

Chapter 13

Entrepreneurship

Chapter 13: Entrepreneurship

EXERCISES

1. Define the term ‘entrepreneurship’. Describe its importance.

Ans: Entrepreneurship Explained

Entrepreneurship is the process of creating or extracting economic value in ways that involve significant risk and innovation. It encompasses the conception, launch, and growth of a business, often driven by an individual's (the entrepreneur) vision, passion, and skills. This venture could be anything from a small, local bakery to a disruptive tech startup, but the core elements remain the same:

***Identifying a need or opportunity:** Entrepreneurs have a keen eye for gaps in the market or problems waiting to be solved. They can see potential where others might not.

***Taking initiative and risk:** Starting something new always involves uncertainty and potential failure. Entrepreneurs embrace this risk and actively pursue their vision despite the challenges.

***Organizing resources and building a team:** Turning an idea into reality requires resources like capital, technology, and people. Entrepreneurs excel at gathering these resources and assembling the right team to execute their plan.

***Innovation and adaptation:** The entrepreneurial journey is rarely smooth sailing. It demands constant adaptation, creative problem-solving, and the ability to pivot when needed.

Importance of Entrepreneurship

Entrepreneurship plays a crucial role in society, contributing to:

***Economic growth and development:** Entrepreneurs create new businesses, which leads to job creation, increased tax revenue, and overall economic expansion.

***Innovation and technological advancements:** Driven by their desire to disrupt and improve, entrepreneurs are often at the forefront of developing new technologies and solutions.

***Social impact and problem-solving:** Many entrepreneurs are motivated by a desire to make a positive impact on the world. They tackle social and environmental challenges through innovative businesses and social enterprises.

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***Individual empowerment and personal growth:** The entrepreneurial journey can be incredibly rewarding, offering individuals the opportunity to pursue their passions, build something meaningful, and achieve financial independence.

2. What are the qualities of an entrepreneur?

Ans: A successful entrepreneur embodies a unique blend of personal qualities, skills, and mindsets. Here are some key characteristics that often distinguish them:

Personal Qualities:

***Passion and drive:** A burning desire to bring their vision to life, and the relentless energy to pursue it through thick and thin.

***Creativity and innovation:** The ability to think outside the box, identify new opportunities, and develop solutions that disrupt the status quo.

***Risk-taking:** A willingness to step outside their comfort zone and take calculated risks, even in the face of uncertainty.

***Resilience and determination:** The ability to bounce back from setbacks, learn from failures, and persist in the face of challenges.

***Self-reliance and independence:** A strong sense of autonomy and the ability to take responsibility for their decisions and actions.

Skills:

***Problem-solving and decision-making:** The ability to analyze complex situations, identify solutions, and make quick and effective decisions.

***Leadership and communication:** The ability to inspire and motivate others, clearly communicate their vision, and build strong relationships.

***Planning and organization:** The ability to set goals, create actionable plans, and manage resources effectively.

***Financial literacy and business acumen:** An understanding of key financial concepts, market trends, and business operations.

***Adaptability and learning agility:** The ability to quickly learn new skills, adapt to changing circumstances, and embrace continuous learning.

Mindsets:

***Growth mindset:** A belief that abilities and skills can be learned and developed through effort and perseverance.

***Customer focus:** A deep understanding of their target audience's needs and desires, and a commitment to exceeding their expectations.

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***Openness to feedback:** A willingness to listen to criticism, learn from others, and constantly improve their approach.

***Tenacity and grit:** The unwavering determination to achieve their goals, even when faced with obstacles and setbacks.

***Visionary thinking:** The ability to envision the future, set ambitious goals, and inspire others to join them on their journey.

It's important to remember that no single list of qualities guarantees entrepreneurial success. The specific mix of attributes and skills that define a successful entrepreneur can vary depending on the industry, venture type, and individual personality. However, the characteristics mentioned above provide a valuable starting point for anyone considering embarking on the exciting and challenging journey of entrepreneurship.

