At Eduncle, the aspirants are provided the prescribed IBPS IT Officer Syllabus 2017 in a well-structured manner.

Below you can find the complete IBPS SO Syllabus for IT Officer Scale 1.

**Database Management System** 

File Based Data Management – Disadvantages of file system

Database systems – Need for Database, Advantages of using a database

Characteristics of data in a database – Functions of DBMS, Components of a database, Comparison between Database and file-processing systems

Data dictionary – Data abstraction, Data independence – Logical and Physical data independence

Architecture: Overall Architecture of DBMS

Three level architecture – Hierarchical, Networking, Relational Data Models (E-R Model, E-R Diagrams, EER Model), Advantages and Disadvantages of each model.

Advanced Concepts: Introduction to Data warehousing and Data mining – Different types

Client/Server Technology: Client – Server – Distributed and Co-operative processing – Peer- to – Peer processing – Application components – Transaction management.

Relational Structure – Characteristics of Relational Database Model – CODD's rules – Tables (Relations), Rows (Tuples), Domains, Attributes, Extension, Intention.

Keys: Candidate Key, Primary Key, Foreign Key, Super Keys, Unique Keys.

Data Constraints: Referential Integrity Constraints, Entity Integrity Constraints, Constraints like Primary key constraint, Unique, Check constraint strong Entity, Weak Entity.

Normalization: Introduction – Purpose of Normalization – Definition of Functional Dependence (FD) Relational database Design, – Normal forms: 1NF, 2NF, 3NF, BCNF, 4Nf and 5 NF.

Database Administration: DBA Tasks – DBA Tools – User Privileges – Performance monitoring and tuning – Query tracing – Backup and Recovery

Introduction to SQL: Advantages of SQL – Invoking SQL\*PLUS, The Oracle Data-types, Data Definition Language (DDL), Data Manipulation language (DML), Data Control Language (DCL), Data Query Language (DQL) and all related commands.

Queries using Group by and Order by clause & Join: Querying a Single Table, Ordering results, grouping the results, Joins, Types of Joins, Sub queries.

Operators: Logical, Value, Syntax and Query expression operators – Set operators.

Functions: Character, Arithmetic, Date and time, Group and Miscellaneous Functions, Commit, Rollback, Savepoint.

Format models: Character, Numeric & Date Format models.

Views: Introduction – Advantages of views – The Create View Command, Updating Views, Views and Joins, Views and Sub queries – Dropping Views.

Sequences: Creating Sequences, Altering Sequences, Dropping Sequences.

Indexes: Index Types, Creating of an Index: Simple Unique and Composite Index, Dropping Indexes.

Snapshots: Creating a Snapshot, Altering Snapshot, Dropping a Snapshot.

Introduction to PL/SQL: The PL/SQL Syntax, The PL/SQL Block Structure, Fundamentals of PL/SQL, Advantages of PL/SQL data Types.

Control Structure: Conditional Control, Iterative Control, Sequential Control.

Exception handling: Predefined Exception – User defined Exception.

**Cursors: Implicit and Explicit Cursors** 

Procedures: Advantages – Creating – Executing and Deleting a Stored Procedure.

Functions: Advantages – Creating – Executing and Deleting a Function.

Database Triggers: Use of Database Triggers – How to apply database Triggers – Types of Triggers – Syntax for Creating Trigger – Deleting Trigger.

**Data Communication and Networking** 

Data Communication: Components of a data communication – Data flow: simplex – half duplex – full duplex; Networks – Definition – Network criteria – Types of Connections: Point to point – multipoint; Topologies: Star, Bus, Ring, Mesh, Hybrid – Advantages and Disadvantages of each topology.

Types of Networks: LAN – MAN – WAN – CAN – HAN – Internet – Intranet – Extranet, Client-Server, Peer To Peer Networks.

Transmission Media: Classification of transmission media – Guided – Twisted pair, Coaxial, Fiber optics; unguided – Radio waves – Infrared – LOS – VSAT – cabling and standards

Network devices: Features and concepts of Switches – Routers (Wired and Wireless) – Gateways.

Network Models: Protocol definition – standards – OSI Model – layered architecture – functions of all layers..

Data Link Layer: Framing & its methods, Flow Control, Error control. DLL Protocol, Piggybacking & Pipelining. MAC Sub layer, Media access control for LAN & WAN, collision, IEEE 802 standards for LAN & MAN & their comparison. Ethernet, Wireless LANs, Broadband Wireless, Bluetooth.

