

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING
Govt College of Engineering Kalahandi



Cyber Law & Ethics
B.Tech., Semester -VII

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Cyber Laws and Ethics

UNIT - 3

Cyber law and Related Legislation

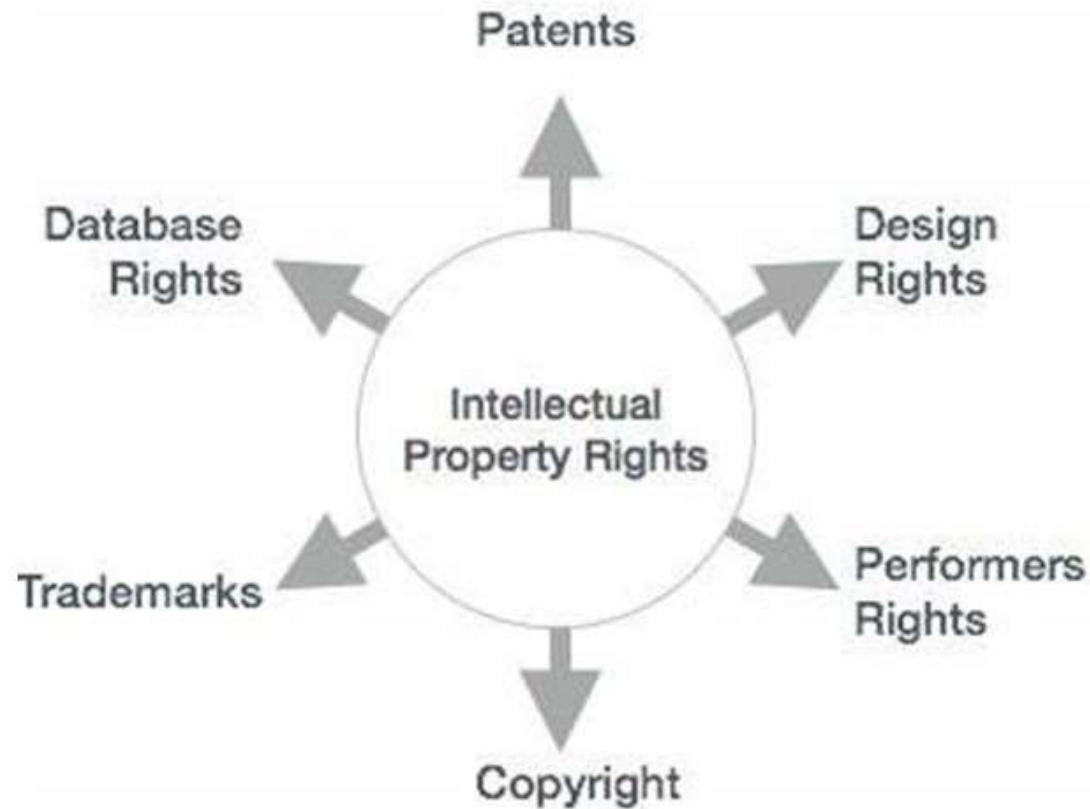
Outline....

- Patent Law
- Trademark Law
- Copyright
- Software
 - Copyright or Patented
- Domain Names and Copyright disputes
- Electronic Data Base and its Protection
- IT Act and Civil Procedure Code
- IT Act and Criminal Procedural Code
- Relevant Sections of Indian Evidence Act
- Relevant Sections of Bankers Book Evidence Act
- Relevant Sections of Indian Penal Code
- Relevant Sections of Reserve Bank of India Act
- Law Relating To Employees And Internet
- Alternative Dispute Resolution
- Online Dispute Resolution (ODR)

Intellectual Property

- Intellectual Property (IP) refers to creations of the mind, such as inventions, literary and artistic works, design and symbols, names and images used in commerce.
- IP is protected in law by for example patents, copyright and trademarks which enable people to earn recognition or financial benefit from what they invent or create. By striking the right balance between the interests of innovators and the wider public interest the IP system aims to foster an environment in which creatively and innovation can flourish.