3. Differentiate between entrepreneur and intrapreneur.

Ans: Both entrepreneurs and intrapreneurs are driven by innovation and a desire to make a difference, but they operate in different environments and with different levels of risk and control. Here's a breakdown of their key differences:

Focus:

***Entrepreneur:** Creates and launches a new business from scratch, bringing their idea to life. They identify market gaps and opportunities, develop products or services, and build a brand from the ground up.

***Intrapreneur:** Drives innovation within an existing organization. They take on new projects or initiatives within established companies, aiming to improve existing products, processes, or services.

Resources:

***Entrepreneur:** Uses personal or borrowed resources to fund their venture, relying on fundraising and building partnerships to acquire necessary assets.

***Intrapreneur:** Leverages the resources of the existing organization, including funding, infrastructure, and personnel. They have access to established resources but may face bureaucratic hurdles.

Risk and Reward:

***Entrepreneur:** Faces high personal risk with their own finances and career on the line. However, they enjoy the potential for high rewards and complete control over their venture.

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***Intrapreneur:** Faces lower personal risk as they are employed by the organization. Their potential rewards may be tied to salary increases, promotions, or bonuses, but the control they have over their project is often limited.

Examples:

***Entrepreneur:** Steve Jobs founding Apple, Elon Musk founding SpaceX, Oprah Winfrey starting her own media company.

***Intrapreneur:** A Google employee developing a new search algorithm, a product manager at Pepsi launching a plant-based soda line, a healthcare professional advocating for a new treatment within their hospital.

4. What are the steps of preparing a feasibility report?

Ans: Preparing a feasibility report involves a thorough assessment of various factors to determine the viability of a proposed project or venture. Here are the key steps involved:

1. Define the Project and Scope:

- *Clearly state the project or idea you're evaluating.
- *Define the project's boundaries, timeline, and expected outcomes.
- *Identify the stakeholders who will be interested in the report's findings.

2. Conduct a Preliminary Analysis:

- *Perform a rapid assessment of the project's potential.
- *This involves evaluating the market, technological requirements, potential risks and challenges, and any initial cost estimates.
- *This preliminary analysis helps determine if further in-depth investigation is worthwhile.

3. Market Research and Analysis:

- *Conduct detailed research on the target market for your project.
- *Analyze the size, trends, and demographics of the market.
- *Identify potential competitors and their strengths and weaknesses.
- *Assess customer needs and preferences to determine market demand for your project.

4. Technical Feasibility:

- *Evaluate the technical requirements of the project.
- *Identify any needed equipment, infrastructure, or technology.
- *Assess the availability and cost of resources required.

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*Ensure the project aligns with any relevant regulations or standards.

5. Financial Projections:

*Develop detailed financial projections for the project.

*This includes estimating revenue, expenses, costs, and potential profit margins.

*Conduct sensitivity analysis to consider different scenarios and potential risks.

*Create a break-even analysis to determine how long it will take to recoup costs.

6. Operational Feasibility:

*Plan the operational aspects of the project.

*Define the organizational structure, staffing needs, and management processes.

*Consider legal, regulatory, and environmental factors that may impact operations.

*Develop a timeline and project schedule for implementation.

7. Risk Assessment and Mitigation:

*Identify potential risks associated with the project.

*Analyze the likelihood and impact of each risk.

*Develop mitigation strategies to manage and minimize risks.

8. Conclusion and Recommendations:

*Summarize the findings of your feasibility analysis.

*Provide a clear recommendation on whether to proceed with the project.

*If proceeding, outline the next steps and implementation plan.

Additional Tips:

*Tailor the report to the specific needs and interests of your audience.

*Use clear, concise language and avoid technical jargon.

*Support your findings with data and evidence from your research.

5. Define a 'start-up'. What are the sources of funds for a new venture?

Ans: Defining a Startup

A startup is a young company in its early stages of operation, typically characterized by:

***Innovation:** Focus on a new product, service, or process with the potential to disrupt or create a new market.

***Growth potential:** Aiming for rapid growth and scalability compared to established businesses.

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***High uncertainty:** Operating with limited resources and facing uncertain outcomes due to its newness.

