

PAPER – 20C : ENTREPRENEURSHIP AND START UP

SUGGESTED ANSWERS

SECTION – A

1.

- (i) (C)
- (ii) (B)
- (iii) (D)
- (iv) (D)
- (v) (C)
- (vi) (B)
- (vii) (A)
- (viii) (B)
- (ix) (A)
- (x) (C)
- (xi) (C)
- (xii) (C)
- (xiii) (A)
- (xiv) (C)
- (xv) (B)

SECTION - B

2. (a)

Among personality theories of entrepreneurship, locus of control has received considerable attention. The concept was developed in the 1950s by Julian Rotter who is an American psychologist working on social learning theories. Rotter (1966) defines locus of control as the degree to which a person perceives an outcome as being contingent on their own actions or those of external forces, existing along a continuum from a more internalized orientation to a more externalized orientation.

Locus of control refers to an individual's perception about the causes of their life conditions. External locus of control describes an individual that believes that most of their life conditions are determined by forces outside of their control, such as like deities, governments, power structures, institutions, and also fate or luck. Internal locus of control describes an individual that believes that they are their own master and can act to change their own life conditions. They are viewed as a continuum and most individual are situated between the two extremes of complete external control and total internal control orientations.

When applied to entrepreneurs, those with an external locus might believe that their survival or success chances are determined by market and institutional forces they cannot control. Conversely, entrepreneurs with an internal locus of control believe that success is determined by his or her own efforts and abilities. The main idea is that internal locus of control is associated with intentions to become an entrepreneur, and entrepreneurial entry.

Locus of control has also been deemed a cultural trait such that some countries' cultures engender more of it than others (Mueller and Thomas, 2001). This has been used to explain why some countries have more innovative entrepreneurship than others.

2. (b)

The following are the major after sales services:

(i) Customer care:

Customer care is usually described as an activity which provides technical and commercial information and services; typically, warranty extension and complaint management to customers. There are different types of customer care and it is distributed on different levels; it can be distributed through a national centralized call center, through the manufacturer's website and through the local repair centers that provide technical information to customers. There are also differences in the variety of personalization when offering the service (ibid). The customer care activity has shifted from being primarily providing simple tasks, such as providing information and handling orders, to now, being more complex and handling tasks, such as giving advice in financial affairs or strengthening and managing the relationship with key accounts (Kantsperger & Kunz, 2005).

(ii) Field Technical Assistance:

Field technical assistance is the assistance provided from seller to buyer where the buyer can receive encompassing installation, warranty work as well as out-of-warranty repairs, product disposal and check-ups. The main purpose of warranty is to provide an after-sale remedy for customer when a product fails to meet its intended achievement during the warranty period (ibid). Warranty has also been defined as a contractual obligation made by a manufacturer, in connection with the sale of a product, where the manufacturer is obligated to ensure orderly functioning of the product.

(iii) Spare Parts Distribution:

Spare parts distribution is responsible for inventory management, customer order management and delivery of spare parts. Spare parts distribution provides crucial functions for the customers throughout consumption of the product.

3. (a)

Steps to be taken to incorporate a new company:

As per the Companies Act, 2013 the following steps to be taken to incorporate a new company:

- (i)** Select, in order of preference, at least one suitable name upto a maximum of six names, indicative of the main objects of the company.
- (ii)** Ensure that the name does not resemble the name of any other already registered company and also does not violate the provisions of emblems and names (Prevention of Improper Use Act, 1950) by availing the services of checking name availability on the portal.
- (iii)** Apply to the concerned ROC to ascertain the availability of name in eForm1 A by logging in to the portal. A fee of Rs. 500/- has to be paid alongside and the digital signature of the applicant proposing the company has to be attached in the form. If proposed name is not available, the user has to apply for a fresh name on the same application.
- (iv)** After the name approval the applicant can apply for registration of the new company by filing the required forms (that is Form 1, 18 and 32) within 60 days of name approval
- (v)** Arrange for the drafting of the memorandum and articles of association by the solicitors, vetting of the same by ROC and printing of the same.
- (vi)** Arrange for stamping of the memorandum and articles with the appropriate stamp duty.
- (vii)** Get the Memorandum and the Articles signed by at least two subscribers in his/her own hand, his/her father's name, occupation, address and the number of shares subscribed for and witnessed by at least one person.
- (viii)** Ensure that the Memorandum and Article is dated on a date after the date of stamping.
- (ix)** Login to the portal and fill the following forms and attach the mandatory documents listed in the eForm:
Declaration of compliance - Form-1
Notice of situation of registered office of the company - Form-18.
Particulars of the Director's, Manager or Secretary - Form-32.