Network Layer: Routing, Congestion Control Algorithms, IP protocol, IP Addresses, Comparative study of IPv4 & IPv6, Mobile IP.

Transmission Control Protocol (TCP) – User Datagram Protocol, Data Traffic, Congestion Control and Quality of Service

Network Security: Cryptography, Message Security, Digital Signature, User Authentication, Key Management, Security Protocols Internet, DNS, SMTP, FTP, HTTP, WWW, Virtual Terminal Protocol.

**Operating System** 

Introduction to System Programs & Operating Systems, Buffering & Spooling, Types of Operating System.

File concepts, access methods, free space managements, allocation methods, directory systems, protection, organization, sharing & implementation issues, etc.

Process: Concept, Process Control Blocks (PCB), Scheduling criteria Preemptive & non Preemptive process scheduling, Scheduling algorithms, algorithm evaluation, multiple processor scheduling, real

time scheduling, threads, critical section problem, semaphores, and classical problems of synchronization, etc.

Memory Hierarchy, logical and physical address space, swapping, contiguous and non-contiguous allocation, paging, segmentation, Concepts of virtual memory, Cache Memory Organization, demand paging, page replacement algorithms, allocation of frames, thrashing, demand segmentation.

Distributed operating system:-Types, Design issues, File system, Remote file access, RPC, RMI, Distributed Shared Memory(DSM), Basic Concept of Parallel Processing & Concurrent Programming

Security & threats protection: Security violation through Parameter, Computer Worms & Virus, Security Design Principle, Authentications, Protection Mechanisms.

Software Engineering

The Software Product and Software Process Models, Software Process customization and improvement.

Requirement Elicitation, Analysis, and Specification Functional and Non-functional requirements, Validation, Trace ability.

Software Design, Architectural Design, User Interface Design, Function-oriented Design, SA/SD Component Based Design, Design Metrics.

Software Analysis and Testing, Software Test Process, Testing Levels, Test Criteria, Test Case Design, Test Oracles, Test Techniques, Black-Box Testing, etc.

Software Maintenance & Software Project Measurement: Software Configuration Management (SCM), Re-engineering, Reverse Engineering. Project Management Concepts, Feasilibility Analysis, Project and Process Planning, Resources Project Scheduling and Tracking, etc.

Data Structure

Introduction: Basic Terminology, Data types and its classification, Array Definition, Representation and Analysis of Arrays, Single and Multidimensional Arrays, etc.

Stack, Array Implementation of stack, Linked Representation of Stack, Queue, Array and linked implementation of queues, Circular queues, D-queues and Priority Queues. Linked list, Generalized linked list.

Trees: Basic terminology, Binary Trees, Complete Binary Tree, Extended Binary Trees, Array and Linked Representation of Binary trees, etc.

Internal and External sorting, Insertion Sort, Bubble Sort, selection sort Quick Sort, Merge Sort, Heap Sort, Radix sort, Searching & Hashing: Sequential search, binary search, Hash Table, Hash Functions, etc.

Graphs: Introduction, Sequential Representations of Graphs, Adjacency Matrices, Traversal, Connected Component and Spanning Trees, Minimum Cost Spanning Trees.

## Compiler Design

Introduction to Compiler, Phases and passes, Bootstrapping, Implementation of lexical analyzers, LEX: lexical analyzer generator, Input buffering, Recognition of tokens, Error handling.

Basic Parsing Techniques: Parsers, Shift reduce parsing, operator precedence parsing, top down parsing, predictive parsers, LR parsers, an automatic parser generator

Syntax directed definitions, L-attributed definitions, Syntax directed Translators, Intermediate code, etc.

Symbol Tables, Run-Time Administration, simple stack allocation scheme, storage allocation in block structured language, Code Optimization and Code Generation

Parsing control statements, syntax diagrams, Error Recovery, Interpreting control statements, parsing programs, procedures and Functions.

Computer Organization and Microprocessor
Computer System: Basic Computer Operation, Machine Instructions, Addressing Modes, DLX Architecture,
Computer Configuration, Memory organization, Memory Architecture and Interface, DMA, Synchronization, etc.
Microprocessor As A CPU- types of Microprocessor, Microcomputers, Computer Languages, Flags, Program Counter(PC), Stack Pointer, OPCode Format, etc.
Input-output System.
Object Oriented Programming (OOPS)
General concept OOPS- Object, Classes, Data Abstraction, Encapsulation, Inheritance, Polymorphism, Methods and Messages, Dynamic Binding.
Features, Advantages and Applications of OOPS
Aggregation and Association, Generalization, Multiple Inheritance.
As you have seen above, we provided the complete IBPS IT Officer Syllabus. You can also download it for free from Eduncle.

