CBCS SCHEME

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BRMK557

Fifth Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026
Research Methodology and IPR

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	Define the term Research. Explain the research flow cycle with the help of a neat diagram.	07	L2	CO1
	b.	Interpret the factors that motivate Engineering Research.	07	L2	CO1
	c.	With the help of neat diagram, recall the 3 broad categories of developing and accessing knowledge in research.	06	L1	CO1
		OR			
Q.2	a.	What do you mean by Ethics? Recall the importance of practicing ethics in engineering research.	07	L1	CO1
	b.	Write short notes on the following : i) Fabrication ii) Plagiarism	08	L2	CO1
	c.	Explain in brief the 3 ways to credit the Research Contributions.	05	L2	CO1
		Module – 2			
Q.3	a.	Explain briefly the goals of conducting literature review in academic research.	10	L2	CO2
	b.	Explain how existing knowledge will act as a foundation for new knowledge.	10	L2	CO2
		OR			
Q.4	a.	Define Citation. Mention and explain the types of citations which fail to achieve their goals in benefiting the reader.	10	L2	CO2
	b.	With the help of neat diagram, illustrate how knowledge flows through a citation network.	10	L2	CO2
		Module – 3			
Q.5	a.	What is Intellectual Property? Discuss the role of IP in economic and cultural development of the society.	10	L2	CO1
	b.	List the type of inventions which are eligible for patenting and which are not patentable?	10	L1	CO3

		OR			
Q.6	a.	Define the term Patent. List and explain the conditions that must be met for obtaining a patent protection.	10	L2	CO3
	b.	With the help of neat diagram, explain the process of patenting an invention.	10	L2	CO3
		Module – 4			
Q.7	a.	What is Copy Right? Explain the criteria that a work must meet to qualify for Copy Right Protection.	10	L2	CO4
	b.	With the help of flowchart, explain the important steps involved in the process of copy right registration.	10	L2	CO4
		OR			
Q.8	a.	What is a Trademark? Explain eligibility criterias for trademark and designation of Trademark Symbols.	10	L2	CO4
	b.	With the help of neat flowchart, explain the process of trademark registration.	10	L2	CO4
		Module – 5			
Q.9	a.	What is an Industrial Design? Explain the procedure for registering an industrial design.	10	L2	CO5
	b.	Explain the classification of Industrial Design.	10	L2	CO5
		OR			
Q.10	a.	What is GI? Explain the mechanism available for the protection of rights related to GI.	10	L2	CO5
	b.	Discuss the case study of curcuma (turmeric) patent.	10	L2	CO5

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DEC 2025/Jan 2026 Solution

Subject Code: BRMK557

Module 1

Ques 1 a) Define the term Research. Explain the research flow cycle with the help of a neat diagram.

Answer:

Research is a systematic and organized process of identifying a problem, collecting relevant information, analyzing data, and drawing meaningful conclusions to generate new knowledge or improve existing knowledge. In engineering, research aims to solve real-world problems, improve technologies, and contribute to scientific and technological development.

The research flow cycle represents the step-by-step procedure followed while conducting research. It ensures that the research is logical, reliable, and goal-oriented.

The main stages of the research flow cycle are:

1. Identification of research problem
2. Review of literature
3. Formulation of objectives and hypotheses
4. Research design and methodology
5. Data collection
6. Data analysis and interpretation
7. Results, conclusions, and recommendations
8. Documentation and publication

Neat diagram (textual representation):

Problem Identification
↓
Literature Review
↓
Objectives & Hypothesis
↓
Research Methodology
↓
Data Collection
↓
Data Analysis
↓
Results & Conclusion
↓
Report / Publication

This cycle may repeat if further refinement or validation is required.

Ques 1 b) Interpret the factors that motivate Engineering Research.
Answer:

Engineering research is motivated by several important factors that drive innovation and problem-solving. These motivating factors help engineers improve systems, products, and technologies.

The key factors motivating engineering research are:

1. Technological advancement – Continuous demand for faster, safer, and more efficient technologies motivates research.
2. Problem-solving needs – Real-world engineering problems such as traffic congestion, energy shortage, and pollution encourage research solutions.
3. Industrial requirements – Industries demand better processes, cost reduction, and improved product quality.
4. Societal needs – Research is driven by social challenges like healthcare improvement, sustainable development, and smart infrastructure.
5. Academic curiosity – Engineers are motivated to explore unanswered questions and expand scientific knowledge.
6. Government policies and funding – Research grants and national missions encourage engineering innovation.
7. Global competition – The need to stay competitive at international levels motivates continuous research and development.

These factors together play a major role in advancing engineering research.

Ques 1 c) With the help of a neat diagram, recall the 3 broad categories of developing and accessing knowledge in research.
Answer:

In research, knowledge is developed and accessed through three broad categories. These categories help researchers understand, create, and validate knowledge systematically.

The three broad categories are:

1. Empirical knowledge – Knowledge gained through observation, experiments, and practical experience.
2. Theoretical knowledge – Knowledge developed using concepts, models, principles, and mathematical formulations.
3. Experiential knowledge – Knowledge obtained through personal experience, practice, and professional expertise.

Neat diagram (textual representation):

Knowledge in Research

↙ ↓ ↘

Empirical Theoretical Experiential

These categories together form the foundation of research knowledge development.

Ques 2 a) What do you mean by Ethics? Recall the importance of practicing ethics in engineering research.

Answer:

Ethics refers to the moral principles and standards that guide human behavior and help distinguish between what is right and what is wrong. In the context of engineering research, ethics ensure that research is conducted honestly, responsibly, and with respect for society, the environment, and all stakeholders involved.