***Flexibility and agility:** Ability to adapt quickly to market changes and iterate on its product or service.

Sources of Funds for New Ventures

Startups need capital to get off the ground and fuel their growth. Here are some common sources of funding:

Bootstrapping: Using personal savings, credit cards, or income from side hustles to finance the initial stages.

Friends and family: Borrowing capital from individuals close to the founders.

Angel investors: Wealthy individuals who invest in early-stage ventures for high potential returns.

Venture capitalists (VCs): Firms that invest larger sums of money in exchange for equity in the company.

Crowdfunding: Raising smaller amounts from a large pool of individuals online.

Business loans: Obtaining loans from banks or other lenders, often requiring collateral and strong financial projections.

Government grants and incentives: Certain programs support innovative ventures in specific sectors.

Incubators and accelerators: Programs that provide funding, mentorship, and resources to startups in exchange for equity or a fee.

The best source of funding for a startup depends on several factors, including the nature of the business, its stage of development, and the risk appetite of potential investors. It's often a combination of different sources that fuels a startup's journey.

6. Elaborate the significance of a Biotechnology Entrepreneur.

Ans: The Significance of a Biotechnology Entrepreneur

Biotechnology entrepreneurs play a crucial role in turning scientific discoveries into tangible solutions that improve our lives in countless ways. Their significance can be seen across various dimensions:

1. Driving Innovation and Progress:

***Bridging the gap between science and application:** They transform ideas from academic labs and research institutions into practical products and services for healthcare, agriculture, environment, and beyond.

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***Developing life-changing solutions:** Bioentrepreneurs are responsible for advancements in drug development, gene therapy, regenerative medicine, agricultural technology, and sustainable practices.

***Pioneering new frontiers:** They explore uncharted territories in areas like synthetic biology, artificial intelligence-powered drug discovery, and personalized medicine, paving the way for the future of biotechnologies.

2. Economic and Social Impact:

***Generating jobs and stimulating economic growth:** The biotechnology industry is a powerful engine for job creation, attracting skilled professionals and fostering a diversified economy.

***Improving healthcare accessibility and affordability:** Bioentrepreneurs develop diagnostics, treatments, and preventative measures that reach underserved communities and alleviate financial burdens.

***Addressing global challenges:** They tackle critical issues like food security, environmental pollution, and climate change by developing innovative bio-based solutions.

3. Fostering Collaboration and Ecosystems:

***Building bridges between academia, industry, and investors:** Bioentrepreneurs facilitate collaboration between scientific research, business expertise, and financial backing, accelerating innovation and commercialization.

***Creating communities and networks:** They connect scientists, investors, policy makers, and other stakeholders, fostering a vibrant ecosystem for biotechnology innovation.

***Inspiring the next generation:** By demonstrating the potential of science to create positive change, bioentrepreneurs motivate young people to pursue careers in STEM fields and contribute to future breakthroughs.

Challenges and Risks:

While the significance of bioentrepreneurs is undeniable, their paths are often fraught with challenges:

***High risks and long development timelines:** Bringing a biotech product to market can take years and involve significant financial investments with uncertain outcomes.

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***Navigating complex regulations and ethical considerations:** Biotechnology advancements raise ethical concerns and require careful adherence to regulatory frameworks.

***Securing funding and building trust:** Convincing investors and the public of the potential value of innovative biotech concepts can be challenging.

Despite these challenges, the contributions of bioentrepreneurs remain vital. Their passion, perseverance, and visionary thinking continue to drive the industry forward, shaping a future where biotechnology serves as a powerful tool for improving human health, addressing global challenges, and creating a more sustainable world.

7. Identify the similarities and differences between General Entrepreneur and Biotechnology Entrepreneur.

Ans: Similarities between General Entrepreneurs and Biotechnology Entrepreneurs:

***Innovation and Risk-Taking:** Both types of entrepreneurs are driven by a passion for innovation and a willingness to take risks to bring their ideas to life. They identify market gaps or opportunities, develop solutions, and build businesses from scratch.

***Leadership and Vision:** Both require strong leadership skills to motivate and guide teams, and a clear vision to navigate the uncertainties of starting and growing a business.

