INDIAN INSTITUTE OF BANKING & FINANCE

(An ISO 21001 - 2018 CERTIFIED ORGANISATION)

Kohinoor City, Commercial-II, Tower-1, 2nd Floor, Kirol Road, Kurla (West), Mumbai - 400 070 Website: www.iibf.org.in

Certificate Examination in IT Security (in Remote Proctored mode)

Rules & Syllabus 2025

OBJECTIVE

The objective of the course is to make the bank employees aware of the IT security requirements and proper implementation thereof for protecting organizational interest. This course has been developed on the basis of discussions that a committee of IBA had on IT security based on Goplakrishnan Committee Report.

REMOTE PROCTORED MODE

Remote proctoring allows candidates to take an examination at a location of his/her choice while ensuring the integrity of the examination. These systems require students to confirm their identity, and, during the examination, the system monitors students through video, mic, etc. looking for behaviour that could indicate unfair practices (cheating). Examinations are conducted over internet using a Desktop/Laptop. Taking examination using any other device is not permitted e.g. mobile, tabs, etc.

CERTIFIED INFORMATION TECHNOLOGY AUDIT PROFESSIONAL (CITAP)

The Certified Information Technology Audit Professional (CITAP) is a reimagined version of the DISA certification offered by the Indian Institute of Banking & Finance (IIBF), designed to align with global IT audit standards.

To obtain the CITAP qualification, candidates must first complete the following three certificate examinations under the revised syllabus within the stipulated time-limit:

- Certificate Examination in IT Security
- b) Certificate Examination in Prevention of Cyber Crimes & Fraud Management, and
- Certified Information System Banker (CISB).

and thereafter complete the mandatory training within the stipulated time-limit.

The registration fee for CITAP is ₹1,000 plus GST, and the training fee is ₹4,500 plus GST.

Upon successful completion of the training, candidates will be awarded the CITAP certificate.

Candidates are strictly advised to read the relevant rules and eligibility criteria before applying for the CITAP certification.

Candidates who have already cleared any or all the above three examinations under the old syllabus, prior to May 2017 are not eligible for CITAP certificate.

ELIGIBILITY

- 1. Members and Non-Members of the Institute
- 2. Candidates must have passed the 12th standard examination in any discipline or its equivalent.

SUBJECT OF EXAMINATION

IT Security

PASSING CRITERIA:

Minimum marks for pass in the subject is 50 out of 100.

EXAMINATION FEES*:

| Particulars | For Members | For Non-Members |
|-------------------------|--------------|-----------------|
| First attempt | Rs.1,100/- * | Rs.1,600/- * |
| Subsequent each attempt | Rs.1,100/- * | Rs.1,600/- * |

* Plus Convenience charges and Taxes as applicable.

Please Note: Candidates are required to Register for every attempt separately.

While registering online for the examination candidates will have to choose examination date / time slot of his/her choice, the exam date/time will be allotted on first-cum-first-serve basis.

Candidates are required to take utmost care and precaution in selecting Exam Date and Time slot, as there is no provision to change the Exam date and Time slot in the system. Hence no request for change of Exam date and time slot will be entertained for any reason.

The fee once paid will NOT be refunded or adjusted on any account.

MEDIUM OF EXAMINATION:

Examination will be conducted in English only.

PATTERN OF EXAMINATION:

- (i) Question Paper will contain 120 objective type multiple choice questions for 100 marks.
- (ii) The examination will be held in Online Mode only
- (iii) There will NOT be negative marking for wrong answers.

DURATION OF EXAMINATION:

The duration of the examination will be of 2 hours.

PERIODICITY:

Examination will be conducted on pre-announced dates published on IIBF Web Site. Institute conducts examination on 2nd & 4th Saturday and on all Sunday's, however periodicity of the examination may be changed depending upon the requirement of banking industry.

PROCEDURE FOR APPLYING FOR EXAMINATION

Application for examination should be registered online from the Institute's website www.iibf.org.in. The schedule of examination and dates for registration will be published on IIBF website.

PROCESS

Registration

- Application for examination should be registered online from the Institute's website www.iibf.org.in. The schedule of examination and dates for registration will be published on IIBF website.
- 2) At the time of registration, the candidate will select date/time of the examination.
- At the time of registration, the candidate can register for e-learning/e-book, if required, by paying the requisite additional fees.
- 4) The study material can be in the form of e-book and/or e-learning.
- Based on the option selected (e-book/e-learning) the candidate will be provided login ID password to access the study material.
- On successful registration admit letter will be generated. Candidates can download it.