Intellectual Property Law in Computer Science



Patent Law

- A patent safeguards an original invention for a certain period of time and is granted by the United States Patent and Trademark office (USPTO). By granting the right to produce a product without fear of competition for the duration of the patent, an incentive is provided for companies or individuals to continue developing innovative new products or services.
- A Patent is a legal monopoly, which is granted for a limited time by a country to the owner of an invention.
- There are three types of patent
 - Utility Patent
 - Plant Patent
 - Design Patent

Trademark Law

- The Trade Marks Bill, 1999, replaced the Trade and Merchandise Marks Act, 1958.
- A Trademark in computer security is a contract between code that verifies security properties of an object and code that requires that an object have certain security properties.
- A trademark has two operations:
- Apply Trademark! (object)
- This operation is analogous to the private key in a digital signature process, so must not be exposed to untrusted code. It should only be applied to immutable objects, and makes sure that when Verify Trademark? is called on the same value that it returns true.

Trademark Law

- Verify Trademark? (object)
- This operation is analogous to the public key in a digital signature process, so can be exposed to untrusted code. Returns true if-and-only-if, Apply Trademark! has been called with the given object.

Copyright

- A Copyright is a protection for any published work that helps to prevent that work from being used without prior authorization. A Copyright may be indicated by the word "Copyright," or a C surrounded by a circle (©). The Copyright might also be followed by the published date and the author of the work.
- When work is Copyrighted, it may not be reproduced in any fashion unless the owner of the work grants proper rights.
- Computer Hope is not meant for legal representation, and how a Copyright is interpreted could vary. If you have additional questions or concerns about legalities, consult a legal consultant or attorney.
- Copyright can apply to a wide range of media, including music, software, images, books etc.

Copyright vs Trademark vs Patent

CATEGORIES	COPYRIGHT	TRADEMARK	PATENT
Governed Under	The Copyright Act, 1957	Trade Marks Act, 1999	The Patents Act, 1970
Types of Protection & Works	Protection of original creative expressions like literary works, artistic works, dramatic works etc.	Protection of unique name slogans, logo, shape, color that makes a brand distinct from other.	Protection of inventions that are novel, original and has industrial utility.
Validity and Reach	Valid for life time of the author + 60 years after his/her death.	Validity for 10 years can be made perpetual by renewing the trademark every 10 years.	Validity for 20 years starting from the day the application is first made.
Secures	Copyright secures Creative or intellectual creations.	Trademarks secure the branding under which products and services are sold.	Patent secures inventions that are useful for the world and has some use.
Right comes into Existence	Exclusive rights over the copyright are created the moment the authorship creates the work.	Once the trademark gets registered the applicant of the mark can claim complete right over the said mark.	Patent registration takes about 2-3 years in all.
Symbolic Representation	No symbolic representation	Used when registration is in process: TM Used when registration is complete: [®]	No symbolic representation

Software – Copyright

- Copyright protection covers the method in which you express your software. This may be both the object and/or source code. Your copyright protection begin when you start creating your code, but we highly advise clients to make sure they register their copyright with the US copyright office.
- Copyright protection lasts for the life of the author, plus 50 years. The downside of this form of IP protection is that you are only protecting the source code, meaning if a competitor makes even minor changes to the code they may be able to circumvent the legal protection of your copyright registration and avoid infringement.