***Entrepreneurial Skills:** Both need a well-rounded skillset including business acumen, marketing and sales expertise, financial management, and the ability to build relationships and networks.

***Facing Common Challenges:** Both face similar challenges such as raising capital, securing resources, building strong teams, navigating regulations, and adapting to market changes.

Differences between General Entrepreneurs and Biotechnology Entrepreneurs:

***Domain Expertise:** General entrepreneurs can come from any background, while biotechnology entrepreneurs require specialized knowledge and understanding of scientific principles, regulations, and technological advancements in the field.

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***Market and Target Audience:** General entrepreneurs target a broader range of markets and customer segments, while biotechnology entrepreneurs typically focus on niche markets within healthcare, agriculture, or environmental sectors.

***Development Timeline and Costs:** Bringing a biotechnology product to market typically takes longer and involves higher research and development costs compared to many other sectors.

***Regulatory Landscape:** Biotechnology entrepreneurs face stricter regulations due to the ethical and safety considerations involved in biological products and processes.

***Funding Environment:** While both face challenges in securing funding, biotechnology startups may face additional scrutiny from investors due to the perceived higher risk and longer development timelines.

8. Explain the process of starting a Biotech Enterprise.

Ans: Starting a biotech enterprise is an exciting but challenging journey filled with groundbreaking science, complex regulations, and immense potential. Here's a breakdown of the key steps involved:

1. Identify a Niche and validate idea:

***Explore scientific advancements:** Stay updated on research within your area of interest and identify unmet needs or potential disruptions.

***Market research:** Understand the target market, competition, and commercial viability of your idea.

***Proof of concept:** Conduct initial experiments or pilot studies to demonstrate the feasibility and effectiveness of your solution.

2. Build a Strong Team:

***Assemble a team of experts:** Recruit scientists, engineers, business professionals, marketers, and regulatory specialists with relevant experience.

***Founders and advisors:** Build a strong founding team with complementary skills and recruit experienced advisors for guidance.

3. Develop a Business Plan:

***Define your mission and vision:** Clearly articulate your goals and the impact you aim to achieve.

***Market strategy:** Outline your target market, competitive advantage, and marketing approach.

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***Financial projections:** Develop realistic financial forecasts, including fundraising needs, revenue streams, and expenses.

***Intellectual property protection:** Secure patents, trademarks, or copyrights to protect your technology or inventions.

4. Secure Funding:

***Bootstrapping:** Utilize personal savings, grants, or angel investors for initial stages.

***Seed funding:** Seek funding from venture capitalists specializing in early-stage biotech startups.

***Government grants and incentives:** Explore research grants or innovation programs relevant to your field.

5. Regulatory and Legal Compliance:

***Regulatory framework:** Thoroughly understand and comply with regulations related to drug development, clinical trials, manufacturing, and safety.

***Seek legal counsel:** Engage with experienced legal professionals for intellectual property protection, contracts, and regulatory guidance.

6. Development and Testing:

***Preclinical research:** Conduct laboratory experiments to validate the safety and efficacy of your product or technology.

***Clinical trials:** Design and conduct rigorous clinical trials to test your product on human subjects and obtain regulatory approval.

***Manufacturing and Quality Control:** Establish efficient and cost-effective manufacturing processes while ensuring adherence to quality standards.

7. Commercialization and Marketing:

***Launch strategy:** Develop a comprehensive launch plan for market entry, including pricing, distribution channels, and marketing campaigns.

***Building partnerships:** Collaborate with pharmaceutical companies, research institutions, or distributors for expanded reach and resources.

8. Growth and Sustainability:

***Continuous innovation:** Invest in research and development to maintain a competitive edge and explore new product lines.

***Financial management:** Implement sound financial practices, monitor profitability, and seek additional funding as needed.

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***Adaptability and resilience:** Be prepared to adapt to market changes, regulatory updates, and unforeseen challenges.

