

SL.NO:1304

SUBJECT CODE:17MBHS07

VINAYAKA MISSIONS RESEARCH FOUNDATION
(Deemed to be University)
B.E./ B.TECH DEGREE EXAMINATIONS- FEB -2022
CIVIL ENGINEERING

PROFESSIONAL ETHICS AND HUMAN VALUES

Time : Three Hours

Maximum Marks:100 Marks

Answer **ALL** questions
Part-A (10 x 2 =20 Marks)

- 1 Draw the plot between cost and risk
- 2 Define the term Engineering
- 3 Write short note on caring and sharing.
- 4 What are personal ethics and business ethics?
- 5 What are the analytical methods?
- 6 What do you mean by appropriate technology?
- 7 What is meant by technology transfer?
- 8 What is the Importance of IPR?
- 9 Discuss the steps used to resolve the Moral Dilemmas
- 10 Define Collegiality.

Answer **Any FIVE** questions
Part-B (5 x10 =50 Marks)

- 11 a. Write down the highlight of code of ethics in ASCE guidelines
OR
b. Write a detailed note on courage, co-operation.
- 12 a. Discuss the theories pertaining to moral autonomy with specific reference to consensus and controversy?
OR
b. "Engineering work is seen as Experimentation" - Discuss.
- 13 a. Explain the details about the senses of engineering Ethics ?
OR
b. Explain any two case studies which will help us to learn from the past in ethical aspects in engineering.
- 14 a. Explain access and reduce the risk?
OR
b. Explain "Professional rights and Employee rights for privacy and choice of outside activities. p.t.o

- 15 a. Describe the different ethical problem that exists in computer science and technology.
OR
b. What is meant by Moral Autonomy ? Discuss the factors influencing person concern and the skills required to improve more Autonomy ?
- 16 a. What are the general features of morally responsible engineers?
OR
b. List some grey areas of confidentiality, and how management policies influence the maintenance of confidentiality.
- 17 a. What are the factors that affect risk acceptability? what is the use of knowledge of risk acceptance to engineer ?
OR
b. List and explain the steps in confronting moral dilemmas.
- 18 a. Can an engineer become a responsible experimenter- Discuss.
OR
b. What are the various ways of promoting morally justifiable measures for a Multinational corporation (MNC)?

Answer ALL questions

PART-C (2 x 15 = 30)

- 19 a. Compare the similarities between engineering experiments and standard experiments
OR
b. How can an engineer become a responsible experimenter? Explain in detail ?
- 20 a. Explain a brief report on the 'Three-Mile Island' and 'Chernobyl' accidents. What are the safety lessons we learn from 'Three-Mile Island' and 'Chernobyl' safe exits?
OR
b. How did Gilligan recast Kohlberg's level of moral development?

SL.NO:1288

SUBJECT CODE:17MBHS09

VINAYAKA MISSIONS RESEARCH FOUNDATION
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B.E./ B.TECH DEGREE EXAMINATIONS- FEB -2022
MECHANICAL ENGINEERING

**INTELLECTUAL PROPERTY RIGHTS AND ALTERNATE DISPUTE
RESOLUTION**

Time : Three Hours

Maximum Marks:100 Marks

Answer ALL questions
Part-A (10 x 2 =20 Marks)

- 1 Mention the essential characteristics of an industrial design
- 2 List four types of intellectual properties.
- 3 Define intellectual property in technology
- 4 Define patents.
- 5 What are the infringement actions
- 6 What rights does a patent provide?
- 7 Is a patent valid in every country?
- 8 How does copyright differ from patent and trademark law?
- 9 What is trade secret and how is it protected?
- 10 What do you understand by IPR strength in India

Answer Any FIVE questions
Part-B (5 x10 =50 Marks)

- 11 a. Illustrate the following i) Copyright ii) Trademarks
OR
b. Demonstrate briefly International Treaties and Conventions on IPRs
- 12 a. Formulate and explain IPR in India and abroad and its limitations. Outline the steps in nature of IP.
OR
b. Discuss various IP rights.
- 13 a. Explain the procedure to select and evaluate trademarks
OR
b. Explain the Digital Content Protection

(p.t.o)

14 a. Elucidate in which way does WTO differ from WIPO with suitable example.

OR

b. Explain the trading norms of WTO towards IPR

15 a. Explain the differences between Trademark and Geographical Indication Act.

OR

b. Discuss the principles of Copyright Act.