Examination

- Candidates will take examination under remote proctored mode on predetermined date/time from a secured environment. (refer Do's and Don'ts section for more information)
- 2) Candidates should login to the system half an hour before the exam start time.
- The examination proctor will verify the candidate's face with the registered photo image of the candidate.
- Candidate will also be asked to display any valid original photo id-card (Aadhaar card/e-Aadhaar/Employer's card/ PAN Card/ Driving License/ Election voter's card/ Passport etc.)
 - for verification purpose. After successful verification the proctor will allow the candidate to start the examination.
- 5) Candidate may be required to show 360° view of the exam area using the webcam. So that the proctor can identify the object/check the suitability of the exam area/environment. A clear desk/table has to be ensured for appearing for the examination. No reference materials, books, notes, periodicals, mathematical

tables, slides rules, stencils, post-its, chits, mobile phones, headsets (wired/wireless), any other electronic gadgets are allowed to be kept on the table or the desk.

- 6) Both sides of the rough sheet (if it is going to be used) should be shown to proctor before and after the examination.
- Once the examination begins live remote proctoring of the candidate's activities will take place throughout the examination period.
- Under remote proctoring candidate's activities will be monitored using webcam, mic etc. Computer screen, browser, mouse, keyboard etc. will be monitored.
- Proctor, if required, can convey information/ instructions to the candidate using chat box.
- 10) If a candidate indulges in unfair practices/suspicious acts, the proctor will intervene and warn the candidate through chat box or can cancel/stop the examination immediately as the case may be.
- After completion of the examination/submission, provisional scorecard will be displayed on the screen.
- 12) RESULT ADVICE/ CONSOLIDATED MARKSHEET/ FINAL CERTIFICATE
 - Result Advice of candidates will be hosted on Institute's website on declaration of result, which can be downloaded by the candidates.
 - b. Consolidated mark sheet for candidates completing examination having more than one subject, will be available on the Institute's website after the declaration of results. Candidates can download the same after entering login credentials using their membership number and edit profile password.
 - c. For passed candidates, digitally signed certificate will be sent through e-mail registered with the Institute within 3 weeks after the declaration of result. The Paper Certificate issued by the Institute is discontinued.

Minimum System Requirement:

- Desktop/Laptop:
 - Browser: Google Chrome version 75 & above, with cookies & popups enabled
 - Video/Audio: Webcam and a good quality Mic is required
 - Operating system: Windows 8 or 10
 - RAM & Processor: 4 GB+ RAM, i3 5th Generation 2.2 Ghz or equivalent/higher
 - Pop-up blocker: Disabled
- II) Internet Connection:

Stable internet connection with at-least 2 mbps+ upload speed

Examination not allowed on mobiles or tablets

Do's and Don'ts

- 1. The candidate will take the examination from a secured environment.
 - Place having desk and chair preferably with plain backdrop (area behind the candidate) with adequate lighting so that the candidate is visible to the proctor. The place should be noise free with no public movement in the surroundings.
 - All the items should be removed from the desk except computer/external webcam (if internal webcam is not available) /keyboard/mouse, other permitted items, if any.
 - ii. Examination will not be conducted if the examination area is a Public place, a noisy environment, having inadequate lighting, having public movement in examination area/around the candidate, having other computer or similar device in the examination area.
 - iii. The examination cannot be taken sitting on a couch, bed or on the floor.
- Candidate's will take examination on a registered date/time from a secured environment. Candidate who tries to appear after the scheduled examination date/time will not be allowed to appear for the examination.
- 3. Candidate's should login to the system half an hour before the examination start time.
- 4. No other persons are allowed in the examination area during the examination.
- Candidate must keep ready his/her original photo identity card that has name and photo
 on the same side, admit letter, rough sheet, pen/pencil and calculator.