9. Explain the concept of IPR and aspect of IPR in Biotechnology.

Ans: Understanding Intellectual Property Rights (IPR) and their role in Biotechnology

Intellectual Property Rights (IPR) are a legal framework that protects creations of the mind, such as inventions, literary and artistic works, designs, and symbols. They grant the owner exclusive rights to use, control, and prevent others from using their intellectual property for a limited period. In the context of biotechnology, IPR plays a crucial role in:

1. Encouraging Innovation:

***Rewarding inventors:** Patents give inventors exclusive rights to their inventions for a defined period, allowing them to recoup research and development costs and generate profits. This incentivizes research and development in promising areas of biotechnology.

***Sharing knowledge:** Patent documents disclose technical details of inventions, enabling others to build upon existing knowledge and accelerate future advancements.

2. Protecting Innovations:

***Preventing exploitation:** Patents prevent competitors from copying or unauthorized use of inventions, giving innovators control over their work and ensuring commercial viability.

***Fair competition:** IPR creates a level playing field by safeguarding legitimate innovators from unfair competition based on stolen or copied ideas.

3. Facilitating Commercialization:

***Attracting investments:** Strong IPR protection signals investors about the potential value and security of investments in biotechnology ventures.

***Enabling partnerships:** Licensing deals and cross-collaborations between companies rely on clearly defined IPR ownership to share innovations and expedite advancements.

Specific Aspects of IPR in Biotechnology:

***Patents:** Cover biological materials like genes, cells, proteins, and processes related to their manipulation or use.

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***Trademarks:** Protect brand names, logos, and slogans associated with specific biotech products or services.

***Trade Secrets:** Guarding valuable know-how, manufacturing processes, and confidential information not publicly known.

***Plant Variety Protection (PVP):** Grants exclusive rights to breeders of new plant varieties for a limited period.

***Geographical Indications (GIs):** Protect the reputation and origin of geographical-specific products, often applied to agricultural and bioresource-based products.

Challenges and Considerations:

***Ethical concerns:** Balancing commercialization with access to life-saving biotechnologies and ensuring equitable distribution of benefits.

***Biopiracy:** Protecting biological resources and traditional knowledge in developing countries from misappropriation by corporations.

***Complexities in patenting life forms:** Debates and legal battles continue around the patentability of genes, organisms, and naturally occurring biological materials.

Conclusion:

IPR plays a critical role in fostering innovation, protecting intellectual property, and facilitating commercialization in the biotechnology sector. However, navigating the nuances and ethical considerations in this field requires ongoing dialogue and collaborative efforts among researchers, legal experts, policymakers, and industry stakeholders.

10. Explain the role of IPR in Biotechnology Enterprise.

Ans: Intellectual Property Rights (IPR) play a crucial role in the success and sustainability of any biotechnology enterprise. They act as powerful tools for:

1. Securing Competitive Advantage:

***Patents:** Protect key inventions, such as novel drugs, diagnostic tools, or gene editing techniques, preventing competitors from replicating them and stealing market share. This exclusivity allows the enterprise to build a strong brand and command premium pricing.

***Trade secrets:** Safeguarding confidential information like manufacturing processes, proprietary algorithms, or unique data sets, providing a distinct edge over competitors and maintaining a technological lead.

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2. Attracting Investment and Partnerships:

***Strong IPR portfolio:** Demonstrates the value and potential of the enterprise, attracting venture capitalists, angel investors, and potential partners for collaboration and licensing deals. Investors are more likely to support a company with robust IPR protection, minimizing their risk and increasing potential returns.

***Facilitating technology transfer:** Licensing agreements involving patented technologies generate additional revenue streams for the enterprise, promoting wider adoption and accelerating commercialization of their innovations.

3. Encouraging Innovation and Growth:

***Incentivizing R&D:** The prospect of future patent rewards motivates biotechnology enterprises to invest heavily in research and development, leading to breakthroughs in areas like drug discovery, personalized medicine, and sustainable bio-based products.

***Creating a culture of innovation:** A secure IPR environment fosters a culture of innovation within the enterprise, encouraging employees to develop new ideas and inventions knowing they will be protected and rewarded.

4. Navigating Global Markets:

***Harmonization of IPR:** Adherence to international IPR agreements like the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement facilitates smoother entry into global markets and reduces trade barriers related to intellectual property.