- (x) Submit the following eForms after attaching the digital signature, pay the requisite filing and registration fees and send the physical copy of Memorandum and Article of Association to the Registrar of Companies (RoC).
- (xi) After processing of the Form is complete and Corporate Identity is generated obtain Certificate of Incorporation from RoC.

3. (b)

(i) **Statement Showing the Calculation of Working Capital Requirements**

	Particulars	Rs.
A.	Investment in Current Assets	2385385
B.	Current Liabilities:	558461
C.	Net Working Capital (A – B)	1826924

(ii) **Maximum Permissible Bank Finance as per Tandon Committee:**

Method II:	Rs. 1230578
Method III:	Rs. 783318

4. (a)

Financing is needed to start a business and ramp it up to profitability. There are several sources to consider when looking for start-up financing. But first you need to consider how much money you need and when (at what stage) you will need it. However, the stage-wise requirement of sources of finance are discussed below.

Stage 1:

Idea Generation - At this stage, the amount of funds needed is usually small. Additionally, at the initial stage in the start-up lifecycle, there are very limited and mostly informal channels available for raising funds.

Stage 2:

Pre-Seed Stage – The available sources are:

- (i) Bootstrapping/Self-financing
- (ii) Family and friends
- (iii) Business plan/ Pitching events

Stage 3:

Validation - At this stage, a start-up has a prototype ready and needs to validate the potential demand of the start-up's product/ service. This is called conducting a 'Proof of Concept (POC)', after which comes the big market launch.

Stage 4:

Seed Stage - The available sources are:

- (i) Incubators
- (ii) Govt. loan schemes
- (iii) Angel investors
- (iv) Crowd funding

Stage 5:

Early Traction - The available sources are:

- (i) Series a stage
- (ii) Venture capital funds
- (iii) Banks/NBFCs
- (iv) Venture debt funds

Stage 6:

Scaling - The available sources are:

- (i) Venture capital funds
- (ii) Private equity/ investment firms

4. (b)

Data Analytics are applied in various Businesses (Sectors) as are discussed below:

(i) Transportation:

Data analytics can be applied to help in improving Transportation Systems and the intelligence around them. The predictive method of the analysis helps find transport problems like Traffic or network congestion. It helps synchronize the vast amount of data and uses them to build and design plans and strategies to plan alternative routes and reduce congestion and traffic, which in turn reduces the number of accidents.

(ii) Logistics and Delivery :

There are different logistic companies like DHL, FedEx, etc that use data analytics to manage their overall operations. Using the applications of data analytics, they can figure out the best shipping routes, and approximate delivery times, and also can track the real-time status of goods that are dispatched using GPS trackers. Data Analytics has made online shopping easier and more demandable.

(iii) Web Search or Internet Web Results :

The web search engines like Yahoo, Bing, Duck duck go, and Google use a set of data to give you when you search a data. Whenever you hit on the search button, the search engines use algorithms of data analytics to deliver the best-searched results within a limited time frame. For example, when you search for a product on amazon it keeps showing on your social media profiles or to provide you with the details of the product to convince you by that product.

