

**M.TECH. FOOD TECHNOLOGY AND BIO-CHEMICAL ENGINEERING FIRST
YEAR FIRST SEMESTER - 2024**

ENTREPRENEURSHIP DEVELOPMENT PROGRAMME

Time :3hrs

Full Marks :100

Use a separate Answer-Script for each part.

Part I (Marks 50)

Answer Question no 1 and any Three from the rest

1. Portrait the focusing characteristics of an entrepreneur who is known to you at the best level of your knowledge.

(14)

2. Show the method of analysis of small investment increments by using the following data received from a sample study for an orange juice concentration plant: Plant capacity : 450000 kg per day (24 hrs); Initial concentration of water-orange juice : 5% by weight, and Final concentration of juice : 40% by weight, Single effect evaporator or multiple effect evaporator may be used, however, a single effect evaporator of required capacity has been proposed with initial investment of Rs.18000 and for each additional investment same for each single effect evaporator;

Service life : 10 years, and

Salvage value : Rs.6000 has been calculated at the end of service life;

Proposed that "Fixed Charges Minus Depreciation" amount is equal to 20% yearly based on initial investment;

[Turn over

Steam cost: Rs.0.60 per 1000kg of steam; Administration, labour, and misc. cost: Rs.40 per day independent of number of evaporators are used and Assume "X" is the number of evaporator effects; Assume operating days/year: 300 days (24 hrs); Assume minimum return of investment: 15%

(12)

3. How would you conceptualize the idea of Technology Business Incubation? Describe a suitable model indicating the intrinsic parameters of this concept.

(2+10)

4. With a suitable flow sheet describe the process for developing a new product proposed by a group of entrepreneurs.

(12)

5. Describe the method of marketing analysis of a given product with the special reference to gap analysis.

(12)

6. A project having of following activities to be set-up for manufacturing 10000 kgs Cocoa Butter per annum. Use this example as the application of PERT, and show the followings in the net work:

- (a) Critical activities
- (b) Non-Critical activities
- (c) Dummy.

(1) 1-2 : Acquiring land

(2) 2-3 : Apply for and the receipt of letter of indent

- (3) 3-4 : Apply for import licence
- (4) 4-5 : Call invoice for import equipment, select suppliers and place orders.
- (5) 5-8 : Select suppliers for indigenous equipment and place order
- (6) 4-9 : Dummy
- (7) 4-12 : Select suppliers for raw materials and components, place orders.
- (8) 5-6 : Delivery time taken for imported equipment upto the port
- (9) 4-10 : Advertising for dealership and receipt of applications.
- (10) 6-7 : Customs clearance etc. and the transportation of imported equipment at site.
- (11) 7-13 : Hiring of technical staff, chief engineer etc.
- (12) 9-13 : Receipt of indigenous equipment
- (13) 9-13 : Construction of building
- (14) 10-11: Selection of dealers
- (15) 11-16: Training of dealers.
- 12-15: Receipt of raw material and components.
- 13-14: Hiring of assembly persons.
- 13-15: Development of product design.
- 14-15: Training of assembly persons.
- 15-18: Actual production starts
- 16-17: Develop advertising and start advertising.

Ref. No. : Ex/PG/FTBE/T/114B/2024

**M.TECH. FOOD TECHNOLOGY AND BIO-CHEMICAL ENGINEERING FIRST
YEAR FIRST SEMESTER - 2024**

ENTREPRENEURSHIP DEVELOPMENT PROGRAMME

Time :3hrs

Full Marks :100

Part II (Marks 50)

Answer any five questions from the following: 5x10

- 1.a) State the differences between Entrepreneur and manager.
b) Explain Industrial entrepreneur and First generation entrepreneur. 4+3+3

2. Mention the social benefits provided by small scale industries. Define micro, small and /medium Enterprises in Services Sector. 4+3x2

3. Define working capital and fixed capital. What is short term, medium term and long term finance provided by financial institutions to entrepreneurs. 2+ 2+2+2+2

4. What is the main objective of entrepreneurial training? State the components of. entrepreneurial training. Explain Achievement motivation and follow up of entrepreneurial training. 2+2.5+3+2.5

5.What is Acquisition? What are the advantages of Acquisition? State the problems of Acquisition. What is Ancillarisation? 2+3+3+2

6.Explain financial feasibility and Technical feasibility of Project feasibility study. 5.5+4.5

7. Write short notes on(any two) of the following: 2x5
a.IDBI,
b.business entrepreneur,
c Push factors.
d.NABARD.