***Protecting inventions abroad:** International patent filing processes help secure protection for inventions in different countries, expanding market reach and ensuring fair competition.

Challenges and Considerations:

***Balance between innovation and access:** Striking the right balance between protecting inventions and ensuring affordable access to essential biotechnologies like life-saving drugs remains a complex challenge.

***Ethical concerns:** Questions arise around ethical implications of patenting life forms and ensuring equitable distribution of benefits from biotechnologies, particularly in developing countries.

***Managing IPR costs:** Filing and maintaining patents can be expensive, creating a barrier for smaller enterprises and potentially hindering innovation.

Conclusion:

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IPR plays a critical role in the success of any biotechnology enterprise. By leveraging IPR strategically, enterprises can secure their competitive advantage, attract investments, drive innovation, and navigate the global market. However, addressing ethical concerns and finding solutions to make essential biotechnologies accessible to all remain crucial challenges.

11. What are the three central criteria for grant of Patents of any scientific inventions?

Ans: There are three central criteria for granting patents to any scientific invention, often referred to as the "patent trinity":

1. Novelty: The invention must be new and not already known to the public, either through prior publications, public use, or prior patents. This ensures that the patented invention represents a true advancement and doesn't simply repackage existing knowledge.

2. Non-obviousness: The invention cannot be considered an obvious modification of existing technology or something easily expected by someone skilled in the field. It must demonstrate an inventive step, showcasing a unique and unexpected solution to a problem.

3. Industrial applicability: The invention must have a practical application and be capable of being made or used in industry. This excludes hypothetical or purely theoretical concepts that cannot be translated into a tangible product or process.

These three criteria ensure that:

***Patents go to genuine advancements:** Only truly new and inventive solutions that add value to the field are rewarded.

***Competition is encouraged:** By setting a high bar for patentability, inventors are incentivized to develop truly innovative solutions, not just minor tweaks or obvious changes.

***Technology is disseminated:** Patented inventions are publicly disclosed through patent documents, allowing others to build upon them and accelerate further advancements.

It's important to note that the interpretation and application of these criteria can vary depending on the specific invention and the jurisdiction in which the patent is filed. However, the underlying principles of novelty, non-obviousness, and industrial applicability remain fundamental to the patent system worldwide.

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12. 'Angel' usually provide what type of financing?

- (a) Debt**
- (b) Equity**
- (c) Stock Sales**
- (d) None of the above**

Ans: (b) Equity.

13. A patent is granted for a specified amount of time because of the assumption:

- (a) That during this time, the firm will cover its development costs**
- (b) That firm will earn a sufficient profit during this period**
- (c) To limit the monopoly of the firm**
- (d) That it will stimulate the idea and development of a better product**

Ans: (c) To limit the monopoly of the firm.

14. A short-term, internal source of funds can be obtained by reducing all of the following EXCEPT _____.

- (a) short-term assets**
- (b) cash**
- (c) fixed assets**
- (d) Inventory**

Ans: (c) fixed assets.

15. A typical researcher entrepreneur usually _____.

- (a) is highly creative and enjoys the process of research**
- (b) does not encourage change**
- (c) is not willing to take risk**
- (d) dislikes change**

Ans: (a) is highly creative and enjoys the process of research

16. Which of the following elements is NOT an important element of the financial data and projections section of a business plan?

- (a) SWOT analysis**
- (b) Projected income statements**

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(c) Break-even analysis

(d) Cost controls

Ans: (a) SWOT analysis.

17. Which of the following cannot be covered under the copyright protection?

(a) Computer software

(b) Computer hardware

(c) Poems and songs

(d) Models and sculpture

Ans: (b) Computer hardware.

18. Which of the following is false?

(a) A business plan is often prepared by an existing company to ensure that growth is properly managed.

(b) A business plan is usually not required when obtaining finance for a startup.

(c) If a business plan is completed for a start-up, it may help the entrepreneur avoid costly mistakes.

(d) All of the above.

Ans: (b) A business plan is usually not required when obtaining finance for a startup.