Practicing ethics in engineering research is very important due to the following reasons:

1. **Integrity of research** – Ethical practices ensure that data collection, analysis, and reporting are truthful and accurate.

2. **Prevention of misconduct** – Ethics help avoid serious issues such as fabrication, falsification, and plagiarism.

3. **Trust and credibility** – Ethical research builds trust among researchers, funding agencies, journals, and the general public.

4. **Protection of society and environment** – Ethical guidelines ensure that research does not harm humans, animals, or the environment.

5. **Professional responsibility** – Engineers are accountable for the consequences of their research outcomes.

6. **Legal and academic compliance** – Following ethics helps avoid legal issues, academic penalties, and rejection of research work.

7. **Sustainable development** – Ethical research promotes socially responsible and sustainable technological growth.

Thus, ethics form the backbone of responsible and reliable engineering research.

Ques 2 b) Write short notes on the following

i) Fabrication

Fabrication is a serious form of research misconduct in which a researcher deliberately creates false data, results, or observations instead of conducting actual experiments or studies. This may include inventing experimental readings, survey responses, or simulation results to support desired conclusions.

Fabrication is unethical because it misleads other researchers, wastes resources, and can result in faulty engineering designs or unsafe technologies. It damages the credibility of the researcher, the institution, and the scientific community as a whole. Due to its harmful impact, fabrication is strictly prohibited in academic and industrial research.

ii) Plagiarism

Plagiarism is the act of presenting someone else's ideas, words, figures, or research work as one's own without giving proper acknowledgment to the original source. It can occur intentionally or unintentionally and includes copying text, reusing published data, or paraphrasing without citation.

Plagiarism violates academic integrity and ethical standards. Consequences may include rejection of papers, loss of academic reputation, penalties from institutions, and legal issues. To avoid plagiarism, researchers must properly cite sources, use quotation marks where necessary, and ensure originality in their work.

Ques 2 **c) Explain in brief the 3 ways to credit the Research Contributions.**

Answer:

Crediting research contributions is essential to ensure fairness, transparency, and ethical recognition of all individuals involved in a research project. The three main ways to credit research contributions are:

1. **Authorship** – Individuals who have made significant intellectual contributions such as problem formulation, methodology design, data analysis, or manuscript writing are included as authors.

2. **Acknowledgement** – People who provided indirect support such as technical help, guidance, funding, or administrative assistance are recognized in the acknowledgement section.

3. **Citation and referencing** – Proper citation is given to previously published research, theories, data, or ideas that influenced the current study.

These methods help maintain ethical standards and respect intellectual contributions in research.

Module 2

3a.Explain briefly the goals of conducting literature review in academic research-10,L2,CO2

A literature review is a systematic study of existing research related to a chosen topic. The major goals are:

1. Identification of Research Problem
   It helps the researcher clearly identify and refine a research problem that may initially be vague.
2. Understanding Existing Approaches
   It provides knowledge about concepts, theories, methodologies, and approaches already used in the field.
3. Avoiding Duplication
   By understanding prior work, it ensures that the proposed research is not a repetition of existing studies.
4. Establishing Research Gap
   It helps in identifying unsolved issues, limitations, and missing links in existing research.
5. Selection of Appropriate Methodology
   Reviewing earlier studies guides the researcher in choosing suitable tools, models, and experimental methods.
6. Ensuring Novelty and Significance
   A good literature review justifies that the research will contribute new and innovative knowledge.
7. Providing Strong Research Foundation
   It builds credibility by showing that the researcher understands the state of the art.

3b. Explain how existing knowledge will act as a foundation for new knowledge-10,L2,CO2

New knowledge in research can only be interpreted within the context of what is already known, and cannot exist without the foundation of existing knowledge.

The new knowledge can have vastly different interpretations depending on what the researcher‘s background, and one‘s perception of that new knowledge can change from indifference to excitement (or vice versa), depending on what else one knows.

The significance can normally be argued from the point of view that there is indeed an existing problem and that it is known by looking at what already exists in the field.
The existing knowledge is needed to make the case that there is a problem and that it is important.
One can infer that the knowledge that is sought to be produced does not yet exist by describing what other knowledge already exists and by pointing out that this part is missing so that what we have is original. To do this, one again needs the existing knowledge: the context, the significance, the originality, and the tools.
Normally, one finds this knowledge by reading and surveying the literature in the field that was established long ago and also about the more recent knowledge which is in fact always changing.
With this foundation in place, the new knowledge that one will make will be much more difficult to challenge than without that strong foundation in place which is ensured with lots of references to the literature.
Often, but not always, the textbooks contain the older established knowledge and the research papers the newer work. Reading the textbooks on one‘s topic provide the established knowledge and the background to be able to read the newer work usually recorded in the research papers
The research paper is written for other researchers out on the edge of knowledge and it assumes that the reader already knows a lot in that field
The review process must explain how a research item builds on another one. An effective review of literature ensures a firm foundation for advancing knowledge, facilitates theoretical growth, eliminates as areas that might be of interest, and opens new avenues of possible work
Generally, a good literature survey is the first expectation of a supervisor from the

research student, and when done well can create a good impression that the state of art in the chosen field is well understood

A good literature review would not draw hasty conclusions and look into the individual references to determine the underlying causes/assumptions/mechanisms in each of them so as to synthesize the available information in a much more meaningful way

A good literature survey is typically a two-step process as enumerated below:

o Identify the major topics or subtopics or concepts relevant to the subject under consideration.

o Place the citation of the relevant source (article/patent/website/data, etc.) in the correct category of the concept/topic/subtopic

It could be that as one is reading and comes across something that one considers to be very important for one‘s work. Naturally, one highlights that section or underlines it, or put an asterisk in the margin, so that one could come back to it later. Effectively, one is saying that it is important and hence the marking so as not to forget it.