Software – Patented

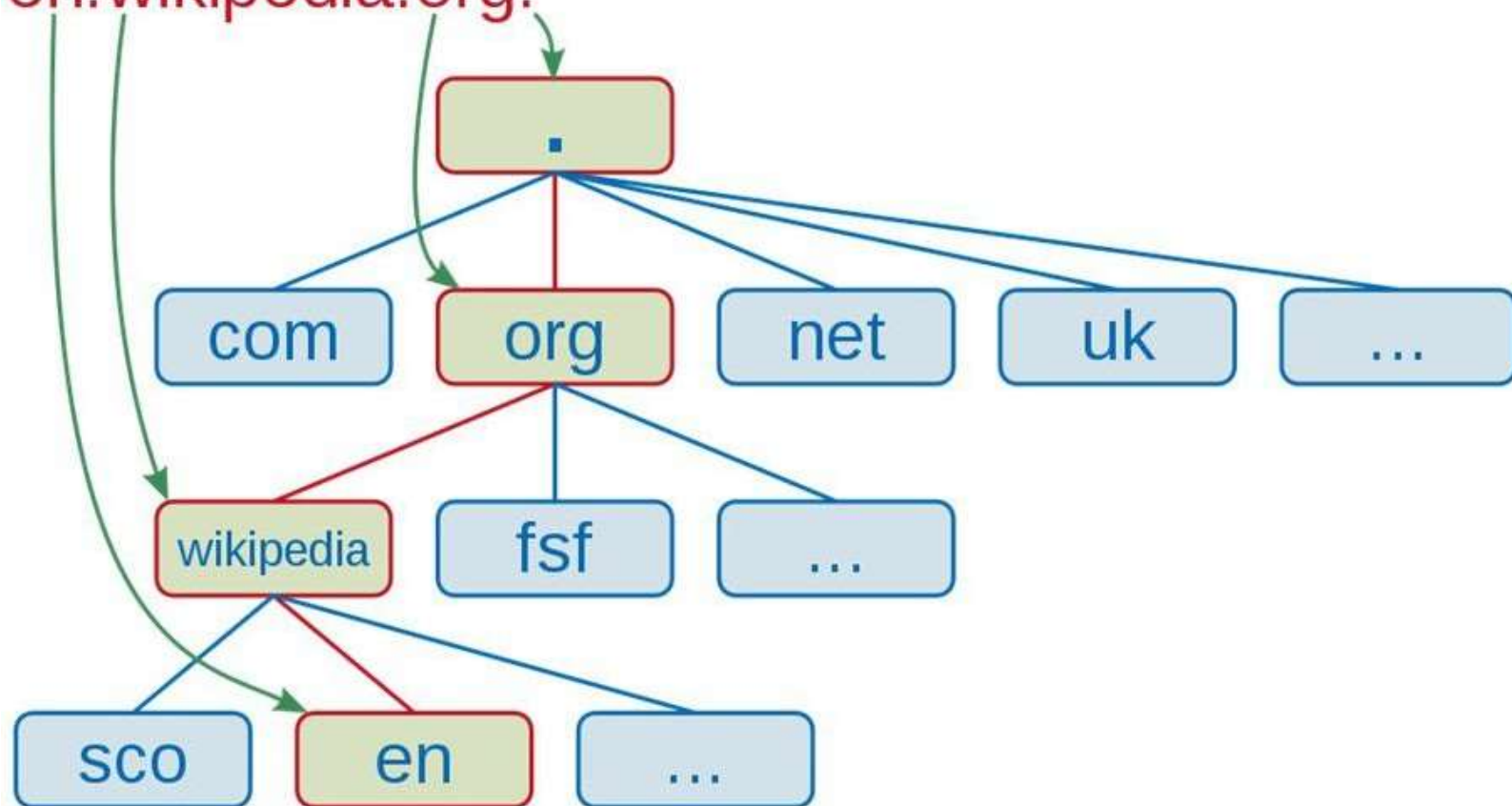
- If your invention is found to be patentable after a prior art search, a patent offers the most comprehensive form of intellectual property protection for software-related innovations, protecting the novel features and processes that power the application rather than just the underlying source code.
- Once you are issued a software patent, you have the exclusive right to make, use, license and sell your software invention. A broad software patent application may further include your proprietary processes, system, methods, functions and algorithms. Providing you the ability to gain an advantage over your competition while developing a defensive patent portfolio.
- Amazon One-Click, U.S. Patent No. 5,960,411
- Google Homepage U.S. Patent No. D599,372

Domain Names

- A domain name is an identification string that defines a realm of administrative autonomy, authority or control within the Internet.
- Domain names are used in various networking contexts and for application-specific naming and addressing purposes. In general, a domain name identifies a network domain, or it represents an Internet Protocol (IP) resource, such as a personal computer used to access the Internet, a server computer hosting a website, or the web site itself or any other service communicated via the Internet.
- In 2017, 330.6 million domain names had been registered.
- Domain names are formed by the rules and procedures of the Domain Name System (DNS). Any name registered in the DNS is a domain name.