19. Which of the statements is/are true with respect to entrepreneurship?

(i) Entrepreneur is an individual who undertakes an activity foreseeing business opportunity.

(ii) He/She organises resources needed for starting the enterprise and also bears the risk involved in the process.

(iii) There are three prominent roles that an entrepreneur fulfils that of an innovator, organiser and a risk bearer.

Options:

(a) Only (i)

(b) Only (i) and (ii)

(c) Only (i) and (iii)

(d) (i), (ii) and (iii) are true

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Ans: (d) (i), (ii) and (iii) are true.

20. Seed capital assistance is _____.

- (a) a long-term assistance.**
- (b) initial assistance**
- (c) a help for the purchase of seeds.**
- (d) a short-term assistance.**

Ans: (d) a short-term assistance.

21. Which one of the following is a pioneering initiative of India to prevent misappropriation of country's traditional medicinal knowledge at International Patent Offices?

- (a) Traditional Knowledge Digital Library (TKDL)**
- (b) National Digital Library of India (NDLI)**
- (c) Digital Library of Open Access Books (DOAB)**
- (d) Universal Digital Library**

Ans: (a) Traditional Knowledge Digital Library (TKDL).

SUMMARY

- Entrepreneur is an individual who undertakes an activity foreseeing business opportunity. They organise resources needed for starting the enterprise and also bear the risk involved in the process.
- Entrepreneurship is widely regarded as the best way to augment the growth of an economy. Entrepreneurs have played a significant role in developing some of the best economies of the world like that of USA and Japan. In India also we have had several communities who have played the significant role of entrepreneurs for the economic development of our nation.
- Entrepreneurs are seen to display certain inherent qualities like that of initiative, knowledge and skill, risk-taker, adaptability, self-confidence and they are also the wealth creators.
- The two terms—entrepreneur and intrapreneur, are often used interchangeably. But each has a distinctive definition. An entrepreneur is a person who takes risks to start a business venture in order to earn profit. On the other hand, an intrapreneur is

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an employee of an organisation who promotes innovation among the employees of the organisation.

- In entrepreneurial terminology, the term ‘Startup’ has become a popular word. A startup should be working towards innovation or improvement of the existing products, services and processes and should have the potential to generate employment and to create wealth. An entity formed by splitting up or reconstruction of an existing business shall not be considered a ‘Startup’.
- There are seven sources of starting a new venture viz. Personal Investment, Venture Capital, Angel Investors, Business Incubators, Government Grant Subsidy and Bank Loans.
- Biotechnology entrepreneurship consists of all the activities that an entrepreneur does to build and sustain an enterprise based on biotechnological innovation. It is an enterprise built by the amalgamation of science and business.
- There are six steps that are critical to starting a biotech enterprise, these are— Need assessment, Identification of founders and key personnel, Getting a legal expert, Incorporate the company as a Limited Company, Design a marketing and business strategy, and Focus on technology development.
- The proprietary aspect is the key feature of biotechnology in modern times. In the past, innovations in biotechnology came out only of publicly funded laboratories. In present times, biotech innovations are well protected within legal framework of Intellectual Property Rights (IPR). Aspects of IPR involved in biotechnology are Patent, Plant Breeder’s rights and Farmer’s Variety Act, Trademark, Copyright and Trade-secrets.
- Biopiracy is a major issue in efforts to commercialise biotechnological knowledge. When there is commercial exploitation of biochemicals or genetic materials which occur naturally, it is known as biopiracy. Generally, indigenous people have traditional understanding of biological features and genetic diversity of the natural environment passed on from one generation to another. There have been cases of infringement of rights towards traditional materials in recent times. A case of biopiracy by multinational corporations is that of the Neem tree of India. Another case was when patent was granted to researchers for the use of turmeric in wound healing, which was revoked later. Yet another case was when rice similar to Basmati was granted patent in USA, which was also revoked later.
- In order to curb the biopiracy of traditional medicines, Traditional Knowledge

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Digital Library (TKDL) has been set up which is a pioneering initiative of India to prevent misappropriation of country's traditional medicinal knowledge at International Patent Offices.