(iv) Manufacturing :

Data analytics helps the manufacturing industries maintain their overall work through certain tools like prediction analysis, regression analysis, budgeting, etc. The unit can figure out the number of products needed to be manufactured according to the data collected and analyzed from the demand samples and likewise in many other operations increasing the operating capacity as well as the profitability.

(v) Education:

Data analytics applications in education are the most needed data analyst in the current scenario. It is mostly used in adaptive learning, new innovations, adaptive content, estimation, assortment, investigation, and detailing of information about students and their specific circumstances, for reasons for comprehension and streamlining learning and conditions in which it happens.

(vi) Healthcare :

Applications of data analytics in healthcare can be utilized to channel enormous measures of information in seconds to discover treatment choices or answers for various illnesses.

(vii) Digital Advertisement :

Digital advertising has also been transformed as a result of the application of data science. Data analytics and data algorithms are used in a wide range of advertising mediums, including digital billboards in cities and banners on websites.

(viii) Fraud and Risk Detection :

Detecting fraud may have been the first application of data analytics. They applied data analytics because they already had a large amount of customer data at their disposal.

(ix) Tourism and Travel :

Data analysis applications can be used to improve the travellers purchasing experience by analyzing social media and mobile/weblog data. Companies can use data on recent browse- to-buy conversion rates to create customized offers and packages that take into account the preferences and desires of their customers.

(x) Communication, Media, and Entertainment :

When it comes to creating content for different target audiences, recommending content, and measuring content performance, organizations in this industry analyze customer data and behavioural data simultaneously.

(xi) Energy and Utility :

Many firms involved in energy management use data analysis applications in areas such as smart-grid management, energy distribution, energy optimization, and automation building for other utility-based firms.

(xii) Banking and Insurance Sector :

Data analytics in the finance and banking sector is mainly used in demand, supply, and risk management. Banks want to know whether their customers are paying on time. They want to know how their customers use their credit cards, whether customers are using certain products with the bank.

5. (a)

Design thinking is a process for creative problem-solving. It is a strategy which provides a solution-based approach to solving problems. It's extremely useful when used to tackle complex problems that are ill-defined or unknown, because it serves to understand the human needs involved, reframe the problem in human-centric ways, create numerous ideas in brainstorming sessions and adopt a hands-on approach to prototyping and testing.

However, the steps are –

- (i) Empathize:** The first stage of the design process is to understand the perspective of the target audience/customer/consumer to identify and address the problem at hand. To do this, design thinkers are encouraged to cast aside all assumptions (because assumptions can stifle innovation!) about the problem, the consumers, and the world at large. This allows them to objectively consider all possibilities about the customers and their needs.
- (ii) Define:** Putting together all the information gathered in the first stage, the next step is to define the problem statement clearly. The resulting problem statement should be captured in human-centered terms rather than focused on business goals. For example, instead of setting a goal to increase signups by 5%, a human-centered target would be to help busy moms provide healthy food for their families.
- (iii) Ideate:** During the third stage of the design thinking process, designers are ready to generate ideas. You've grown to understand your users and their needs in the Empathize stage, and you've analyzed your observations in the Define stage to create a user centric problem statement. With this solid background, you and your team members can start to look at the problem from different perspectives and ideate innovative solutions to your problem statement.
- (iv) Prototype:** The design team will now produce several inexpensive, scaled down versions of the product (or specific features found within the product) to investigate the key solutions generated in the ideation phase. These prototypes can be shared and tested within the team itself, in other departments or on a small group of people outside the design team.

This is an experimental phase, and the aim is to identify the best possible solution for each of the problems identified during the first three stages.

- (v) Test: Designers or evaluators rigorously test the complete product using the best solutions identified in the Prototype stage. This is the final stage of the five-stage model; however, in an iterative process such as design thinking, the results generated are often used to redefine one or more further problems.