- Candidates must dress decently as though they are in a public place and will be video recorded
- Candidates must not talk to anyone during the examination period or talk/read to oneself loudly
- 8. In case of emergency he/she can talk to helpdesk in case of any technical issue with permission from proctor.
- 9. Candidates must not use headphones, ear buds, or any other type of listening equipment.
- 10. Candidates must not communicate with any other person by any means.
- 11. Candidates must not use any phone for any reason.
- 12. Candidates must not leave the room/examination area during the examination for any reason without the permission of the proctor. Leaving the room/examination area or moving to another room/area during the examination for any reason will be treated as a violation of examination rules.
- 13. Candidates must not setup the computer at the time of examination. All the settings need to done much before the examination time and tested properly. For any failure of the computer system during the examination period, Institute will not be responsible and candidate will lose his/her attempt.
- Candidates must not switch off the webcam or mic or cover the webcam during the examination
- 15. Candidates must not navigate away from examination window.
- Candidate's face must be positioned in the middle of the camera view and candidate's face must be visible throughout the Examination.
- 17. Don't Position camera too low, too high or hooked onto a different monitor. Weird camera angles can be very distracting -- and unflattering -- during examination. The candidate should make sure that the camera is at eye level and on the monitor which is used for the examination.
- 18. Candidate must not look away from laptop/desktop screen, must face computer screen.
- Candidate must not seek any assistance or refer study material/mobile/ for answering the questions.
- Candidate must ensure that he/she has attempted every question and reviewed the
 accuracy of his/her answers before submitting the paper. Once submitted (even by
 mistake), re-examination will not be permitted.
- 21. On the exam day candidate is advised to ensure that the Laptop is fully charged and in case of Desktop it is connected to an uninterrupted power source for smooth conduct of examination.
- 22. Candidates are not permitted to logout/switch-off the computer for the sake of going to washroom and if they log out/switch-off, re-login will not be permitted.
- 23. Candidates will be allowed to use battery operated portable calculator during the examination. The calculator can be of any type up to 8 functions i.e. (Addition, Subtraction, Multiplication, Division, Percentage, Sq. root, Tax+ and Tax-), having 12 digits. Attempt to use any other type of calculator not complying with the specifications indicated above or having more features than mentioned above shall tantamount to use of unfair means. Scientific/Financial calculator is NOT allowed.

Debarment/Cancellation of examination:

- If a candidate indulges in unfair practices/suspicious acts, the proctor will intervene and warn or cancel the test.
- For any case of misconduct, the proctor can warn/cancel the test immediately as the case may be.
- 3) For any unfair act (cheating) during the examination, the result of such examination may be cancelled and he/she will be liable for punishment. Institute will also inform the employer of the candidate by giving the details of unfair practice and punishment levied on the candidate.
- 4) If the unfair act is determined after the examination, the result of such examination will be cancelled and he/she will be liable for punishment.
- 5) If any candidate attempts copying Onscreen question, takes photoshots or violates any of the examination rules, it will be considered to be an act of misconduct and he/she will be liable for punishment.
- 6) PLEASE REFER INSTITUTE'S WEBSITE UNDER THE MENU "EXAM RELATED" FOR DETAILS OF DEBARMENT PERIOD FOR UNFAIR PRACTICES ADOPTED BY CANDIDATES DURING CONDUCT OF INSTITUTE'S EXAMINATIONS.

Privacy

During the remote proctored examination, Images/Videos/Sounds of the candidates and their computer systems will be captured and stored for examination proctoring purposes. It is

envisaged that candidates who register for the remote proctored examinations agree for the same.

PROOF OF IDENTITY

Non-members applying for Institute's examinations/ courses are required to attach/ submit a copy of any one of the following documents containing Name, Photo and Signature at the time of registration of Examination Application. Application without the same shall be liable to be rejected.

1) Photo ID Card issued by Employer or 2) PAN Card or 3) Driving License or 4) Election Voter's ID Card or 5) Passport 6) Aadhaar Card

STUDY MATERIAL/ COURSEWARE

The Institute has developed a courseware to cover the syllabus. The courseware (book) for the subject/s will be available at outlets of publisher/s. Please visit IIBF website www.iibf.org.in under the menu "Exam Related" for details of book/s and address of publisher/s outlets. Candidates are advised to make full use of the courseware. However, as banking and finance fields are dynamic, rules and regulations witness rapid changes. Therefore, the courseware should not be considered as the only source of information while preparing for the examinations. Candidates are advised to go through the updates put on the IIBF website from time to time and go through Master Circulars/ Master Directions issued by RBI and publications of IIBF like IIBF Vision, Bank Quest, etc. All these sources are important from the examination point of view. Candidates are also to visit the websites of organizations like RBI, SEBI, BIS, IRDAI, FEDAI etc. besides going through other books & publications covering the subject/ exam concerned etc. Questions based on current developments relating to the subject/ exam may also be asked.

E-LEARNING:

Institute facilitates e-learning to enhance the understanding of the concepts. Candidates can access the e-learning (From Desktops and Laptops only) through our website www.iibf.org.in at their convenience and from their place of choice.