Domain Names

en.wikipedia.org.



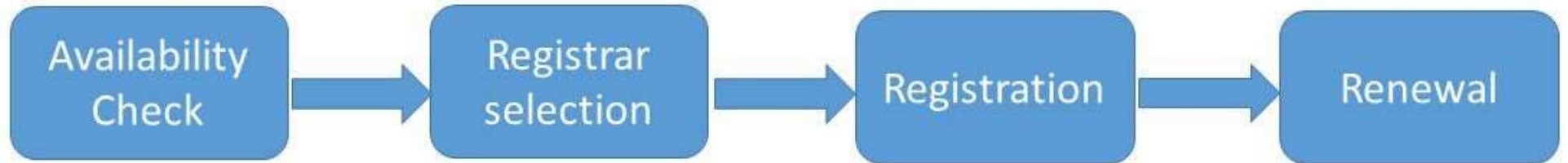
Types of Domain Name

- **Top-Level Domain(TLDs):** They appear in domain names as the string of letters following the last “ . ”, such as “net” in www.example.net. Most commonly used TLDs are .com, .net, .edu, .jp, .de , TLDs are classified into two broad categories: generic top-level domains (gTLDs) and country-code top-level domains (ccTLDs).
- **Generic Top-Level Domain (gTLDs):** It is a generic top-level domain name that identifies the domain class it is associated with (.com, .org, .edu, etc).
- **Country Code Top-Level Domain(ccTLD):** It is a two-letter domain extension, such as .uk or .fr assigned to a country, geographic location or territory.

Types of Domain Name

- nTLDs: It refers to new top-level domain names that are geared towards brand organizations and service as they're more customized, flexible and relevant. Some of the Examples of nTLDs include “.voyage” , “.app” , “.ninja” , “.cool” etc.

Registration Process



Copyright Disputes

- Where copyright is infringed, owner of copyright is entitled to see for remedies including injunction, damages, profit of account and delivery up of infringing goods.
- Section 51 states copyright in a work is considered infringed when a person without a license from owner or registrar of copyrights or contravening conditions of a license does anything the exclusive right to do which is the right of the owner as per the act or communication constitutes infringement of copyright in the work unless he was not of copyright.
- It also amounts to an infringement where a person makes for sale or hire or displays or offers for sale or distributes for trade or to prejudicially affect the owner of copyright or by way of trade exhibit in public or import into India infringing copies of work.

Electronic Data Base

- Maintaining of data base is not as much difficult task as maintaining its integrity, so in this era the most concerned debate is going to innovate a perfect method of data protection.
- With the advancement in technological development, there took place a transition in the standard of crimes.
- In the present era most of the crimes are being done by the professional through the easiest medium i.e. computers and electronic gadgets.
- Just by the single click the criminals are able to get the secured information. The lust of information is acting as a catalyst in the growth of cyber crimes.

Electronic Data Base

- It is the very big headache for the business houses, financial institutions and the governmental bodies so as to give adequate protection to their huge database.
- In the absence of any particular stringent law relating to data protection the miscreants are gaining expertise in their work day by day.

Electronic Data Base - Protection

- Be Alert to Impersonators
- Make sure you know who is getting your personal or financial information. Don't give out personal information on the phone, through the mail or over the Internet unless you've initiated the contact or know who you're dealing with.
- If a company that claims to have an account with you sends email asking for personal information, don't click on links in the email.
- Safely Dispose of Personal Information
- Before you dispose of a mobile device, check your owner's manual, the service provider's website, or the device manufacturer's website for information on how to delete information permanently, and how to save or transfer information to a new device.

Electronic Data Base - Protection

- Remove the memory or subscriber identity module (SIM) card from a mobile device. Remove the phone book, lists of calls made and received, voicemails, messages sent and received, organizer folders, web search history, and photos.
- **Encrypt Your Data**
- Keep your browser secure. To guard your online transactions, use encryption software that scrambles information you send over the internet.
- A “lock” icon on the status bar of your internet browser means your information will be safe when it’s transmitted. Look for the lock before you send personal or financial information online.