A comprehensive literature survey should methodically analyze and synthesize quality archived work, provide a firm foundation to a topic of interest and the choice of suitable research methodologies, and demonstrate that the proposed work would make a novel contribution to the overall field of research.

OR

4a.Define citation.Mention and explain the types of citation which fail to achieve their goals in benifitting the readers.- 10,L2,CO2

CITATION-Academic writing, by definition, must follow certain rules and conventions. Among the most important of these are the rules and conventions about citing, referencing, attributing, and acknowledging the works of others.
That means giving proper credit wherever due.
Citing is the practice of quoting from, referring to other authors‘ works and ideas in the text of our work in such a way that the context is clear to the reader.
Referencing is the listing of the full publication details of a published work that is cited so as to give background information to the readers.

Acknowledgment in research publications indicates contributions to scientific work. However, acknowledgment, attributions, and citations differ in the manner of their application.

CITATIONS: FUNCTIONS AND ATTRIBUTES

Citations (references) credit others for their work, while allowing the readers to trace the source publication if needed.

Any portion of someone else‘s work or ideas in papers, patents, or presentations must be used in any new document only by clearly citing the source.

This applies to all forms of written sources in the form of texts, images, sounds, etc. and failure to do may be considered plagiarism

When a bibliography of previously published patents or papers is placed in the new works of a researcher, a connection is established between the new and previous work. As per relevance to context, the researcher provides due credit through the use of a citation.

Citations help the readers to verify the quality and importance of the new work and justification of the findings. It is a way to tell readers that certain material in the researcher‘s present work has come from another source and as an ethical responsibility; appropriate credit has been given to the original author or writer.

Materials that can be cited include journal papers, conference proceeding, books, theses, newspaper articles, websites, or other online resources and personal communication.

Preferably, citations should be given at the end of a sentence or the end of a paragraph as can be seen even in this particular paragraph. Citation must contain enough details so that readers can easily find the referenced material.

A researcher needs to cite each source twice:

(i) in-text citation, in the text of the article exactly where the source is quoted or paraphrased, and
(ii) a second time in the references, typically at the end of the chapter or a book or at the end of a research article

LaTeX, a document preparation system often used by engineering researchers to automatically format documents that comply with standard formatting needs, is very effective to track and update citations

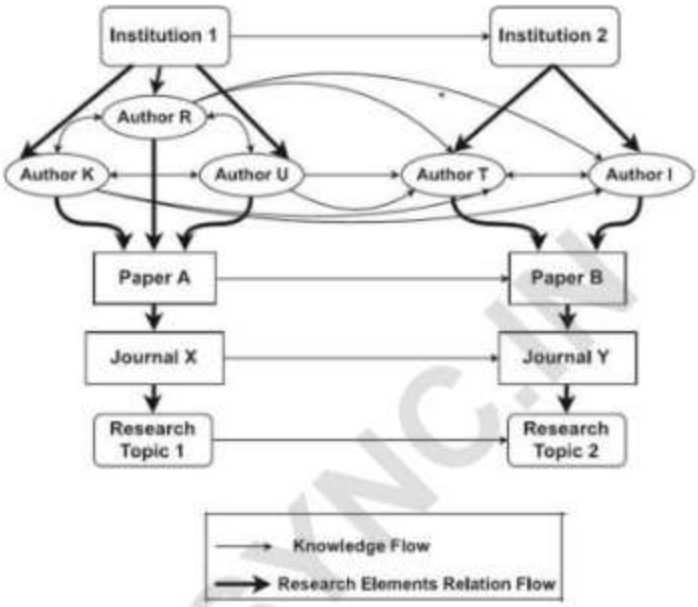
There are three main functions of citation:

(i) Verification function: Authors have a scope for finding intentional or unintentional distortion of research or misleading statements. Citation offers the readers a chance to ascertain if the original source is justified or not, and if that assertion is properly described in the present work
(ii) Acknowledgment function: Researchers primarily receive credit for their work through citations. Citations play crucial role in promotion of individual researchers and their continued employment. Many reputed organizations and institutes provide research funding based on the reputations of the researchers. Citations help all researchers to enhance their reputation and provide detailed background of the research work.
(iii) Documentation function: Citations are also used to document scientific concepts and historical progress of any particular technology over the

years
Citations are the currency that authors would wish to accumulate and the technical community gives them credit for these contributions. When other authors make citations, they honor those who initiated the ideas
Authors should cite sources to indicate significance of the work to the reader. Relevant citations help authors develop an easily understandable argument and prevent the need to navigate through work irrelevant to the reader‘s interest areas
There are certain cases when references do not fulfill the actual goal of citations and acknowledgments, and thus do not benefit the reader.
o Spurious citations: In certain cases, when citation is not required or an appropriate one is not found, if the author nevertheless goes ahead with including one anyways, it would be considered as a spurious citation
o Biased citations: When authors cite the work of their friends or colleagues despite there being no significant connection between the two works, or when they do not cite work of genuine significance because they do not wish to give credit in the form of citation to certain individuals, then such actions can be classified as biased citations.
o Self-citations: There is nothing wrong in citing one‘s prior work if the citation is really relevant. Self-citation of prior papers is natural because the latest paper is often a part of a larger research project which is ongoing
o Coercive citations: Despite shortcomings, impact factors remain a primary method of quantification of research. One side effect is that it creates an incentive for editors to indulge in coercion to add citations to the editor‘s journal