- At the time of registration, the candidate can register for e-learning/e-book, if required, by paying the requisite additional fees.
- The study material can be in the form of e-book and/or e-learning.
- Based on the option selected (e-book/e-learning) the candidate will be provided login ID
 password to access the study material.

DISCLAIMER:

The above said facility of e-learning offered to the candidates is solely at the discretion
of the Institute and subject to such terms/ conditions as may be deemed fit by the institute
from time to time. Hence no candidate has any right/ claim whatsoever against the
institute by reason of any technical glitches or any shortcomings as the case may be and
the decision of the institute in the event of any dispute there-under will be final and
conclusive.

CUT-OFF DATE OF GUIDELINES/ IMPORTANT DEVELOPMENTS FOR EXAMINATIONS

The Institute has a practice of asking questions in each exam about the recent developments/ guidelines issued by the regulator(s) in order to test if the candidates keep themselves abreast of the current developments. However, there could be changes in the developments/ guidelines from the date the question papers are prepared and the dates of the actual examinations. In order to address these issues effectively, it has been decided that:

- (i) In respect of the examinations to be conducted by the Institute for the period March to August of a calendar year, instructions/ guidelines issued by the regulator(s) and important developments in banking and finance up to 31st December will only be considered for the purpose of inclusion in the guestion papers".
- (ii) In respect of the examinations to be conducted by the Institute for the period September to February of a calendar year, instructions/ guidelines issued by the regulator(s) and important developments in banking and finance up to 30th June will only be considered for the purpose of inclusion in the question papers.

The table given below further clarifies the situation.

| Particulars | Cut-off Date of Guidelines/ Important | |
|--|---------------------------------------|--|
| Developments for Examination/s | Developments for Examination/s | |
| For the examinations to be conducted by | 31st December 2023 | |
| the Institute for the period March 2024 to | | |
| August 2024 | | |
| For the examinations to be conducted by | 30th June 2024 | |
| the Institute for the period September 2024 to | | |
| February 2025 | | |

The details of the prescribed syllabus which is indicative are furnished in the booklet. 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 subject/s 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 newspapers/ periodicals more particularly "IIBF VISION" and "BANK QUEST" published by the Institute.

SYLLABUS

MODULE A: IT SECURITY OVERVIEW

Unit 1: Introduction to Information Security - Data and Information, Information Classification, Need to Know, Information Security, Other Applicable Attributes of Information Security, Physical Security, Logical Security, Advantages of organization's information security programme, Disadvantages of organization's information security programme, Goals of Information security, Types of information security, The services of information security.

Unit 2: Corporate IT Security Policies - Meaning of Corporate IT Security, Need for a Corporate IT Security Policy, Legal Requirements, Essential Features of Corporate IT Security Policy, Physical Security Policy, Methodology of Framing an IT Security Policy, Awareness Initiatives, Aspects of security measurement.

Unit 3: Organisational Security and Risk Management - Organisational Security, Public Sector Organisation, Right to Information Act, 2005, Risk Metrics, Downstream Liability, Risk Management in Banking, Classifications of security attacks in IT security, The information security attacks.

Unit 4: Security Governance - Concepts, Policies, Framework, Key Responsibility Areas, Security Governance in Public Sector Undertakings, Security Governance in Banks, Compliance to Policies is a Must in Any Organization, Monitoring.

Unit 5: Physical and Environmental Security - Concepts, Physical Security Equipment, Intrusion Prevention Systems (IPSs), Environmental Security.

Unit 6: Hardware Security - Hardware, Network Related Devices Like Routers, Switches, Hubs. Unit 7: Software and Operational Security - Concepts, Cloud Computing, Operational Security, Banking, Telecom Industry, IT Industry, BPO and KPO Industries, User Level Controls, Software Security Techniques.

Unit 8: Security Standards and Best Practices - ISO 27000 Standards, ISO - ISMS, Benefits of ISO 27001, Cobit-Control Objectives in IT, CIA triad - Confidentiality, Integrity, Availability, Importance of Confidentiality, Components of Confidentiality, Different types of Confidentialities.

MODULE B- IT SECURITY CONTROLS

Unit 9: Asset Classification and Controls - Asset Classification and Control, Protection of Information Assets, Control of Hardware Equipment, Traditional Methods to Control Hardware Assets, Control of Software Assets, OSI Model.

Unit 10: Physical and Environmental Security Controls - Physical Security Layer-Concepts, Environment Controls, Lighting, e-Waste.

Unit 11: Software Security Controls - Operating Systems (OS), Windows Security, Databases, Application Level Security, Mobile Banking, Internet Banking, Credit Cards.

