

KLS Vishwanathrao Deshpande Institute of Technology

(Accredited by NAAC with "A" Grade)

(Approved by AICTE, New Delhi, Affiliated to VTU, Belagavi)

(Recognized Under Section 2(f) by UGC, New Delhi)

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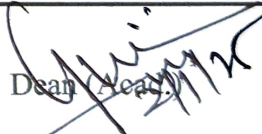
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

University / Model Question Paper Scheme & Solution

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|------------------------|---|------------------------------|
| Faculty Name | : | Prof. Pooja. C. Shinde |
| Course Name | : | Research Methodology and IPR |
| Course Code | : | 21RMIS6 |
| Year of Question Paper | : | June/July 2024 |
| Date of Submission | : | 12/09/2024 |


Faculty Member


Head of Department
Dept. of Electronic & Communication Engg.
KLS Vishwanathrao Deshpande Institute of Technology
Uttara Kannada, Haliyal (U.K.)


Dean (Acad.)

CBCS SCHEME

USN

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21RMI56

Fifth Semester B.E. Degree Examination, June/July 2024 Research Methodology and Intellectual Property Rights

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Identify the meaning of Research and brief out the objectives and motivation in Engineering Research. (10 Marks)
b. Identify the steps to find the "Solve a worthwhile problem". (10 Marks)

OR

- 2 a. Identify the types of Engineering Research and briefly explain them. (10 Marks)
b. Identify the ethical issues related to authorship and brief out them. (10 Marks)

Module-2

- 3 a. Identify the essence of new and existing knowledge and explain briefly. (10 Marks)
b. Identify how search operators are used to narrow down the search results. (10 Marks)

OR

- 4 a. Identify the impacts of title and keywords on citation. (10 Marks)
b. Identify acknowledgement and attributions in research process and briefly explain. (10 Marks)

Module-3

- 5 a. Define Intellectual Property (IP). Explain the major types of IP. (10 Marks)
b. Identify the process of patenting. Briefly explain. (10 Marks)

OR

- 6 a. Explain briefly the Commercialization of a patent. (10 Marks)
b. What are the exclusions (product and processes) that cannot be patented? Explain. (10 Marks)

Module-4

- 7 a. Explain the classes or types of copyrights. (10 Marks)
b. What is a Trademark? Explain the symbols in TM. (10 Marks)

OR

- 8 a. What are the advantages "the registration of a trademark provides to the proprietor"? (10 Marks)
b. Identify process of Trademark registration and explain briefly the classification of TM. (10 Marks)

Module-5

- 9 a. Define Industrial design. Briefly explain acts and laws to govern Industrial design. (10 Marks)
b. Identify procedure for registration of Industrial design by taking example of Aple Inc Vs Samsung Electronics Co. (10 Marks)

OR

- 10 a. Define Geographical Identification (GI) and briefly explain acts, laws and rules pertaining to GI. (10 Marks)
b. Identify IP Organizations in INDIA. Explain schemes and programs for Intellectual Property Rights. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.



Research Methodology and IPR.

June/July 2024 (Scheme & Solution)

- 1 a. Definition of Research and Explanation - 2 Marks.
Objectives & Motivation with Brief Explanation - $4 \times 2 = 8$ Marks

Research \rightarrow It is a systematic process of discovery that involves seeking new knowledge or applying existing knowledge in new ways.

Objectives \rightarrow

Solve new and important problem.

Motivation \rightarrow

Intrinsic, Extrinsic, and Social Motivation.

- 1 b. Finding & Solving worthwhile Problem.
there are four steps explaining each - ($2\frac{1}{2} \times 4 = 10$)

① Conversation

② Observation

③ Detecting Efficient Solution

④ Create problems worth solving intentionally

OR

- 2 a. Types of Engineering Research ($2\frac{1}{2} \times 4 = 10$)

① Descriptive

② Correlation

③ Casual

④ Experimental research.

- 2 b. Ethical issues related to authorship and brief ($2\frac{1}{2} \times 4 = 10$)

* Responsible and ethical authorship. (Fabrication)

* The work too be trust worthy, & Truthful. (Falsification)

* Plagiarism

* Other type of research bias.

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3(a).

The essence of new and existing knowledge explains briefly (3)

The interpretation of new knowledge heavily $(2 \times 5 = 10)$ depends on the researcher's background and perception, which can range from indifference to excitement. The significance of new knowledge is often established by different existing problems.

Existing knowledge is essential for highlighting the existence of a problem and its importance.

3(b)

Any five important points and explanation of search operators, are used to narrow down the search result.

$(5 \times 2 = 10)$

* OR operator.

* Brackets / Parentheses.

* Quotation Marks.

* Site Operator

* filetype Operator.

OR



4(a) Impacts of Title & Keywords on citation

$(5 \times 2 = 10)$

Title's Importance

* The title is a key factor in attracting readers and conveying the paper's subject.

