

**Date of Examination:** 19.02.2025 **Session:** (AN) **Duration:** 2 Hrs **Full Marks:** 100 **Subject No.:** EP61201 **Subject:** Entrepreneurship Essentials **Department/Center/School:** Rajendra Mishra School of Engineering Entrepreneurship **Specific charts, graph paper, log book etc., required:** Nil **Special Instructions (if any):** Provided against a few questions. Please follow meticulously. 

**Answer all questions. Answer precisely. Do not reproduce questions in the answer script.**

**Do not use the same numbering system for listed answers and multi-level lists to avoid confusion.**

1. Read the following story and answer the questions following it:

Amit and Rohan, two passionate young entrepreneurs, founded KitchnFresh in 2018 as a cloud kitchen and food delivery startup. Their vision was to deliver hot, homemade-style meals to students, faculty, and office-goers within 10 minutes. Both graduated from IIT Kharagpur in the same year and deeply understood the challenges of living away from home, especially the longing for fresh, homely food. They observed that while some students frequently ate outside the mess, indicating their willingness to spend on better meals, others struggled with affordability.

Having already won several business plan competitions and prize money, they conducted extensive discussions with their peers and juniors, receiving overwhelming support for their idea. To validate demand, they floated a Google questionnaire, inviting students and faculty to express their food preferences and their willingness to pay for faster delivery and homemade-style meals. Encouraged by positive feedback, they launched operations within IIT Kharagpur using their prize money, personal savings, and loans from their parents.

KitchnFresh offered meals at competitive prices, ensuring affordability for a broad customer base. However, Amit and Rohan soon realized that affordability, homely food, and fast delivery alone were not enough. To make the business sustainable, they focused on:

* Superior Taste & Nutrition – They attended food festivals and catering events to identify talented cooks, hiring them for their kitchen.
* Hygiene & Clean Practices – They set up an automated kitchen, trained staff on food safety, and worked with experts on nutrient fortification.
* Transparency & Customer Trust – They printed nutritional data on packaging, including the percentage of unhealthy components like saturated fats and sugar to promote informed consumption.

Being IIT Kharagpur graduates, Amit and Rohan easily connected with students and faculty, earning quick trust and brand loyalty without incurring much customer acquisition costs. The startup grew rapidly, building a robust supply chain to ensure an uninterrupted flow of fresh ingredients. They implemented a reward system where customers who purchased three or more meals in a week received a 10% discount on same number of meals the following week, leading to an increase in repeat customers.

Within two years, KitchnFresh achieved a million-dollar turnover without any external investment, though it was still incurring cash losses. Recognizing the scalability of their model, they expanded aggressively:

* Raised $3 million in VC funding at a $15 million valuation.
* Opened ten more cloud kitchens in different university campuses.
* Their experience with the first campus helped them expand efficiently, quickly setting up operations in new locations.
* Created direct and indirect employment of over 1,000 local people.

The foods and the service were very well appreciated by the campuses wherever they launched the service, though hiring the right kind of cooks was a big challenge. Their turnover grew quickly to more than ₹50 crores in just about 5 years from the start though the number of complaints increased exponentially. However, the company was readying for further expansion and started to pitch before the existing investors for ₹10 crore of funding at a valuation of ₹100 crore. On the insistence of the VCs, they hired a professional CEO who is experienced in managing a growth venture in the food industry.

Despite their success, expansion brought operational and financial challenges:

Hiring Skilled Cooks – Finding and retaining quality chefs across multiple locations was difficult.

Customer Complaints Increased – Rapid growth led to inconsistencies in food quality and delivery service.

Cash Burn Rate Escalated – Rising operational costs, salaries, and seasonal price fluctuations drained working capital.

At the insistence of their investors, they hired a professional CEO with experience in scaling food businesses. The new management made two major changes:

* Delivery Strategy Shift – Increasing delivery time to 15 minutes allowed drivers to deliver multiple orders per trip, reducing costs.
* Pricing Adjustment – Fast-moving dishes were priced 10% higher, assuming minimal customer churn.

At first, these changes seemed effective—cash flow temporarily improved. However, customer acquisition slowed with higher churn, and operational costs continued to rise. As a result, KitchnFresh faced higher burn rates and depleted working capital. Before investors could arrange emergency funding, the company ran out of cash and was forced to shut down.

