

Student Learning Outcomes:

By the end of this chapter, you will be able to:

- Explain the significance of legal compliance and ethical practices in digital entrepreneurship.
- Identify and describe key data privacy laws.
- Apply ethical decision-making to resolve conflicts of interest and ensure fairness in business operations.
- Recognize responsible marketing practices and explain the necessity of truthful advertising and obtaining user consent for targeted marketing.
- Use structured problem-solving methods, such as root cause analysis and SWOT analysis, to address business challenges.
- Explain the concept of data-driven marketing, including setting measurable goals, defining Key Performance Indicators (KPIs), using analytics tools, and measuring Return on Investment (ROI).
- Describe the role of Customer Relationship Management (CRM) systems in building long-term customer loyalty through personalized communication and loyalty programs.
- Explain how marketing automation tools can improve efficiency, reduce operational costs, and expand customer reach.

Subjective Type Questions

Long Questions prepared in the light of new Examination Techniques
(Knowledge, Understanding, Application, Analytical & Conceptual)

Introduction

Q. Explain the core concept of digital Entrepreneurship?

Ans: This chapter provides an understanding of the legal, ethical, and strategic skills that are important to operate a successful digital business. It explains how entrepreneurs can comply with relevant data privacy laws, such as Pakistan's Data Protection Bill, the General Data Protection Regulation (GDPR), and the Children's Online Privacy Protection Act (COPPA). It further outlines the principles of ethical decision-making, conflict of interest management, and balancing profitability with customer welfare.

The chapter also examines the role of digital ethics in promoting safe and respectful online environments for both businesses and customers. Strategic marketing concepts, including data-driven decision-making, customer relationship management (CRM), competitive analysis, and marketing automation, are discussed with practical examples. By the end of this chapter, you will have the knowledge and skills to make informed, responsible, and strategic business decisions in the digital age.

Q.1. Define Entrepreneurship and Write down its basic concepts?

Ans:

Entrepreneurship is the process of designing, launching, and managing a business to create value.

Economic Growth:

Entrepreneurship tells how it drives economic growth, generates employment opportunities.

Innovations:

Entrepreneurship also introduces innovations that improve everyday life.

Digital tools:

Entrepreneurship also introduced fundamental digital tools, such as social media platforms, e-commerce websites, and market research applications, that enable entrepreneurs to connect with customers and manage their operations effectively.

Q.2. Define Advance Entrepreneurship concepts?

Ans:

We build upon that foundation to explore advanced skills required in the competitive digital business environment. These include:

Legal Compliance:

Legal compliance, to ensure a business operates within the law; regulatory awareness, to keep pace with changing rules and industry requirements.

Ethical framework:

Ethical frameworks, structured problem-solving, to address challenges effectively.

Strategic Marketing:

Strategic marketing, to strengthen a business's presence and relationship with its customers.

These skills matter because today's entrepreneurs are expected to protect their intellectual property, respect customer rights, safeguard data privacy, and maintain the trust of their community.

Q.3. What are the challenges does today's entrepreneurship face? Explain.

Ans:

In the business world, challenges can appear at any time. These may include losing customers, facing new competitors, or changes in technology. Successful entrepreneurs do not give up when faced with difficulties. Instead, they use a clear method to understand the problem, find its main cause, and take effective steps to solve it. They also stay flexible and ready to change when conditions demand it.

Q.4. What is structured problem solving? Explain Root Cause Analysis and SWOT Analysis?

Ans:

Structured problem-solving means using a step-by-step approach to identify a problem, understand why it is happening, and decide the best solution. This avoids guesswork and helps prevent the same issue from happening again.

Root Cause Analysis:

Every problem has a main reason behind it, called the root cause. If we only fix the surface problem, it may return. Root cause analysis helps in finding and addressing the main reason, so the solution is long-lasting.

Example:

If an online shop receives many complaints, the owner should investigate whether the cause is late delivery, unclear product descriptions, or poor packaging. Once the root cause is found, it can be corrected.