4b.With the help of neat diagram,illustrate how knowledge flows through citation network-10,L2,CO2

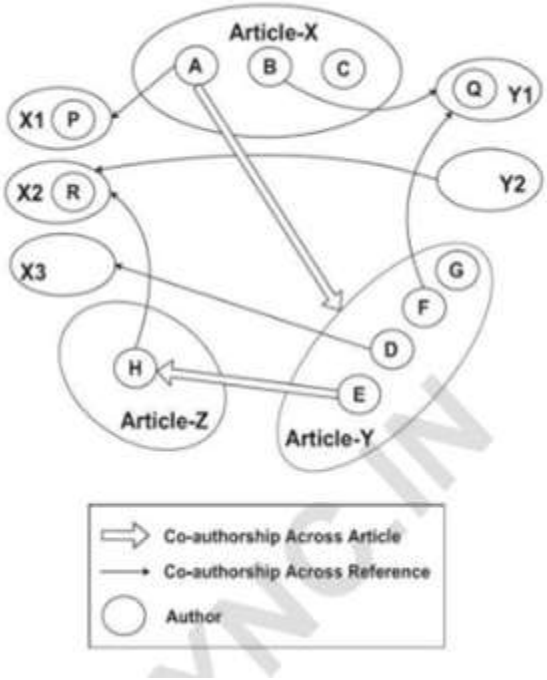
Knowledge flows through verbal communications, books, documents, video, audio, and images, which plays a powerful role in research community in promoting the formulation of new knowledge.
In engineering research, knowledge flow is primarily in the form of books, thesis, articles, patents, and reports. Citing a source is important for transmission of knowledge from previous work to an innovation
Knowledge flow happens between co-authors during research collaboration, among other researchers through their paper citation network, and also between institutions, departments, research fields or topics, and elements of research



If paper A is cited by paper B, then knowledge flows through citation networks across institutions.

The complex interdisciplinary nature of research encourages scholars to cooperate with each other to grab more advantages through collaboration, thereby improving quality of the research

The below figure shows a relationship between co-authorship and different types of citations. Three articles (X, Y, and Z) and five references (X1, X2, X3, Y1, and Y2) of article X and Y, respectively, are considered. A, B, and C are authors of article X, and D, E, F, G, and also A are authors of article Y. Article Z has two authors H and E. References X1, X2, X3, Y1, and Y2 have authors (A, P), (H, R), (D), (Q, B, F), and (R), respectively.



Module 3

Ques 5 a) Intellectual Property (IP) refers to creations of the human mind that are legally protected so the creators can control and benefit from their use. In simple terms, IP gives people ownership rights over ideas and creative works, just like property rights over land or goods.

Main Types of Intellectual Property

- Patents – protect inventions and technological innovations
- Copyright – protect literary, artistic, musical, and digital works
- Trademarks – protect brand names, logos, and symbols
- Industrial Designs – protect the visual design of products
- Geographical Indications (GIs) – protect products linked to a specific region (e.g., Darjeeling Tea)

Role of Intellectual Property in Economic Development

1. Encourages Innovation and Investment
   IP protection motivates inventors, researchers, and companies to invest time and money in new ideas because they can earn returns from their work.
2. Boosts Industrial Growth
   Strong IP systems support industries such as pharmaceuticals, IT, biotechnology, media, and manufacturing, leading to job creation and economic expansion.

3. Attracts Foreign Direct Investment (FDI)
   Countries with reliable IP laws are more attractive to foreign investors who want assurance that their technologies and brands will be protected.
4. Promotes Technology Transfer
   IP facilitates licensing, partnerships, and knowledge sharing between institutions and countries, helping developing economies grow.
5. Supports Small Businesses and Startups
   Trademarks and patents help startups protect their innovations, build brand value, and compete in the market.

Role of Intellectual Property in Cultural Development

1. Preserves Cultural Heritage
   Copyright and geographical indications help protect traditional knowledge, folklore, art, and regional products from misuse or exploitation.
2. Encourages Creative Expression
   Artists, writers, filmmakers, and musicians are more willing to create when their work is legally protected and fairly rewarded.
3. Promotes Cultural Industries
   IP supports growth in publishing, film, music, fashion, and crafts, strengthening cultural identity and diversity.
4. Ensures Recognition and Respect for Creators
   IP laws give moral and economic recognition to creators, reinforcing respect for creativity in society.
5. Balances Access and Protection
   While protecting creators, IP laws also allow limited public use (fair use, compulsory licensing), ensuring cultural and educational access.

Ques 5 b)

Inventions Eligible for Patenting

An invention is patentable if it satisfies three basic conditions:
novelty, inventive step, and industrial applicability.
The following types of inventions are eligible for patenting:

1. New products
   – e.g., a new machine, device, chemical compound, or pharmaceutical product.

2. New processes or methods
   – e.g., a new method of manufacturing, treatment, or production.

3. Improvements to existing inventions
   – provided the improvement is novel and non-obvious.

4. Mechanical inventions
   – engines, tools, instruments, and mechanical devices.

5. Chemical inventions
   – new chemical substances, compositions, or formulations.

6. Biotechnological inventions
   – genetically modified microorganisms, vaccines (subject to legal provisions).

7. Electrical and electronic inventions
   – circuits, communication systems, electronic devices.

8. Computer-related inventions
   – when combined with hardware and showing technical advancement.

9. Medical devices
   – diagnostic equipment, surgical instruments (not treatment methods).

10. Industrial inventions
    – inventions capable of being made or used in an industry.

Inventions Not Patentable

The following are not patentable under patent law (as per the Indian Patents Act and similar laws):