Questions

1. Using your understanding of the campus eatery ecosystem, identify the elements of (i) an asymmetric business model and (ii) the unfair advantages of KitchnFresh. (iii) What type of market research did the founders conduct? Assess its appropriateness and present your views on how it should have been conducted. [10]

***Answer to 1.(i):*** *The founders’ IIT background gave* ***KitchnFresh*** *an undue advantage that was not available to other restaurants giving it an unfair advantage.*

***Answer to 1.(iii):*** *a.**The reward system implemented by* ***KitchnFresh*** *aligns with an asymmetric business model.*

*b. The founders identified and hired cooks who prepared tastier dishes than those of their competitors.*

***Answer to 1.(iii):*** *The founders first conducted primary exploratory market research by gathering qualitative data discussing with peers, seniors, and juniors. Then they conducted primary descriptive market research through questionnaire survey using Google Form gathering quantitative and qualitative data. However, for products such as food, a causal research is essential to understand customers’ preferences and price sensitivities. This critical step was missing in the market research.*

1. Identify at least five actions that can be considered as mistakes which lead to the failure of the business. [10]

***Answer***

1. *KitchnFresh expanded too quickly. They should have prioritised profitability over expansion in multiple locations.*
2. *They delivered less than they promised. Committing to deliver in 10 minutes without assessing its feasibility was a mistake.*
3. *They priced the meals at an unsustainably low levels. They must have done the costing of the meals to understand sustainability.*
4. *They hired too many employees at a later stage without proper due diligence.*
5. *They committed many mistakes managing the growth phase, often referred to as ‘chasm’, particularly ‘business process management’ leading to a growing number of dissatisfied customers.*
6. Write five important utilities of Business Model Canvas. Explain each point briefly in one sentence each, preferably with an example. [10]

***Answer***

1. *The Business Model Canvas (BMC) provides a concise, one-page overview of how a business creates, delivers, and captures value, making it easier to understand and communicate.*
2. *The BMC fosters alignment across departments such as marketing, operations, and finance by providing a common framework for discussion.*
3. *Startups and businesses can quickly iterate and refine their models by testing different value propositions, pricing strategies, and customer channels.*
4. *Investors use the BMC to assess a company’s viability, scalability, and profitability before making funding decisions.*
5. *The BMC helps identify potential risks and gaps in a business model, allowing entrepreneurs to proactively address challenges and strengthen their strategy before launching or scaling the business.*
6. *The BMC enables founders to compare different business models, assess their strengths and weaknesses, and choose the most viable option based on market conditions and resources.*
7. State the five most important learnings on entrepreneurship from the story of Steve Jobs. [10]
8. *One does not need to be born in a business family to become a successful entrepreneur.*
9. *Starting a venture does not always require a lot of funds.*
10. *Design innovation can enhance customers experience, contributing to the success of a venture.*
11. *Failures should be seen as lessons not to commit the same mistakes again.*
12. *Many great innovations exist but lack commercialization; one can leverage them to create new venture and offer great value.*
13. State and explain the two principles that were combined by Eric Reis to develop the Lean startup methodologies. Define those principles. Explain the difference between ‘Hypothesis’ and ‘leap of faith’ with example in this context? [10]

*Eric Reis combined the Agile method of product development and the Lean manufacturing process to proffer the Lean Startup Process.*

*Agile method uses Build-Measure-Learn feedback process to get the development validated by end-users before moving to the next stage ensuring product-market-fit. The Lean manufacturing process requires to follow reduction of waste of all kinds of resources including time and eliminating everything possible without affecting value perception of the customers.*

*‘Hypothesis’ is assumption based on limited available data, whereas, ‘Leap of Faith’ is assumption without any data. Apple launched iPod based on the hypothesis that people would listen to music on the go that was evident from the popularity of ‘Walkman’. Their leap of faith was that customers will download music from cloud paying money which had no prior example.*