Electronic Data Base - Protection

- Keep Passwords Private
- Use strong passwords with your laptop, credit, bank, and other accounts. Be creative: think of a special phrase and use the first letter of each word as your password. Substitute numbers for some words or letters.
- For example, “I want to see the Pacific Ocean” could become 1W2CtPo.
- Don't Overshare on Social Networking Sites
- If you post too much information about yourself, an identity thief can find information about your life, use it to answer 'challenge' questions on your accounts, and get access to your money and personal information.

Electronic Data Base - Protection

- Consider limiting access to your networking page to a small group of people. Never post your full name, Social Security number, address, phone number, or account numbers in publicly accessible sites.

Under IT Act 2000

- Section 43
- Provides protection against unauthorized access of the computer system by imposing heavy penalty up to one crore.
- Section 65
- Especially for computer source code. If anyone knowingly or intentionally conceals, destroys or causes another to do as such shall have to suffer a fine up to 2 lakh rupees.
- Section 66
- Protection against hacking. Penalty of imprisonment of three years or fine up to 2 lakh rupees.

Under IT Act 2000

- Section 70
- Protect the data stored in the protected system. Punishment of imprisonment for any access or attempt to secure access of that system in contravention or may extend to ten years.
- Section 72
- Protection against breach of confidentiality and privacy of the data. Punished with imprisonment which may extend to two years or with fine which may extend to 1 lakh rupees.

IT Act

- The Information Technology Act, 2000 (also known as ITA-2000, or the IT Act) is an Act of the Indian Parliament (No 21 of 2000) notified on 17 October 2000. It is the primary law in India dealing with cybercrime and electronic commerce.
- An Act to provide legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as “electronic commerce”, which involve the use of alternatives to paper-based methods of communication and storage of information, to facilitate electronic filing of documents with the Government agencies and further to amend the Indian Penal Code, the Indian Evidence Act, 1872, the Banker’s Books Evidence Act, 1891 and the Reserve Bank of India Act, 1934 and for matters connected therewith or incidental thereto.

IT Act

- The bill was passed in the budget session of 2000 and signed by President K. R. Narayanan on 9 May 2000. The bill was finalized by a group of officials headed by then Minister of Information Technology Pramod Mahajan.
- Schema of the Act: It consolidates the law relating to procedure of Civil Courts.
- It has 158 sections in the first part and 51 ORDERS in the second part containing Rules and 8 appendices.
- The sections contain the fundamental principles and thus create jurisdiction hence a substantive law whereas the Rules deal with the detailed procedure as to how the jurisdiction should be exercised.

Civil Procedure Code

- The Code of Civil Procedure, 1908 is a procedural law related to the administration of civil proceedings in India.
- The Code is divided into two parts: the first part contains 158 sections and the second part contains the First Schedule, which has 51 Orders and Rules.
- The sections provide provisions related to general principles of jurisdiction whereas the Orders and Rules prescribe procedures and method that govern civil proceedings in India.
- To give uniformity to Civil Procedure, Legislative Council of India, enacted Code of Civil Procedure, 1858, which received the assent of Governor-General on 23 March 1859.

Civil Procedure Code

- The Code however, was not applicable to the Supreme Court in the Presidency Towns and to the Presidency Small Cause Courts.
- It did not meet the challenges and was replaced by Code of Civil Procedure Code, 1877. But still it did not fulfill the requirements of time and large amendments were introduced.
- In 1882, the Code of Civil Procedure, 1882 was introduced. With passing of time it is felt that it needed flexibility for timeliness and effectiveness. To meet these problems Code of Civil Procedure, 1908 was enacted.

Criminal Procedural Code

- The Code of Criminal Procedure commonly called Criminal Procedure Code (CrPC) is the main legislation on procedure for administration of substantive criminal law in India.
- It was enacted in 1973 and came into force on 1 April 1974.
- It provides the machinery for the investigation of crime, apprehension of suspected criminals, collection of evidence, determination of guilt or innocence of the accused person and the determination of punishment of the guilty.
- It also deals with public nuisance, prevention of offences and maintenance of wife, child and parents.
- At present, the act contains 484 sections, 2 schedules and 56 forms. The sections are divided into 37 chapters.