1. Discoveries
   – discovery of scientific principles, natural laws, or naturally occurring substances.

2. Abstract ideas and theories
   – mathematical methods, algorithms, or mental acts.

3. Mere new use of a known substance
   – unless it results in enhanced efficacy.

4. Methods of agriculture or horticulture
   – e.g., farming or cultivation techniques.

5. Methods of medical treatment
   – surgical, therapeutic, or diagnostic methods on humans or animals.

6. Plants and animals in whole or part
   – except microorganisms.

7. Computer programs per se
   – software without technical application or hardware involvement.

8. Aesthetic creations
   – literary, artistic, musical, or dramatic works.

9. Inventions against public order or morality
   – harmful to life, environment, or society.

10. Traditional knowledge
   – knowledge already known within a community (e.g., turmeric healing properties).

Ques 6 a)

Definition of Patent

A patent is a legal right granted by the government to an inventor for an invention, giving the inventor the exclusive right to make, use, sell, or license the invention for a limited period (usually 20 years) in exchange for public disclosure of the invention.

Conditions for Obtaining Patent Protection

For an invention to be granted a patent, it must satisfy the following essential conditions:

1. Novelty (Newness)

- The invention must be new and not previously known to the public anywhere in the world.
- It should not be published, used, or disclosed before the patent application date.

Example: A completely new type of water-purifying device.

2. Inventive Step (Non-Obviousness)

- The invention must involve a technical advancement or economic significance.
- It should not be obvious to a person skilled in the relevant field.

Example: A machine modification that significantly improves efficiency, not a minor change.

3. Industrial Applicability (Utility)

- The invention must be capable of being made or used in an industry.
- It should have practical usefulness.

Example: A chemical compound that can be used in medicine or manufacturing.

4. Patentable Subject Matter

- The invention must not fall under non-patentable categories (such as natural discoveries, medical treatment methods, or abstract ideas).

5. Disclosure Requirement

- The patent application must clearly and completely describe the invention so that a skilled person can reproduce it.

Ques 6 b)

Process of Patenting an Invention

The patenting process involves a series of legal and technical steps through which an invention is examined and granted protection by the Patent Office.

Idea / Invention
↓
Patent Search
↓
Filing of Patent Application
(Provisional / Complete)
↓
Publication of Application
↓
Request for Examination
↓
Examination by Patent Office
↓
First Examination Report (FER)
↓
Response to Objections
↓
Grant of Patent

Explanation of Each Step

1. Idea / Invention

- The process begins with a new invention that solves a technical problem.
- The inventor documents the concept, drawings, and working principle.

2. Patent Search

- A prior art search is conducted to check whether the invention is already known.
- Helps determine novelty and avoid rejection.

3. Filing of Patent Application

- The inventor files:
  - Provisional application (early protection, basic details), or
  - Complete specification (full technical details and claims).

- Filed at the Patent Office.

4. Publication of Application

- The application is published in the Official Patent Journal (usually after 18 months).
- Makes the invention available to the public.

5. Request for Examination (RFE)

- The applicant must formally request examination.

- Without RFE, the application will not be examined

6. Examination by Patent Office

- The patent examiner checks:
    - Novelty
    - Inventive step
    - Industrial applicability
    - Patentable subject matter

7. First Examination Report (FER)

- Examiner issues objections or requirements.
- Applicant must respond within the specified time.

8. Response to Objections

- Applicant amends claims or provides explanations.
- Hearing may be conducted if required.

9. Grant of Patent

- If all objections are satisfied, the patent is granted.

- The invention gets legal protection for 20 years from the filing date.

Module 4

Ques 7 a)What is Copy Right? Explain the criteria that a work must meet to qualify for Copy Right Protection.

Ans: 'Copyright' is legal rights provided to the work in the fields of literature and computer software. **'Related Rights'** encompass the author's work in the fields of dramatics, sound recording, film/video recordings, paintings, architecture, etc.An individual who develops the content is called an **'Author'.**

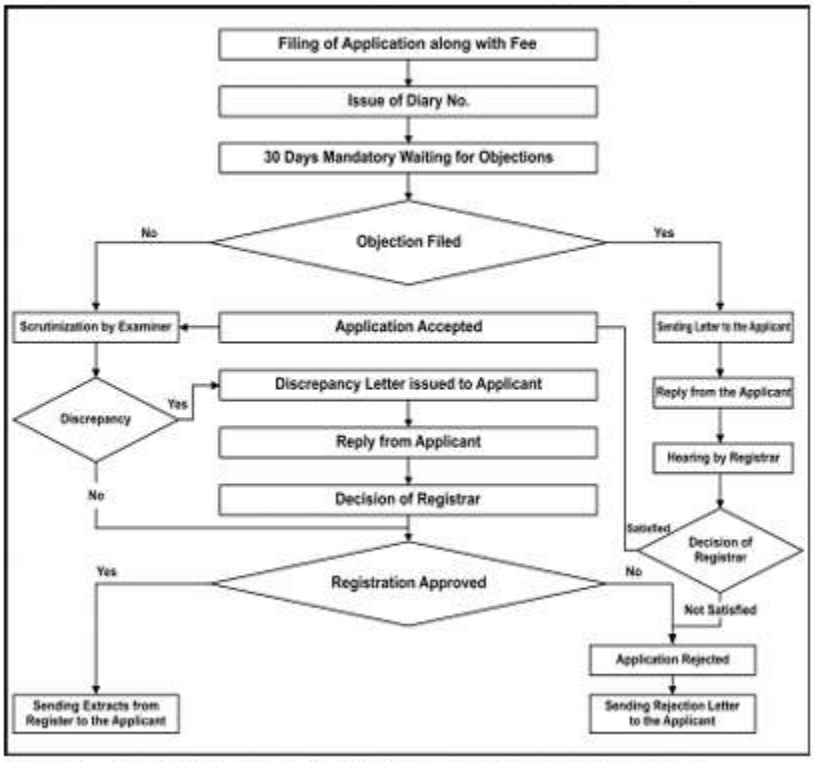
A task undertaken in the fields of literature, dramas, music, artistic, cinematograph film and sound recording is referred **to as work**