IBPS Specialist Officer Syllabus for Human Resource Management

The candidates who seek their future as Human Resource Manager in Reputable Banking Organizations should follow the complete IBPS Specialist Officer HR Syllabus given below-

**HR** Introduction

Staffing

Wage and Salary Administration

Principles of management

Leadership styles

**HR Planning** 

Job analysis (Procedures, Methods and techniques)

Job design (Meaning and techniques)

Recruitment and selection (Procedure, Process and barriers)

Interview (Types of tests, Types of interviews and limitations)

Placement (Induction, procedure and benefits)

Training and development (Types and methods)

Performance appraisal (Process, uses and techniques)

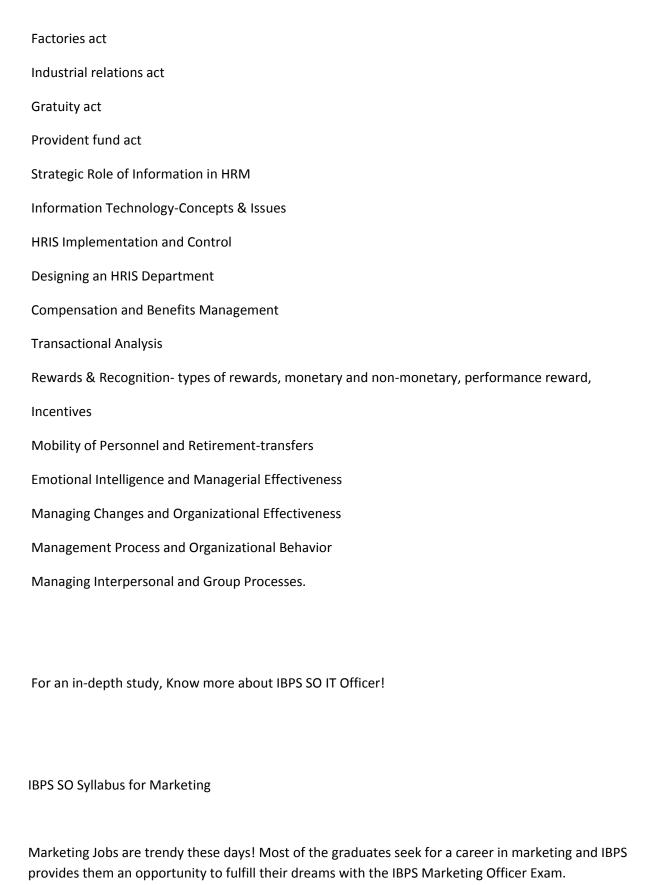
Promotion, transfer and demotions (Types, policies)

Job evaluation (Pre-requites, principles and process)

Compensation (Theories of wages, compensation administration and criteria to develop compensation plan)

Motivation (Theories, Importance, Factors impacting)

Industrial relations



The IBPS Marketing Officer Syllabus is given below, please have a look and prepare accordingly.

**Marketing Overview** 

Concept, Nature, Scope and Importance of Marketing

Meaning, Functions and Importance of Marketing Management

Marketing Process and Marketing Planning

Consumer/ Buyer Behavior

Market Segmentation: Importance of Market Segmentation

Marketing Research

**Product Planning and Development** 

Sales Promotion and its Objectives

Branding, Packaging and Labeling

Pricing Decisions: Pricing, Pricing Decision Strategies

Wholesale Trade

Retail Trade

**Personal Selling** 

**Services Marketing** 

**Bank Marketing** 

Insurance Marketing

Consumer Protection in India: List of Consumer Rights, Consumer Protection Act

Marketing Organization

**Marketing Program** 

Marketing Decision Making

Product
Distribution: Definition, Channels of Distribution
Advertisement
Sales Management
Marketing Environment
Rural Marketing
International Marketing
Social Responsibility and Business Ethics.
Syllabus for IBPS Law Officer
The candidates who are having an interest in law field should definitely apply for IBPS SO Exam as it gives candidates a great platform to showcase their excellence in Law with the help of IBPS Law Officer
Exam.
Those who qualify the exam, get placed in reputable government organization on the position of Law
Officer.
Delevis the complete IDDC CO Cullabus for Law Officer Diagon and it countylly and start your
Below is the complete IBPS SO Syllabus for Law Officer, Please read it carefully and start your preparation accordingly!
You can check the Important Banking Terms to practice well for this section!