Unit 12: Network Controls - Concepts, Controls in a Layered Network, VLANs, Protocols used in Network, Intrusion Detection System (IDS), Firewalls, Unified Threat Management, The Information Management Security, Advantages of information management security.

Unit 13: Controls in Software Development and Maintenance - Software Security-Concepts, Software Development, Cloud Computing, Big Data.

MODULE C- IT SECURITY THREATS

Unit 14: Security Threats Overview - Threats, Cyber Espionage, Cyber Terrorism.

Unit 15: Prevention and Detection of Software Attacks - Viruses and Malwares- Malware, Controls.

Unit 16: Incident Management - Objectives of Incident Response, Action Methodology, Processes Running, Awareness.

Unit 17: Fault Tolerant Systems - High Availability (HA), Services Oriented Architecture (SOA), The primary aspects of Service-Oriented Architecture.

Unit 18: Business Continuity and Disaster Recovery Management - Downtime, Phase I, Backups, Who Should Call 'Disaster'? Phase II, Phase III.

MODULE D- IS AUDIT AND REGULATORY COMPLIANCE

Unit 19: Information Systems Audit - History of EDP Audit in Banks, IS Auditor, External v. Internal IS Auditor, Audit Methodologies, Types of Audits, Planning Phase, Report Presentation, Audit Policy, Cobit and Framework, Audit Reports.

Unit 20: Regulatory mechanism in Indian Banks - RBI as the Regulator, RBI'S Regulatory Initiatives Taken so far, Gopalakrishna Working Group, Compliance in Banks, Penal Powers of RBI, RBI's Regulatory Mechanism Already in Place, RBI, SEBI, TRAI, IRDAI, Legal Enactments.

MULTIPLE CHOICE QUESTIONS (MCQS) AND ANSWERS

"The Institute conducts its examinations through Multiple Choice Questions (MCQs). These MCQs are part of the Question Bank of the Institute and its Intellectual Property. As a matter of policy, these MCQs and their answers will not be shared by the Institute with the candidates or others and no correspondence in this regard will be entertained."

CONTACT DETAILS:

Register your queries through website www.iibf.org.in > Members/ Candidates Support Services (Help) or email all your queries to care@iibf.org.in

MEMBER SUPPORT SERVICE OFFICE:

Indian Institute of Banking & Finance

193-F, Maker Towers, 19th Floor,

Cuffe Parade,

Mumbai - 400 005, Tel : 08069260700

FOR TRAINING/ CONTACT CLASSES RELATED QUERIES CONTACT:

Leadership Centre

Indian Institute of Banking & Finance

Kohinoor City, Commercial-II, Tower-I, 3rd Floor,

Kirol Road, Off L. B. S. Marg, Kurla West, Mumbai 400 070.

Tel.: 022-68507000 / 080692 60710

E-mail: training@iibf.org.in

PROFESSIONAL DEVELOPMENT CENTRES:

| South Zone | North Zone | East Zone | West Zone |
|-----------------------|-------------------------|-----------------------|--------------------------|
| Indian Institute of | Indian Institute of | Indian Institute of | Indian Institute of |
| Banking & Finance | Banking & Finance, | Banking & Finance | Banking & Finance |
| No.94, Jawaharlal | C-5/30, Safdarjung | Avani Heights, | 192-F, |
| Nehru Road, | Development Area | 2nd Floor, | Maker Towers, |
| (100 Feet Road), | (SDA), | 59A, Jawaharlal | 19th Floor, |
| Opp.Hotel Ambica | Near SDA Local | Nehru Road, | Cuffe Parade |
| Empire, Vadapalani, | Shopping complex | Kolkata - 700020 | MUMBAI - 400 005 |
| Chennai - 600 026. | Outer Ring Road, Opp | | |
| Tel:044 | IIT Delhi, | Tel: 033-46032850 | Tel: 022- |
| 24722990/24727961 | NEW DELHI-110 016 | Email:iibfez@iibf.org | 69437301/02 |
| Email:iibfsz@iibf.org | Tel:011-2653 2194 / | .in | Email:iibfwz@iibf.org.in |
| .in | 2191 (office) | | |
| | Email:iibfnz@iibf.org.i | | |
| | n | 1 | |

CORPORATE OFFICE: Indian Institute of Banking & Finance, Kohinoor City, Commercial-II, Tower-1, 2nd Floor, Kirol Road, Kurla (West), Mumbai - 400 070

Tel.: 022-68507000 / 080692 60710