To qualify for Copyright protection, a work must exist in some physical (or tangible) form. The duration of the existence of the physical form may vary from a very short period to many years. Virtually any form of expression which can be viewed or listened to is eligible to qualify as Copyright. Even hurriedly scribbled notes for an impromptu speech are considered copyrightable material. The Copyright work has to be expressed by the creator in his frame of thought. In other words, the work has to be original i.e. the author created it from independent thinking void of duplication. This type of work is termed as an Original Work of Authorship (OWA). It may appear similar to already existing works but should not be the same. The original work may lack quality or quantity or aesthetic merit or all these parameters; still, it will pass the test of copyrightable work. In addition to originality for the work, Copyright protection also requires at least some creative effort on the part of the author. There is no minimum limit for the extent of creativeness. It is a subjective matter. The minimal level of creativity needed for Copyright protection depends on the judgment of the evaluator (adjudicated by the Office of Registrar of Copyright). As an example, mere changing the dimensions of a book will not be granted Copyright protection. Similarly, an address book of alphabetically arranged telephone numbers does not qualify for

Copyright protection as it involves a straightforward alphabetical listing of phone numbers rather than a creative selection of listings.

Ques 7 b)With the help of flowchart, explain the important steps involved in the process of copyright registration.

ANS: A duly filled application (Form XIV) is submitted to the Copyright Office at the following address: The Registrar of Copyright, Plot no. 32, Boudhik Sampada Bhawan, Sector 14, Dwarka, New Delhi - 110075. The application can be submitted by post or online registration through the _E-filing facility' (www.copyright.gov.in). Any person who is either an author of the work or assignee of the concerned work can file an application for Copyright. Usually, it takes around 2-3 months to get the work registered by the Copyright Office. After applying, there is a mandatory waiting period of 30 days. If any person has any objection to the claim/s made in the application, he can contact the office of the Registrar of Copyrights. After giving an opportunity of hearing to both the parties, the Registrar may decide the case in favour or against the author of the work. Once the objections (if any) are cleared, the application is evaluated by the examiners. If any doubts/queries are raised, the applicant is given ample time (around 45 days) to clear these objections. The elements included in Copyright filing to grant are depicted below in the flow chart:



Source: https://copyright.gov.in/frmWorkFlow.aspx *(slightly modified)*

Fig. Flow chart for the process of Copyright registration.

Ques 8 a)What is a Trademark? Explain eligibility criteria for trademark and designation of Trademark Symbols.

Ans: In simple language, a Trademark (or Trade Mark) is a unique symbol which is capable of identifying as well as differentiating products or services of one organization from those of others. The word _Mark‘ stands for a sign, design, phrase, slogan, symbol, name, numeral, devise, or a combination of these. Essentially, the Trademark is anything that identifies a brand to a common consumer.

For goods/services to be legally classified as Trademark, they need to pass the following conditions:

Distinctiveness - The goods and services for which the protection is sought should possess enough uniqueness to identify it as a Trademark. It must be capable of identifying the source of goods or services in the target market.

Descriptiveness - The Trademark should not be describing the description of the concerned goods or services. Descriptive marks are unlikely to be protected under Trademark law. However, descriptive words may be registered if they acquire ―secondary meaning‖, such as the brand name _Apple‘ is used by a USA based multinational company that manufactures electronic gadgets.

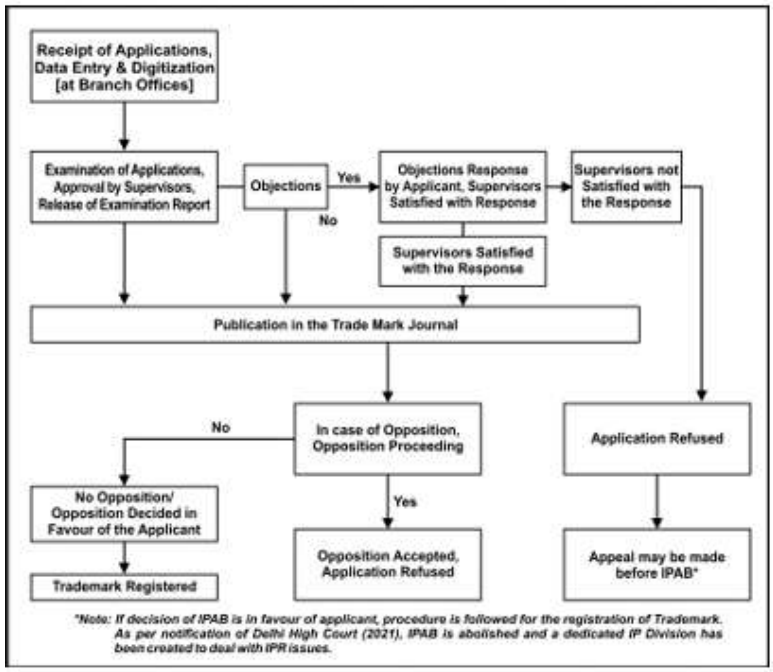
Similarity to the prior marks - The mark should be unique and should not be having similarity to the existing marks.