**RBI's Constitution and Objectives** Banking Regulation Act, 1949 Reserve Bank of India Act, 1934 Credit Information Bureau (India) Banker-Customer Relationship Payment and Collection of Cheques and Other Negotiable Instruments Types of Collaterals and their Characteristics Foreign Exchange Management Act, 1999 The Prevention of Money Laundering Act, 2002. **Banking Regulated Important Laws** Limitation Act, 1993 Banker's Books Evidence Act, 1891 The Recovery of Debts due to Banks and Financial Institutions (DRT) Act,1993 Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002

Banking Regulation & Compliance and Legal Aspects

Miscellaneous Provisions Consumer Protection Act, 1986

The Banking Ombudsman Scheme, 2006

Procedure for Redressal of Grievance

Lok Adalats.
Commercial Laws with Reference to Banking Operation
Contracts of Guarantee
Contracts of Bailment
Contracts of Pledge
Contracts of Agency
Meaning and Essentials of a Contract of Sale
Definition, Meaning and Nature of Partnership
Dissolution of a Firm
Effects of Non-Registration
Definition and Features of Company
Types of Companies
Memorandum of Association and Articles of Association
Doctrines of Ultra/Constructive Notice/Indoor Management
Transfer of Property Act, 1882
The Right to Information Act, 2005
Right to Information and Obligation of Public Authorities
Information Technology Act, 2000.

IBPS Specialist Officer Exam Syllabus for Agriculture Field

The candidates appearing for IBPS SO Agriculture Exam must have a basic knowledge of general topics such as Agriculture, seeds, soil, vegetables, animal husbandry etc. Check topics given below.

Please check it out to score more!

Agriculture current affairs

Crop horticulture vegetables

Spacing time of sowing seed rate

Varieties important only

Herbicides pesticides

Important points regarding crops fruits vegetables

Preservation of fruits and vegetables

Types of cropping system

Seed technology – Different government schemes

Different types of agricultural practices

Animal husbandry and technology

Different varieties of animals

Agriculture economics – Agriculture cost and schemes

Agriculture small industries like honey daily in the fisheries

**Different Diseases** 

Soil resources

Types of facts

Green manures

Indian soil

Different diseases and its causes
Rural welfare activities in India
Before independence
After independence
Different insurance schemes regarding agriculture
Woman and child development schemes.
The above topics are important to gain respectable score in each section. It's not necessary to cover each and every topic but candidates should at least be well aware of these.
each and every topic but candidates should at least be well aware of these.
Take a forward leap in your preparations. Take the Eduncle Online video lectures, study material and set
of practice questions & mock test papers for IBPS SO Exam. Download now for FREE sample!
IBPS SO Exam Pattern – Understand the Paper Format to Prepare Smartly!
The Form Conduction Decky IDDS accountible of Condition Officers/ Collection Decease in two grounds
The Exam Conducting Body, IBPS accomplishes Specialist Officers' Selection Process in two rounds – Online Test and Interview.
The IBPS CRP SPL-VI is administered for five different fields to provide the opportunity to eligible job
seekers belonging to IT, Agricultural, Human Resource Management, Law and Marketing Field.

The Online Test consists of four Sections which includes – Reasoning, English, Quantitative Aptitude and Professional Language (related to the concerned field).
As per the Latest IBPS Specialist Officer Notification, the IBPS SO 2017-2018 Exam Pattern has been changed now.
Below we are sharing the latest facts about IBPS SO Exam Pattern. Must Read!
IBPS SO Exam Pattern 2017 Changed! See the Highlights here!
To ease out the candidates' time scheduling worries during exam, IBPS has now assigned a time limit to each section. If any candidate doesn't attempt enough scoring questions within the assigned time, he/she may lose the his/her qualifying chances.
There will be equal no of questions from each section now.
There are no any specified maximum marks for Reasoning, English, General Knowledge and Quantitative Aptitude Section. Candidates will only have to qualify these sections by scoring more than the IBPS SO Cutoff Marks.
But for the Professional Knowledge Exam, Candidates can score maximum 80 marks.
The candidates will not be shortlisted for the Interview round only on the basis of their qualifying marks. They will have to score more points to create their places in the list of Interview Nominees.