1. Provided below the revenue and operational expenses for the year 2023-24, some balance sheet data as of 31.03.2024 (Table - 1), and the balance sheet as of 31.03.2023 (Table - 2). Please prepare/estimate the following: (All the amounts are in ₹).
2. Gross profit, operating profit, net profit, EBITDA, and cash profit, including margins, for the year 2023-24. [20]
3. Balance sheet as of 31.03.2024. [10]
4. Cash flow statement for the year 2023-24. [10]
5. (i) Present your views on the overall financial health of the company, (ii) provide separate insights on the three cash flows from its three different activities, (iii) Using absolute values, demonstrate whether the operating cycle has improved or deteriorated during the year (mere commentary will not be accepted as an answer). [10]
6. *The Profit & Loss statement shows that the company has been making profit. It has effectively managed its inventory and the receivables. Additionally, the growing payables is indicating of increasing trust of the suppliers. The company has been investing significantly in capital assets, particularly in machinery, that bodes well for future growth. However, a large part of the net profit has been distributed as dividends to the owners resulting in a negative total cash flow for the year. With anticipated growth in sales, it is expected that the company’s cash flow will improve.*
7. *The net profit and the good management of working capital lead to substantial positive cash flow from operating activities. The significant investment in capital assets led to a negative cash flow from investment activities. High dividends lead to negative cash flow from financing activities.*
8. *Operating cycles: for 2022-23 = 950 + 5,700 – 560 = 6,090*

*For 2023-24 = 1200 + 3,050 - 700 = 3,550. The operating cycle has reduced meaning that the company has been managing with lower working capital.*

| Purchase of goods | 10000 |  | Cash flow format |
| --- | --- | --- | --- |
| Internet expenses | 30 |  | Format for cash flow |
| Advertisement expense | 60 |  | From operating activities |
| Purchase of equipment | 2500 |  | Net profit |
| Transportation expense | 200 |  | Depreciation |
| Purchase of land | 800 |  | Amortization |
| Fuel cost | 45 |  | Change in inventory |
| Web hosting | 10 |  | Change in receivables |
| Employees benefits | 500 |  | Change in payable |
| Sale of an old computer (BV: 200) | 200 |  |  |
| Closing stock | 1200 |  | From investment activities |
| Insurance | 45 |  | Purchase of land |
| Maintenance | 75 |  | Sale of land |
| Legal expense | 15 |  | Purchase of Building |
| Payment of rent | 300 |  | Sale of building |
| License and registration fees | 35 |  | Purchase machinery |
| Repayment of bank loan | 450 |  | Sale of machinery |
| Salary | 1800 |  |  |
| Construction of factory shed | 800 |  | From financing activities |
| Interest on bank loan | 1200 |  |  |
| Purchase of a truck | 2700 |  | Contribution to equity |
| Audit fees | 50 |  | Fresh long term loan |
| Amortization of capitalized expenses | 100 |  | Repayment of loan |
| Purchase of computer | 300 |  | Change in short term loan |
| Sale of goods | 18000 |  | Dividend |
| Traveling expenses | 131 |  | Sub total |
| Purchase of telephone | 95 |  | Total cash flow during the year |
| Electricity bill payment | 140 |  | Cash balance |
| Sale of old machine (book value: 300) | 300 |  |  |
| Trade Receivables | 3050 |  |  |
| Stationeries | 20 |  |  |
| Company pays income tax @ 20% |  |  |  |
| Telephone bill payment | 100 |  |  |
| Postage | 5 |  |  |
| Fresh long term loan raised | 2000 |  |  |
| Trade Payables | 700 |  |  |
| Contribution to new equity capital | 1000 |  |  |
| Sale of building (Book value: 400) | 400 |  |  |
| Dividend during the year | 1500 |  |  |
| Outstanding in short term loan | 2500 |  |  |
| Depreciation rate for building | @ 5% |  |  |
| Depreciation rate for machinery | @10% |  |  |
| Sale of land (Book value: 900) | 900 |  |  |

| Balance sheet as of | 31.3.2023 |
| --- | --- |
| **Current Assets** |  |
| Cash | 460 |
| Inventory/Stock of goods | 950 |
| Trade receivables | 5700 |
| **Fixed assets** |  |
| Land | 1890 |
| Building | 1500 |
| Plant & Machinery | 3545 |
| Capitalized expenses to be amortized | 1000 |
| **Total assets** | **15045** |
|  |  |
| **Equity and Liabilities** |  |
| Equity share capital | 3000 |
| Reserves and Surplus/Retained earnings | 1522 |
|  |  |
| *Short term liabilities* |  |
| Trade Payables/ Sundry Creditors | 560 |
| Short term loan from bank | 3800 |
| *Long term liabilities* |  |
| Long term bank loan | 6163 |
|  |  |
| **Total Equity & liabilities** | **15045** |