16 a. Elaborate the role of IPR in protection against unfair competition

OR

b. Describe the following: i) Copyright ii) Patent iii) Trademark

17 a. Explain the evolution of IP regime in India with suitable examples.

OR

b. Discuss International Patent Law

18 a. Discuss the patent ownership.

OR

b. Discuss on Design Act.

Answer ALL questions

PART-C (2 x 15 = 30)

19 a. Define patent and the application process in detail with illustration

OR

b. Compare and contrast the emerging issues of IPR and discuss new developments and International Patent Law

20 a. Write examples for TRIPs agreement and Summarize enforcement measures in IPR with suitable example

OR

b. Explain the evolution of IP regime in India and formulate the structure of IP licensing and Indian competition law with examples

SL.NO:1241

SUBJECT CODE:17MBEC01

VINAYAKA MISSIONS RESEARCH FOUNDATION
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B.E./ B.TECH DEGREE EXAMINATIONS- FEB -2022
BIOMEDICAL ENGINEERING

ELECTIVE - MARKETING TECHNIQUES FOR ENGINEERS

Time : Three Hours

Maximum Marks:100 Marks

Answer **ALL** questions
Part-A (10 x 2 =20 Marks)

- 1 Expand MRP. Give reasons for fixing MRP.
- 2 Expand and explain WWW and how its useful for sales promotion
- 3 What is terminal market?
- 4 Write a key note on commercialization.
- 5 Define Core Product.
- 6 Write short note on skimming price.
- 7 What do you mean by conventional distribution channel?
- 8 What is offer?
- 9 Give the meaning and example of the term product.
- 10 List any three objectives of sales promotion

Answer **Any FIVE** questions
Part-B (5 x10 =50 Marks)

- 11 a. Define the marketing concept. How does it differ from the selling concept? Is there any role of marketing for consumer product which excess demand is in supply?

OR

- b. Examine the conditions under which "Market-Skimming Pricing" and "Market Penetration Pricing" can be deployed and also analyse the advantages and disadvantages of each of the above pricing strategies

- 12 a. Suggest the criteria for selecting the applicants for the distributors of electronic items. In what ways it will differ for clinical instruments in hospital sectors.

OR

- b. How will the relationship marketing approach create value for their customers.

- 13 a. Categorize the various types of product mix.

OR

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- b. Select the best pricing method for automobile sector new product development stage
- 14 a. Can you list out some premium priced products? Why are these products able to command high prices? State the reasons of high pricing for those products.

OR

- b. List the levels of distribution channel . Trace the suitable channel of distribution for clinical drug products and indicate the functions performed at each level.
- 15 a. Explain the methods of sales promotion.. Suggest a suitable methods for launching low price washing powder for upcoming year

OR

- b. As a Marketing Manager, Design the suitable promotional Strategy for diary products during the festival season.
- 16 a. “A product is more than just a product” – Justify

OR

- b. Sales person are born or made - comment
- 17 a. Examine the potential benefits of marketing environment .

OR

- b. Explain the functions of marketing management.
- 18 a. Explain about pricing policy in marketing management

OR

- b. What do you understand by retailing? What important functions do the retailers perform in the distribution of products.

**Answer ALL questions
PART-C (2 x 15 = 30)**

- 19 a. How to overcome the challenges of SETTING THE PRICE on the basis of QUALITY of the product and VALUE EQUATION for industry product and consumer product -

OR

- b. Indicate the guiding principles for fixing pricing policy. Why pricing discrimination permitted?

- 20 a. As a adult consumer, How you will measure and built the consumer satisfaction on fashion products.

OR

- b. Explain in detail about the marketing environment with diagram.

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SL.NO:1170

SUBJECT CODE:17MBHS04

VINAYAKA MISSIONS RESEARCH FOUNDATION
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B.E./ B.TECH DEGREE EXAMINATIONS- FEB -2022
COMMON TO BTE,EEE,PHARMA , CSE & MECH

TOTAL QUALITY MANAGEMENT

Time : Three Hours

Maximum Marks:100 Marks

Answer **ALL** questions
Part-A (10 x 2 =20 Marks)

- 1 List down the any four advantages of fish-bone diagram.
- 2 Why is FMEA important?
- 3 Mention any four features of check sheet.
- 4 State the responsibilities of Management Representative for implementing quality systems.
- 5 List any four characteristics of a quality policy statement.
- 6 Define the term “parameter” in statistics.
- 7 Define the term maintenance.
- 8 Define the term “PDSA”.
- 9 Write short notes on product benchmarking.
- 10 Give a note on environmental policy.