Ques 8 b)With the help of neat flowchart, explain the process of trademark registration.

Ans: To seek Trademark registration, the proprietor of the Trademark has to fill an application. The proprietor may choose to hire an agent to fill and submit the application on his behalf. Before applying, the applicant needs to conduct a prior art search to ensure the registration criteria.

Prior to applying for Trademark registration, it is always prudent to check whether the intended Trademark is already registered or not. Also, it is ascertained whether the intended Trademark is not similar to the ones already registered.

Once the _prior art search‘ is over and the applicant is convinced about the distinctiveness of the Trademark, he can proceed to fill the application form for registration (TM-A). The application is filed at the Trademarks Office subject to the jurisdiction of the applicant. The steps involved in the registration process are as follows: After the prior art search has been conducted, the applicant can apply for the registration on his own or with the help of a certified agent. The application is assigned an application number within a few days. The same can be tracked online at https://ipindiaonline.gov.in/tmrpublicsearch/frmmain.aspx



Source: http://www.ipindia.nic.in/workflow-chart.htm *(slightly modified)*

The application is scrutinized by a professional examiner. If everything is in order, the particulars of the application are published in the official Trademark journal (http://www.ipindia. nic.in/journal-tm.htm). Otherwise, he will send the objections to the applicant for rectification. Based on the satisfactory response, the examiner would recommend the revised application to be published in the journal. If the application is rejected, the applicant may approach the Intellectual Property Division to challenge the rejection of an application by the examiner. Once the Trademark is published in the official journal, the public has an opportunity to file an objection, if any, within 90 days. After hearing both the parties, the officer decides whether to proceed further for the grant of Trademark or disallow the grant of Trademark. In case of unfavourable outcome, the applicant has the right to contest the decision in front of the IPAB.

Once the application has successfully completed all formalities, a Trademark registration certificate is issued in the name of the applicant.

Module 5

Q9.a. What is Industrial Design? Explain the procedure for registering an industrial design. registering an Explain the classification of Industrial Design. (10 marks)

Answer:

Industrial Design

The word ‘Design’ is defined as the features of shape, configuration, pattern, ornament or composition of lines or colors applied to any article. The Design may be of any dimension i.e. one or two or three dimensional or a combination of these. In addition, it may be created by any industrial process or means, whether manual, mechanical or chemical, separate or combined, which in the finished article appeal to and is judged solely by the eye. But the word anything which is in substance a merely mechanical device.

Procedure for Registration of Industrial Designs

Prior Art Search - Before filing an application for registration of Industrial Designs, it is prudent to ensure that the same or similar Design has not been registered earlier.

This search can be carried out using various search engines, such as:

1. Design Search Utility (CGPDTM)

(https://ipindiaservices.gov.in/designsearch/).

2. Global Design Database (WIPO)

(https://www3.wipo.int/designdb/en/index.jsp).

3. Hague Express Database (WIPO)

(https://www3.wipo.int/designdb/hague/en/#).

4. Design View (EUIPO) (https://www.tmdn.org/tmdsviewweb/

welcome#/dsview).

Application for Registration –

· Once the applicant is satisfied that his Design is novel and significantly distinguishable from other Designs, he can proceed with filing an application for Design registration.

· The application for registration of Design can be filed by an individual, small entity, institution, organization and industry. The application may be filed through a professional patent agent or legal practitioner.

· If the applicant is not a resident of India, an agent residing in India has to be employed for this purpose. The applicant submits the registration application at the Design Office Deputy Controller of Patents & Designs, Patent Office, Intellectual Property Office Building, CP-2 Sector V, Salt Lake City, Kolkata- 700091.

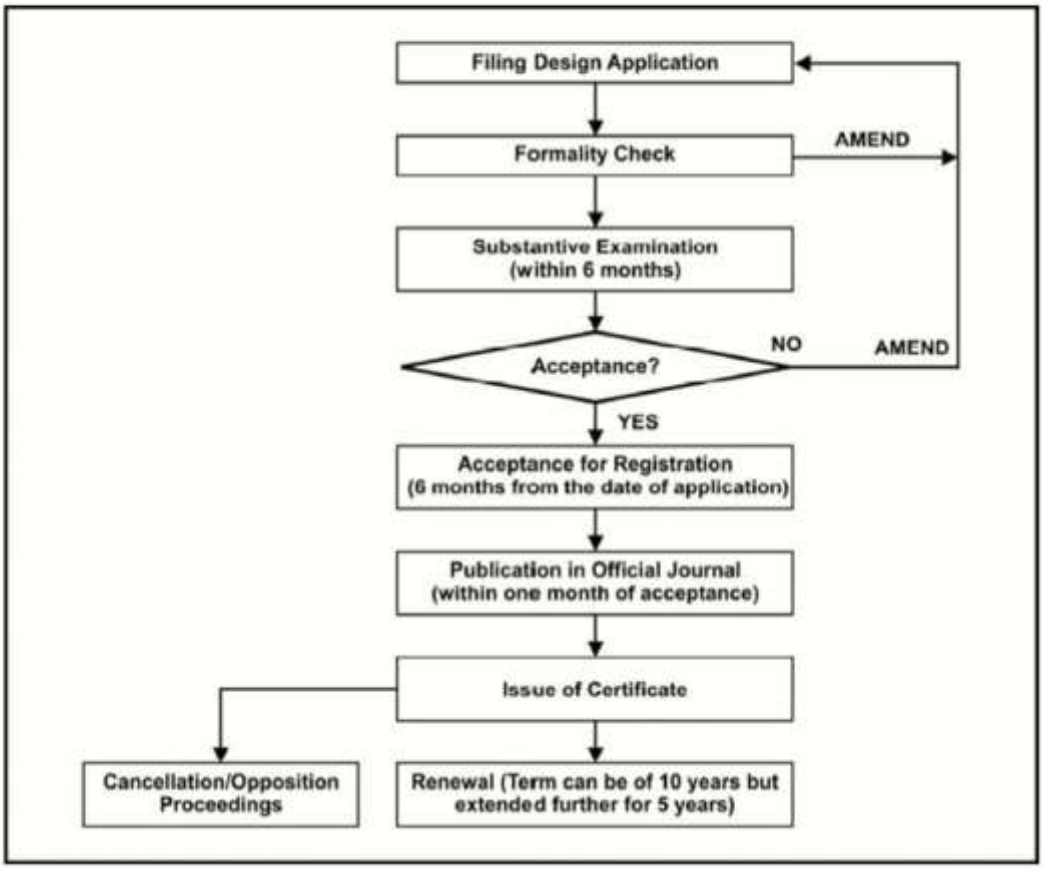
· After the application has been filed, an officer (examiner) analyses the application for qualifying the minimum standards laid down for eligibility criteria for registration. In case of any query, the same is sent to the applicant and he is supposed to respond within 6 months from the objection raised. Once the objections are removed, the application is accepted for registration.