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Relevant Sections of Indian Evidence Act

- The dynamic changing society fails to believe in the words of mouth, rather they prefer written, documented statements to believe the facts of the same.
- Thus, evidence plays a very important role in establishing the occurrence of events that had take place or which gradually would be taking place.
- Therefore in order to establish the happening or non-happening of events, evidence also plays a very important role in the court of law.

Relevant Sections of Indian Evidence Act

- AMENDMENTS TO THE INDIAN EVIDENCE ACT, 1872 (1 OF 1872)
- The definition of 'evidence' has been amended to include electronic records. The definition of 'documentary evidence' has been amended to include all documents, including electronic records produced for inspection by the court.
- Section 3 of the Evidence Act, 1872 defines evidence as under: "Evidence"
 - Evidence means and include:
 1. All statements which the court permits or requires to be made before it by witness in relation to matters of fact under inquiry such statements are called oral evidence.
 2. All documents including electronic records produced for the inspection of the court such document called documentary evidence.

Relevant Sections of Bankers Book Evidence Act

- Section-1 – Title and Extent:
 - This act may be called the Bankers Book Evidence Act, 1891.
 - It extends to the whole of India except the state of Jammu and Kashmir.
- Section-2 – Definitions: In this Act, unless there is something repugnant in the subject or context
 1. “company” means any company as defined in section 3 of the companies act, 1956 and includes a foreign company within the meaning of section 591 of the act.
 - a) “corporation” means any body corporate established by any law for the time being in force in India and includes the RBI the SBI any subsidiary bank as defined in the SBI act, 1959 (38 of 1959)

Relevant Sections of Bankers Book Evidence Act

2. “bank” and “banker” means,
 - a) any company or corporation carrying on the business of banking,
 - b) any partnership or individual to whose books the provisions of this act shall have been extended as hereinafter provided.
 - c) any post office saving bank of money order office
3. “bankers books” include ledgers, day-book, cash-books, account-books and all other records used in the ordinary business of the bank, whether these records are kept in written form or stored in a micro film.
4. “legal proceeding” means,
 - a) Any proceeding or inquiry in which evidence is or may be given
 - b) Any investigation or inquiry under the Code of Criminal Procedure, 1973 or under other law conducted by a police or behalf of magistrate.

Relevant Sections of Indian Penal Code

- Section 354-D : If a man watches a women engaging in private act, were a reasonable assumption of privacy is expected by the women, captures her image and publishes it via an online medium shall be punished with imprisonment of minimum 1 year.
- Section 354-D: Stalking-If a man constantly follows any women and tries to contact her or begin a personal integration with her.
- Section 383: Punishment of Extortion- Whosoever intentionally and illegally puts a person in fear to deliver any property or valuable to him.
- Section 379: Punishment of Theft- whosoever dishonestly take away the goods or any electronic record illegally from the possession of its right full owner without his express.

Relevant Sections of Indian Penal Code

- Section 406 : Punishment of criminal breach of trust- whoever misappropriate any movable property like computer device or any electrical device which was entrusted to him for a lawful purpose.
- Section 417` : Punishment of cheating- whoever impersonates some other person which he is not or knowingly substitutes such person and causes wrongful losses to the innocent victim shall be punished.
- Section 471: Using as genuine a forged document or electronic record whoever fraudulently or dishonestly uses as genuine any document or electronic record which he knows to be forged shall be punished.
- Section 500: Punishment of defamation- whoever knowingly publishes without any justification or reasonable cause any statement, image or document on social platforms.

Relevant Sections of Indian Penal Code

- **Section 506** : Punishment of criminal intimidation where a persons threatens other person to harm his reputation life or property via an electronic means which induces that person to commit an illegal act to prevent him doing an act which is legally obligatory on him shall be punished with imprisonment which may extend to two years or fine or both.