Answer **Any FIVE** questions
Part-B (5 x10 =50 Marks)

- 11 a. Explain the roles and responsibility of quality council & senior management for implementing quality in an organisation.
OR
b. Outline the benefits and pitfalls of benchmarking.
- 12 a. Explain, in what way, the concept of ISO 14000 differs from ISO 9000 series of quality system.
OR
b. Discuss in detail about the dimensions of quality with your own example.
- 13 a. Enumerate the cost of quality and discuss its components in detail with respect to the service based industry.
OR
b. Discuss the important elements to achieve customer/supplier partnering relationship.

P.T.O

- 14 a. Write notes on:
 (a) Differentiate matrix diagram and matrix data analysis diagram.
 (b) Differentiate tree diagram and decision tree diagram.

OR

- b. The following table shows the number of point defects on the surface of a bus body on August 2019.

Body No.	No. of defects		Body No.	No. of defects
1	13		11	17
2	15		12	11
3	19		13	7
4	8		14	11
5	6		15	14
6	17		16	6
7	7		17	16
8	9		18	10
9	3		19	2
10	23		20	6

- a) Compute the value of \bar{C} and its control limits.
 b) Draw C – chart
 c) Compute value of \bar{C} and control limits for the future use, if you deem it necessary.

- 15 a. Describe the term quality statements with suitable illustrations for service organisation.

OR

- b. Is customer complaint necessary for an Organization? If yes, list the various tools used for collecting customer complaints.
- 16 a. Is quality management an issue only for management? Do you agree or not. Justify your answer.

OR

- b. Describe the Trilogy Cycle of Joseph Juran with neat diagram.
- 17 a. Define quality audit. enlighten the features and types of quality audit

OR

- b. What is meant by Operating Characteristics (OC) Curve? Explain it with the neat diagram.

P.T.O

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18 a. Summarize the advantages and limitations of benchmarking.

OR

b. What are the objectives of implementing TPM? Also describe in detail the concept of TPM.

Answer ALL questions

PART-C (2 x 15 = 30)

19 a. Describe seven new tools of quality management with neat diagram of each.

OR

b. Elaborate the Japanese 5S concept as applicable to services and manufacturing company.

20 a. Write the step by step procedure for implementing FMEA of a product.

OR

b. Describe the various elements of ISO 9000 systems.

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SL.NO:1090

SUBJECT CODE:17MBHS01

VINAYAKA MISSIONS RESEARCH FOUNDATION
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B.E./ B.TECH DEGREE EXAMINATIONS- FEB -2022
COMMON TO ECE, EEE,BME ,CSE & MECH

ENGINEERING STARTUPS AND ENTREPRENEURIAL MANAGEMENT

Time : Three Hours

Maximum Marks:100 Marks

Answer **ALL** questions
Part-A (10 x 2 =20 Marks)

- 1 Point out any two features of Risk- reward scale for starttup.
- 2 List any three purpose of Stock Ownership Plan.
- 3 Write on a“ Long Term Disability Insurance”.
- 4 Write any two roles of management in a company?
- 5 Define buyer and seller.
- 6 What is Self-funding?
- 7 What is a contract?
- 8 Write on Preferred Stock?
- 9 Mention any four difficulties faced by the entrepreneur.
- 10 Point out the factors that affecting Entrepreneurship growth.

Answer **Any FIVE** questions
Part-B (5 x10 =50 Marks)

- 11 a. What is the difference between authorized shares and outstanding shares?
OR
b. Explain in detail the violation of intellectual property with few examples.
- 12 a. Elucidate the sole trader business form of organisation.
OR
b. Enumerate the ten commandments for the beginning entrepreneur.
- 13 a. “ A clear business plan is key to startup success” comment.
OR
b. Determine how equity form of incentives help motivate employees in a startup?
- 14 a. How can a business protect its trade secrets?
OR
b. “Successful startups have great management team” Justify.
- 15 a. Assess the safest investment with highest return in startup employment.

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OR

b. Explain in detail the roles of entrepreneurship.

16 a. Define market segmentation and discuss its importance.

OR

b. Briefly discuss the steps involved in developing a new product or service.

17 a. Briefly explain the levels of funding for startups with a diagram.

OR

b. Briefly discuss the importance of identifying target customers for a startup.

18 a. Explain in detail the importance and characteristics of entrepreneurship.