· If no objection is received from the public, the Design is registered. After the registration of the Design, the applicant becomes the proprietor of the Design and is conferred with the exclusive right to apply that Design to the article belonging to the class in which it is registered.

· The applicant puts up a request for issuance of a certificate of registration (for an Industrial Design).

flow chart of the registration process is mentioned below:

Figure 2.10: Flowchart for the process of Design registration.



9. b. Explain the classification of Industrial Design. (10 mark)

Answer:

Classification of Industrial Designs

· Designs are registered in different classes as per the Locarno Agreement, 1968.

· The classification comprises a list of classes and subclasses with a list of goods that constitute Industrial Designs.

· There are 32 classes and 237 subclasses that can be searched in two languages i.e. English and French.

· For example, Class 1 includes foodstuffs for human beings, foodstuffs for animals, and dietetic foods excluding packages because they are classified under Class 9 (Bottles, Flasks, Pots, Carboys, Demijohns, and Pressurized Containers).

· Class 32 classifies the Design of graphic symbols and logos, surface patterns, and ornamentation.

Q.10

a. What is GI? Explain the mechanism available for the protection of rights related to GI. (10 mark)

Answer:

Geographical Indications (GI)

Overview and definition

· A Geographical Indication (GI) is defined as a sign that can be used on products belonging to a particular geographical location/region and possesses qualities or a reputation associated with that region.

· In Gl, there is a strong link between the product and its original place of production.

· Example: Tirupati Laddu from AP. Rasgulla from Oddisha, Kashmir Saffron from J and K, Champagne from France, Kanchipuram silk saree from TN.

Rights Granted to the Holders:

The following rights are associated with Gl

1. Right to grant the license to others: The holder has the right to gift, sell, transfer/grant a license, mortgage, or enter into any other arrangement for consideration regarding their product. A license or assignment must be given in writing and registered with the Registrar of GI, for it to be valid and legitimate.

2. Right to sue: The holder of GI has the right to use and take legal action against a person who uses the product without his consent.

3. Right to exploit: The holder of Gl can authorize users with exclusive rights to use goods for which the Gl is registered.

4. Right to get reliefs: Registered proprietors and authorized users have the right to obtain relief concerning the violation of such Gl products

Protection of GI

The IP rights to GI are enforced by the court of law of the concerned country.

The Gl registration of a product has certain advantages.

It enables to identification of pirated/non-genuine stuff, provides more commercial value to the product, and also strengthens the case if it reaches the judicial courts.

The two common methods of protecting a GI are:

· Many countries, including India protect GI by using the sui generis system.

· This decision was taken after the TRIPS agreement (1995) and an option was given to the countries to choose either TRIPS standards or the sui generis system.

10 b. Discuss the case study of curcuma (turmeric) patent. (10 marks)

· Turmeric is a tropical herb grown in east India. Turmeric powder is widely used in India as a medicine, a food ingredient and a dye to name a few of its uses[3]. For instance, it is used as a blood purifier, in treating the common cold, and as an anti-parasitic for many skin infections. It is also used as an essential ingredient in cooking many Indian dishes.

· In 1995, the United States awarded patent on turmeric to University of Mississippi medical center for wound healing property. The claimed subject matter was the use of "turmeric powder and its administration", both oral as well as topical, for wound healing. An exclusive right has been granted to sell and distribute. The Indian Council for Scientific and Industrial Research (CSIR) had objected to the patent granted and provided documented evidences of the prior art to USPTO.

· Though it was a well-known fact that the use of turmeric was known in every household since ages in India, it was a herculean task to find published information on the use of turmeric powder through oral as well as topical route for wound healing. Due to extensive research, 32 references were located in different languages namely Sanskrit, Urdu and Hindi.

· Therefore, the USPTO revoked the patent, stating that the claims made in the patent were obvious and anticipated, and agreeing that the use of turmeric was an old art of healing wounds. Therefore, the TK that belonged to India was safeguarded in Turmeric case.