5. (b)

A combination of the words “free” and “premium,” freemium is a type of business model that offers basic features of a product or service to users at no cost and charges a premium for supplemental or advanced features. A company using a freemium model provides basic services on a complimentary basis, often in a “free trial” or limited version for the user, while also offering more advanced services or additional features at a premium. This model combines free and premium services via tiered. Hum basic services can be provided free of cost and premium services can be bear with additional services customers can be inside to buy the premium package wave profitable price. Examples - LinkedIn software company, IBM Data Analytics etc.

A reseller can be a person or a business, and it is the person who purchases items to resell them and profit rather than consume or use them. Resellers typically buy things in bulk from wholesalers and distributors at a discounted price, then sell them to end-users or places where the product is in short supply. Examples - Amazon, eBay etc.

6. (a)

The sustainability challenges and opportunities are -

- (i) The challenge is to find new ways of capturing values and income streams. But it’s also an opportunity to create service-led business models rather than product-oriented ones.
- (ii) The challenge is to develop a sustainable product portfolio via design for environment strategies. But it is also an opportunity to use Biomimicry, Dematerialization and Cradle to Cradle thinking in product development.
- (iii) The challenge is to bring a culture change within the organization and across the entire sector. But it is also an opportunity to frame the genesis of sustainability thinking in a particular sector.
- (iv) The challenge is to communicate sustainability initiatives to various stakeholders. But it is also an opportunity to become open to scrutiny and thus building further trust.
- (v) The challenge is compliance with disclosures, norms and standards. But it is also an opportunity for innovative technologies and frugal engineering.
- (vi) The challenge is to define industry specific metrics and the necessary tools to measure and improve. The opportunity is to forge partnerships with players that once were outside the scope of enterprise thinking.
- (vii) The challenge is to create an environmental accounting balance sheet because of its complexity with lot of grey areas in between. The opportunity is to understand your firm’s negative as well as positive external impacts.
- (viii) The challenge is to incorporate sustainable behaviour into employee compensation. The opportunity is the inevitable culture change.
- (ix) The challenge is to get the supply chain on board to change towards more sustainable business practices. The opportunity is the future value generated because of the cascade effect.

6. (b)

The ERM framework by the Commission of Sponsoring Organizations of the Tread way Commission (COSO) provides a more disciplined and consistent standard against which to implement and assess a company’s ERM programme. COSO defines ERM as follows: The culture, capabilities, and practices, integrated with strategy-setting and its performance, that organizations rely on to manage risk in creating, preserving, and realizing value.

The Framework itself is a set of principles organized into five interrelated components:

- (i). Governance and Culture: Governance sets the organization's tone, reinforcing the importance of, and establishing oversight responsibilities for, enterprise risk management. Culture pertains to ethical values, desired behaviors, and understanding of risk in the entity.
- (ii). Strategy and Objective-Setting: Enterprise risk management, strategy, and objective-setting work together in the strategic-planning process. A risk appetite is established and aligned with strategy; business objectives put strategy into practice while serving as a basis for identifying, assessing, and responding to risk.
- (iii). Performance: Risks that may impact the achievement of strategy and business objectives need to be identified and assessed. Risks are prioritized by severity in the context of risk appetite. The organization then selects risk responses and takes a portfolio view of the amount of risk it has assumed. The results of this process are reported to key risk stakeholders.
- (iv). Review and Revision: By reviewing entity performance, an organization can consider how well the enterprise risk management components are functioning over time and in light of substantial changes, and what revisions are needed.
- (v). Information, Communication, and Reporting: Enterprise risk management requires a continual process of obtaining and sharing necessary information, from both internal and external sources, which flows up, down, and across the organization.

7. (a)

Change can be approached in a number of ways. Efficient change management strategies are required for overcoming the change in the organisation.

For this purpose five strategies are critically assessed as under:

(i) Directive Strategy :

In this strategy authority and power of the manager is used to manage change. This is mostly used by the top-level management with no or minimum involvement of others. The advantage of this strategy is that it can be undertaken quickly as it involves less number of people. The disadvantage of this strategy is that it does not consider the opinion of others who are involved or affected by these changes.

