ Publications of books, Daily e-newsletter, monthly newsletter and quarterly journal
- ☞ Training & Consultancy & Financial Education

\* Members are employees of Banks and Financial Institutions who have enrolled as members of IIBF.

\*\* Non-Members are eligible candidates for each course / examination without IIBF Membership.

The Syllabi, Rules / Regulations, Examination Forms and other information pertaining to the examinations are available with Institute's Offices at Mumbai, Chennai, New Delhi, Kolkata and also at such other centers / offices as may be notified from time to time. The same is also available at our website [www.iibf.org.in](http://www.iibf.org.in).

## MEMBERS OF THE GOVERNING COUNCIL (As on 01/01/2010)

### President

**Shri O. P. Bhatt**, Chairman, State Bank of India

### Vice President

**Shri M. V. Nair**, Chairman & Managing Director, Union Bank of India

**Shri M. D. Mallya**, Chairman & Managing Director, Bank of Baroda

### Representing Reserve Bank of India

**Shri C. Krishnan**, Executive Director

### Representing State Bank of India and its Associate Banks

**Shri Narayanan Raja**, DMD & CDO, State Bank of India

**Shri Arun Shandilya**, Managing Director, State Bank of Bikaner & Jaipur

### Representing Public Sector Banks

**Shri A. C. Mahajan**, Chairman & Managing Director, Canara Bank

**Shri Yogesh Agarwal**, Chairman & Managing Director, IDBI Bank Ltd.

**Shri M. S. Sundara Rajan**, Chairman & Managing Director, Indian Bank

**Shri K. R. Kamath**, Chairman & Managing Director, Punjab National Bank

**Shri A. K. Misra**, Chairman & Managing Director, Bank of India

**Shri J. M. Garg**, Chairman & Managing Director, Corporation Bank

**Shri S. Sridhar**, Chairman & Managing Director, Central Bank of India

### Representing Financial Institutions

**Shri U. C. Sarangi**, Chairman, NABARD

### Representing Private Sector Banks

**Shri M. V. Venugopalan**, Chairman & CEO, The Federal Bank Ltd.

**Shri Ananthkrishna**, Chairman & CEO, Karnataka Bank Ltd.

### Representing Foreign Banks

**Shri Gunit Chadha**, Chief Executive Officer - India, Deutsche Bank AG

### Representing Co-operative Banks

**Shri S. K. Banerji**, Managing Director, The Saraswat Co-op Bank Ltd.

### Representing other Bodies / Experts

**Shri Y. H. Malegam**, Former Managing Partner, SB. Billimoria & Co., Chartered Accountants

**Prof. Y. K. Bhushan**, Senior Adviser, ICFAI Business School

**Dr. Asish Saha**, Director, National Institute of Bank Management

**Dr. K. Ramakrishnan**, Chief Executive, Indian Bank's Association

### From IIBF

**Shri R. Bhaskaran**, CEO, Indian Institute of Banking & Finance

## ADDRESSES FOR CONTACT

### Corporate Office :

Indian Institute of Banking & Finance  
The "Arcade", World Trade Centre, 2nd Floor,  
East Wing, Cuffe Parade, Mumbai - 400 005  
Tel : 2218 7003/4/5 Fax : 022-2218 5147 / 2215 5093  
E-mail : iibgen@bom5.vsnl.net.in

### Northern Zonal Office :

Indian Institute of Banking & Finance  
109-113, Vikrant Towers, 1st Floor,  
4, Rajendra Place, New Delhi - 110 008  
Tel. : 91-011-2575 2191/92  
Fax : 91-011-2575 2193  
E-mail : iibnz@iibf.org.in

### Southern Zonal Office :

Indian Institute of Banking & Finance  
No.94, Jawaharlal Nehru Road,  
(100 Feet Road), Opp. Hotel Ambica  
Empire, Vadapalani, Chennai - 600 026  
Tel. : 044-2472 2990/2472 7961  
Fax : 044-2472 6966  
E-mail : iibsz@iibf.org.in

### Western Zonal Office :

Indian Institute of Banking & Finance  
191-F, Maker Towers, 19th Floor,  
Cuffe Parade, Mumbai - 400 005  
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Fax : 022-2218 0845  
E-mail : iibwz@iibf.org.in

### Eastern Zonal Office :

Indian Institute of Banking & Finance  
408, 'Anandlok', 'A' Block, 4th Floor,  
227, Acharya J. C. Bose Road,  
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