* A well-crafted title is informative, attention-grabbing and aids in marketing the paper.

* The title influence the paper's visibility.

Keywords in citation.

* Keywords in titles assist in categorizing the research and drawing it to be relevant audience.

* Title with at least two keywords increase the chances of discovery, reading and citation.

4(b)

Brief About Acknowledgement and Attributions in RP $(5 \times 2 = 10)$

Acknowledgment is the practice of recognizing the person or organization responsible for producing the research published in a particular article.

Recognition on social media is very important, leave newsletters or meeting. Providing the right recognition at the right time is very important, and even a small contribution should not be overlooked.

5/1/21 @

Definition and Brief Explanation of IP (2x1=2)
Its type and Brief of those (4x2=8)

Intellectual Property (IP) is the term used to refer to non-commercial assets derived from human intelligence, creativity and imagination, but often intangible.

The major types of IP are

1. Trademarks
2. Patents
3. Industrial Designs
4. Copyrights.

5(b)

Process of Patenting.

- * Filing Application.
- * Submitting & Get Published
- * Grant Process
- * Commercialization.

} Brief out 2 1/2 x 4 = 10.

10R

6(a) Five points on commercialization of a patents. 5x2=10

- * Prevents the exploitation of Registering Trademarks by other companies
- * Potent evidence of the lawful proprietorship.
- * Grants the owner full rights to use it in any lawful manner. to promote his/her business.
- * Gives Brand recognition
- * Asset creation.

6(b)

list five which can not be patented and brief about it (5x2=10)

- * Discoveries, scientific theories and mathematical methods
- * Aesthetic creations, plans, rules and methods
- * Computer programs
- * Methods of Medical Treatment
- * Plant or animal varieties.

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7a) Any five types or classes of Copyrights (5X2=10)

- * Literature
- * Dramatics
- * Sound Recordings
- * Artistical
- * Musical
- * Cinematograph film.

7b) Define Trade Mark with brief
Symbol with Explanation (2X2=4 marks)
(3X2=6) marks

Trademark → It is a unique symbol which is capable of identifying as well as differentiating products or services of one organization from those of others.

Symbols.

TM - Unregistered goods

SM - Unregistered Services

R - Registered goods & Services.

OR

8a) Advantage of Trade Mark. (10X1=10)

- Exclusive Usage rights
- Builds Goodwill
- Differentiate Products & services
- Ensures products Quality
- Helps in creation of assets
- Usage of R symbol
- Protection against infringement
- Protection for 10 years

8b) Process of Trade Marks.
Classification of Trade Marks

5X1=5
5 Marks

Process

- ① Prior Art search
- ② Application Applying
- ③ Publishing in Journals.
- ④ Certification.

Classification of Trade marks.

- Goods and Services under Trademarks are classified as per the Nice Agreement (1957) administered by WIPO.
- A total of 149 countries (84 state parties) and others are using the same Trademarks classification.
- Trademarks classification comprise of 45 classes, out of which 34 are for goods and 11 are for services.



- 9(a) Definition of IA → 2 Marks
 Act brief & → 4 Marks
 Laws to govern ID → 4 Marks.

Industrial Design :

Design is defined as the features of shape, configuration, pattern ornament or composition of lines or colours applied to any article.

Act of ID →

'The Design Act - 2000'

'Design Rules 2001'

Laws to Govern ID →

Amendment of Laws from time to time. 2008, 2013, 2014 and 2019.

- 9(b) Procedure of registration of ID → 5x1=5.
 Apple vs. Samsung Company. → 5x1=5.

Registration.

- * Filing Application.
- * Examination of Application
- * Registration.
- * Publication
- * Renewal.

Apple vs. Samsung.

- * Case filed in 2011, in the United States District Court for Northern District of California for infringing their Designs and Utility Patents of the user interface like screen app grid and tap to zoom.
- * Proceeding continued for 7 years in various courts. In June 2018 both companies reached for a settlement and Samsung was ordered to pay \$539 million to App Inc. for infringing on its patents.

OR

- 10(a) meaning and Definition of GI (2 Marks)
 Act, Laws & Rules pertaining to GI. (10 Marks)

Geographical Indications → Defined as a sign which can be used on products belonging to particular geographical location / region and possesses qualities or a reputation associated with that region.

Act, Law & Rules :

GI introduced in 2003, and Governed under the Geographical Indications of Goods Act 1999, and the Geographical Indications of Goods Rule 2002.

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10⑥ Identifying IP organization in India. SIPS.
Schemes and programs for Intellectual Property rights organization. SIPS.

The Department of Industrial Policy and Promotion, is World Intellectual Property organization (WIPO), schemes and programs.

- * TRIPS Agreement
- * WTO.
- * GATT
- * SEP.
- * IPAB.