(ii) Expert Strategy :

In this approach the change is viewed as a problem solving process and for this purpose help of an expert is taken to resolve it. In this approach also there is little involvement of those who are affected by these changes. The main advantage of this approach is that with the help and guidance to experts the change can be implemented quickly and effectively.

(iii) Negotiated Strategy :

In this strategy the top management discusses the various issues with those who are affected by the changes. This approach involves negotiation and bargaining on the part of the top management to implement the changes in the organisation. The changes to be made are discussed and the methods of implementation and the possible outcomes are also agreed upon.

(iv) Educative Strategy :

This approach is based on redefining and reinterpreting people's norms and values thus motivating them to support the changes being made. Here the main attention is on them who are involved in the process of change. The theory behind this approach is that people's behaviour and mind set is governed by social norms and values and to change them first these existing norms and values must be changed and redefined. And for this education, training, consultation must be needed.

(v) Participative Strategy :

As the name suggests it is based on participation of all individuals in the change process. Though the decisions are taken by the top level management, discussions and meetings are held for taking the view of the individuals before implementing the change. The focus is on full involvement of those who are affected by the changes.

7. (b)

From the viewpoint of Uplonkar and Biradar (2015), Agri entrepreneurship development is necessary for improving the production and productivity. Despite of the fact, the rate of attainment is extremely low in India due to following reasons:

- (i) Agriculture is largely a means of livelihood for most of the farmers. It is difficult for the uneducated small owner to turn their farming into an enterprise due to lack of adequate information, capital, technology and connectivity with the market.
- (ii) There is a need to create consciousness among the farmers about the benefits of these services as they are unaware about it.
- (iii) The free service provided by the Government organizations for promotion of services should be discontinued. As lots of farmers, especially the politically associated leaders feel that the government is liable for providing extension and technical advisory services to the farmers. In addition, the services of these organizations do not reach to small farmers, particularly those living in distant areas. This concept of free service makes the farmers reluctant to avail compensated services offered by the local self-employed technicians.
- (iv) There is need of regular back up services for self-employed technicians, contact with the marketing agencies, suppliers and research stations who are involved in the development of modern technologies.
- (v) They have to face several legal restrictions and obstacles and private traders involved in such business generally ignore these rules and disturb the fair trade environment.
- (vi) Lastly, Organizations feels risk in making heavy investments and implementing modern technologies which affect the profitability. Thus, resultant farmer members lose interest in their own enterprises as well as in that of their leaders.

8.

Report to the management of PQR Ltd in respect of introducing an Enterprise Risk Management System to monitor the risks.

The company should take into account the following risk exposures and possible responses against each such exposures.

Risk Exposure	Possible Responses
<u>Foreign exchange risk</u> due to its buying medical equipment from USA on credit.	A forward or a future contract to lock the exchange rate may be helpful. Additionally, an option contract to profit out of favorable movement in exchange rate may also be explored.
<u>Purchasing power risk</u> due to high volatility in the price of other supplies sourced domestically.	Buying from multiple suppliers and hedging the price risk through some synthetic derivatives may help.
<u>Financial risk</u> due to high leverage in its capital structure.	The company may try to reduce debts by issuing fresh equity if possible.

<u>Operational risk</u> due to high dependence on technology and key managerial personnel.	Regular maintenance of the system, cyber security measures will take care of systems risk while better package for employees will retain the workforce.
<u>Equity risk</u> due to investment of surplus fund in equity shares.	Regular monitoring of the equity portfolio and use of derivatives to cover losses will be advisable.
<u>Interest rate risk</u> due to investment of surplus fund in debt securities.	Regular monitoring of the debt portfolio and use of derivatives to cover losses will be advisable. Use of passive or index debt funds may be explored.
<u>Regulatory risk</u> due to possible change in the regulation.	Put more emphasis on compliance to reduce penalties.

A proposed Enterprise Risk Management System to monitor the risks in its organisation should take care of the issues as stated supra.