OR

b. Explain the importance of intellectual property in start-ups.

Answer ALL questions

PART-C (2 x 15 = 30)

19 a. Discuss the imperative factors of Social Entrepreneurship.

OR

b. Role of Entrepreneurship in Economic Development – Discuss

20 a. Write an essay on different kinds of partnership.

OR

b. Examine the employees and employers should know about restricted stock awards and taxes.

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SL.NO:1026

SUBJECT CODE:17MBHS02

VINAYAKA MISSIONS RESEARCH FOUNDATION
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B.E./ B.TECH DEGREE EXAMINATIONS- FEB - 2022
MECHATRONICS

FINANCE AND ACCOUNTING FOR ENGINEERS

Time : Three Hours

Maximum Marks:100 Marks

Answer **ALL** questions
Part-A (10 x 2 =20 Marks)

- 1 If Profitability Index of a project is 2, Can we accept the project or Reject explain
- 2 Write the journal entry for sale of old machinery for Rs. 2,40,000 at profit Rs. 40,000
- 3 "At positive Margine of safety business firm will get profits," True or False Explain.
- 4 Explain the rule for accepting the project under pay back period method .
- 5 Define Accounting.
- 6 What does the Intangible Assets?
- 7 What is Temporary Working capital?
- 8 What is Selling and Distribution Overheads?
- 9 What is Cash management?
- 10 List any two Nature of Variable Cost.

Answer **Any FIVE** questions
Part-B (5 x10 =50 Marks)

- 11 a. What are EOQ and Reorder level in inventory management, How will you determine Economic Order Quantity and Reorder Level.

OR

- b. A company budgets for a production of 1,50,000 units. The variable cost per unit is Rs. 14 and fixed cost is Rs. 2 per unit. The company fixed its selling price to fetch a profit of 15% on cost.
- (a) What is the break-even point?
 - (b) What is the profit-volume ratio?
 - (c) If it reduced its selling price by 5%, how the revised selling price affect the break-even point and the profit-volume ratio?

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12 a. From the following information of Sri Kiran Ltd., you are required to calculate:

- (a) Net operating cycle period.
 (b) Number of operating cycles in a year

The information is Given below:

(i) Raw material inventory consumed during the year	Rs.6,00,000
(ii) Average stock of raw material	Rs. 50,000
(iii) Work in progress inventory	Rs.5,00,000
(iv) Average work-in-progress inventory	Rs. 30,000
(v) Cost of goods sold during the year	Rs.8,00,000
(vi) Average finished goods stock held	Rs. 40,000
(vii) Average collection period from debtors	45 days
(viii) Average Credit period availed	30 days
(xi) Number of days in a year	360 days

OR

b. Write about any 3 subsidiary books and its uses

13 a. Ganapathi Brothers acquired a machine on July 1, 2017 at a cost of Rs. 70,000 and spent Rs. 5,000 on its installation. The firm writes off depreciation @ 10% on straight line method. The books are closed on December 31 every year. Show the machinery and depreciation account for three years.

OR

b. You are given the following information:

Year	Sales (Rs.)	Profit or Loss (Rs.)
2010	90,000	(-) 10,000
2011	1,30,000	+ 10,000

Calculate: (a) P/V ratio, (b) Fixed Expenses, (c) B.E.P

14 a. Identify the issues to face the dangers of Inadequate working capital

OR

b. How can you measure hour method for heavy Industry

15 a. Evaluate the process of calculating PAYBACK period in case of cash inflows are constant per year and not constant per year with example

OR

b. Explain the accounting treatment for following adjustments:

- i) Outstanding Expenses ii) Prepaid Expenses iii) Bad debts

16 a. Define cash management and write down the objectives of cash management

OR

b. What are the different types of capital budgeting decisions exist, Explain

17 a. What is Trail balance? Explain its objectives and limitations

OR

b. Briefly explain sum of years of degits Method with example

18 a. Explain important sources of financing of account receivables.

OR

b. What is meant by Cost Sheet and briefly specify its advantages

Answer ALL questions

PART-C (2 x 15 = 30)

19 a. Discuss in detail the capital budgeting. How do you use the suitable techniques for profitable business.

OR

b. Write down the acceptance rule, advantages and limitations of Pay Back Period method and Accounting Rate of Return method.

20 a. Define Cash management? Identify the motives for holding cash.

OR

b. How do you analysis the accounting concepts and principles for non profit organisation.