Relevant Sections of Reserve Bank of India Act

- Reserve Bank of India Act, 1934 is the legislative act under the RBI was formed. This act along with the Companies act, which was amended in 1936, were meant to provide a framework for the supervision of banking firms in India.
- **Section 17:** The act defines the manner in which the RBI can conduct business. The RBI can accept deposits from the central and state governments without interest.
- **Section 18:** Deal with emergency loans to banks.
- **Section 21:** States that the RBI must conduct banking affairs for the central government and manage public debt.
- **Section 22:** states that only the RBI has the exclusive rights to issue currency notes in India.

Relevant Sections of Reserve Bank of India Act

- Section 24: states that the maximum denomination a note can be is 10,000 Rs.
- Section 26: of act describes the legal tender character of Indian bank notes.
- Section 28: allows the RBI to form rules regarding the exchange of damaged and imperfect notes.
- Section 31: state that in India only the RBI or the central government can issue and accept promissory notes that are payable on demand.
- Section 42(1): says that every scheduled bank must have an average daily balance with the RBI.

Law Relating To Employees And Internet

- The internet is essential for doing business. However it can also be a great way for employees to waste time, cause security issues or given you legal headaches.
1. Internet access rules
 2. Using the internet
 3. Web browsing
 4. Downloads
 5. Online purchasing
 6. Social networking
 7. Your own website
 8. Implementing your policy
 9. Enforce the policy

Alternative Dispute Resolution

- Whether in a business setting or personal setting disputes can arise when individuals don't agree. However it's often possible to avoid costly litigation or going to court by resolving issues using Alternative Dispute Resolution (ADR).
- ADR provides a confidential and alternative method of tackling legal disputes which avoids going to court. The most common types of ADR are conciliation and mediation, arbitration and adjudication.
- ADR is typically cheaper and faster than entering into litigation and resorting to the courts. As long as communication has not irretrievably broken down between the parties at dispute, it should be considered as a more efficient method of achieving an outcome.

Alternative Dispute Resolution

- It is also helpful in terms of maintaining a degree of privacy compared to the more public nature of court proceedings.
- Arbitration is an increasingly attractive option for business as it enables any matters to be kept confidential which preserves the reputation of the individuals or business involved.

Online Dispute Resolution (ODR)

- Online Dispute Resolution or ODR is a process to settle disputes outside courts, combining technology and alternative dispute resolution ADR mechanisms.
- ODR covers disputes that are settled over the internet having been initiated in cyberspace but with a source outside it i.e. offline.
- Originally arbitration was intended as an alternative to going to court for various kinds of disputes but with time the method itself has become complex and expensive.
- ODR offers a faster, transparent and accessible option for many companies to resolve disputes online particularly those who have high volume and low-value cases.

Online Dispute Resolution - Method

- Synchronous ODR is a method of dispute resolution where the parties communicate with each other in real-time by using various video-conferencing applications.
- Asynchronous form is where communication is not conducted in real-time but via email or other such communication applications.
- Online Mediation is coming out to be the most favorable form of dispute resolution with nearly 70% of ODR platforms using the same to reach a conclusion.
- Typically online mediation starts with sending an email to parties that contain basic information about the proceedings followed by virtual meeting to be conducted in the chat rooms.

Online Dispute Resolution - Method

- Electronic Arbitration is a less popular method of online dispute resolution but it cover-up the process up to a certain extent.

Online Dispute Resolution – Platforms

- CADRE or Central for Alternate Dispute Resolution Excellence is a website base platform for ODR.
- First one party approaches the platform which then contracts the other party. If both the parties agree them an arbitrator is appointed and time-stamped intimations are sent through e-mails or WhatsApp. The decisions that are legally binding come within 20-25 days of time. CADRE has been resolving tenant and rental contract disputes for NesAway an online home rental startup.

Online Dispute Resolution – Platforms

- SAMA is another ODR platform that facilitates easy access to high-quality ADR service provider and helps people to resolve dispute online.
- SAMA is begin used as an ODR platform by ICICI Bank to resolve nearly 10,000 dispute with values going up as high as INR 20 lakh.
- CODR or Centre for Online Dispute Resolution positions itself as an institution that will administer cases online end to end.
- AGAMI is yet another non-profit ODR platform that aspires to create a better system of law and justice by providing time-efficient and feasible dispute resolution methods.