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Total Number of Pages : 02

Course: M.Tech.  
Sub\_Code: P3PGCC01

3<sup>rd</sup> Semester Regular/Back Examination: 2022-23

SUBJECT – RESEARCH METHODOLOGY

BRANCH(S): ALL SPECIALIZATIONS

Time : 3 Hour

Max Marks : 100

Q.Code : L290

Answer Question No.1 (Part-1) which is compulsory, any eight from Part-II and any two from Part-III.

The figures in the right hand margin indicate marks.

**Part-I**

**Q1 Answer the following questions : (2 x 10)**

- a) What is the meaning of research?
- b) What is the research process?
- c) Which hypothesis is tested during testing of hypothesis and why?
- d) What are the sources of Secondary data ?
- e) What is a hypothesis.
- f) What are the applications of Z-test
- g) Explain about nominal data.
- h) Which type of sample design is better and why?
- i) Write the difference between linear regression and multiple regressions.
- j) What is Sign Test.

**Part-II**

**Q2 Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve) (6 x 8)**

- a) Explain in details about the Identification of research problem.
- b) Discuss about formulation of hypothesis with suitable example.
- c) What are the types of research and research process.
- d) Write the steps for design of questionnaire.
- e) Write the methods and application of data processing.
- f) Explain the sampling fundamentals
- g) Explain about the Krushall – Wallis test
- h) Explain about the analysis of variance with details of software used.
- i) Discuss about t-test and F-test
- j) How multiple regressions analysis is applied?
- k) Write the uses of SPS Package.
- l) Explain in details about the data analysis.

**Part-III**

**Only Long Answer Type Questions (Answer Any Two out of Four)**

- Q3** What are the Importance of scientific research in decision making. Also discuss about research design. **(16)**
- Q4** Critically discuss about the measurement and Scaling Techniques, **(16)**
- Q5** Explain the procedure of testing of hypothesis. Also define alternate hypothesis and type-I error, type-II error. **(16)**
- Q6** Discuss about factor analysis and discriminant analysis with suitable counter examples. **(16)**

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M.Tech  
P3PGCC02

3<sup>rd</sup> Semester Regular / Back Examination: 2022-23

Intellectual Property Rights

BRANCH(S): All Specializations

Time : 3 Hour

Max Marks : 100

Q.Code : L227

Answer Question No.1 (Part-1) which is compulsory, any eight from Part-II and any two from Part-III.

The figures in the right hand margin indicate marks.

**Part-I**

**Q1 Answer the following questions : (2 x 10)**

- a) Define intellectual property rights.
- b) List any four major types of intellectual property.
- c) Define Patent.
- d) What criteria must be met by a product to be patentable?
- e) What does a copyright protect?
- f) What is copyright termination?
- g) Define Intellectual Property Infringement.
- h) What is Parallel Import?
- i) Define Trademark?
- j) What are trade secrets?

**Part-II**

**Q2 Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve) (6 x 8)**

- a) Write brief history of patent rights in India.
- b) Substance obtained by mere admixture resulting only in the aggregation of the properties of the components thereof or A process for producing such substance are not patentable. Discuss.
- c) Distinguish between provisional and complete patent specification.
- d) What is patent of addition? How it is different from ordinary patent application?
- e) What is opposition under the Indian Patent Act. Explain.
- f) What works are not protected under copyright law? Discuss.
- g) What is copyright ownership right and transfer? Explain.
- h) Distinguish between Literal and Non-literal infringement.
- i) Explain the role of claims in patent infringement.
- j) What is Pith and Marrow doctrine. Explain.
- k) Discuss the remedies available against infringement of a patented invention.
- l) What is Click-Wrap agreement. Explain.

**Part-III**

**Only Long Answer Type Questions (Answer Any Two out of Four)**

- Q3** What are non-patentable inventions within the meaning of the Act: Under section 3 of the Patents Act, 1970. Discuss. **(16)**
- Q4** Give details of the Patent registration process starting from the filing of Patent Application to Grant/Rejection of the Patent by showing in a flow diagram. **(16)**
- Q5** Describe the procedure/steps for Trademark registration with a suitable example. **(16)**
- Q6** Write short note on followings: **(16)**
- a) First Examination Report (FER)
  - b) Equivalent doctrine
  - c) Gillette Defense
  - d) Federal Preemption