SWOT Analysis:

SWOT analysis helps businesses understand their current situation and plan wisely for the future. SWOT is a simple tool that stands for:

- Strengths, things the business does well (e.g., high-quality products).
- Weaknesses, areas that need improvement (e.g., slow customer service).
- Opportunities, chances to grow or improve (e.g., high demand for a new product).
- Threats, outside factors that can harm the business (e.g., new competitors).

TIDBIT

Every challenge is a hidden lesson. Businesses that stay curious, ask "why" often, and act quickly turn problems into opportunities for growth.

Q.5. Define Adaptability and Resilience? Explain how to response when market technology changes?

Ans: **Adaptability:**

Adaptability means being willing and able to change when needed.

Resilience: Resilience means a business can recover quickly after a setback.

These two skills help a business in surviving and growing even in difficult times.

Respond to Change in Market or Technology:

The business environment changes quickly. New customer needs, competitors, or technologies can appear at any time. A business that adapts to these changes has a better chance of success.

Example: A shop that starts home delivery when customers prefer online shopping.

Setbacks Recovery:

Mistakes, failures, or losses can happen in any business. A resilient business accepts the setback, learns from it, and works harder to improve.

Example: If a bakery receives complaints about taste, it can improve its recipe, test the new version, and invite customers to try it again.

Some of the world's biggest companies, like Netflix and YouTube, did not start the way we know them today. Netflix first rented DVDs by mail, and YouTube was made for video dating. They changed their ideas and became famous all over the world.

8.3**Ethical Business Practices and Digital Ethics**

Q.6. What is ethical business? Also explain ethical decision making? What happened when conflict of interest are there?

Ans:

Ethics in business means following moral principles and doing what is right, fair, and honest.

Importance:

In the digital age, businesses must ensure that their decisions, marketing, and online activities respect both the law and customer rights. Ethical practices build trust and help a business grow in a responsible way.

Ethical Decision-Making:

Ethical decision-making means making choices in business that are fair, honest, and responsible. It is about doing the right thing, even when it may be easier or more profitable to choose another way.

Advantages of Ethical Decision Making:

- A business that follows ethical decision-making earns respect and trust from customers, employees, and the community.
- Ethical decision-making is not always the easiest path, but it is the one that helps a business grow with integrity
- Keep loyal customers, and maintain a positive image in society.

Conflicts of Interest:

A conflict of interest happens when a person's benefit or relationship can affect their business decisions. This can lead to unfair treatment or bias.

Example: If a shop owner hires their cousin for a job without giving a chance to apply to other skilled people, it's unfair. The fair and ethical way is to let everyone apply, check their skills, and then hire the person who is best for the job.

Q.7. Explain the concept of Balancing Profit and Digital Ethics? Describe Responsible Marketing?

Ans:

A business needs profit to continue operating, but profit must not come from harming customers or risking their safety. An ethical business charges a fair price, uses safe and good-quality products, and provides honest information.

Example:

If a business sells food at a high price while using low-quality ingredients, it may

earn more money at first. However, customers lose trust, and the business suffers in the future.

Digital Ethics:

Digital ethics means using the internet and digital tools responsibly and respectfully. Businesses keep customer information safe, provide accurate details, and interact politely online. Customers also follow rules, treat others with respect, and avoid harmful actions. Businesses maintain safe online spaces by setting clear rules and taking quick action against harassment or bullying.

Responsible Marketing:

Responsible marketing means promoting products and services honestly and fairly, providing customers with correct and complete information, and avoiding false promises. This approach helps customers make informed decisions and builds trust in the business.

- Every business advertisement must present truthful and clear information, without exaggerations or hidden conditions that may mislead customers.
- When a business collects personal data of users to show targeted advertisements, businesses must obtain clear permission from customers and explain how the information will be used.

Q.8. Define Data Privacy laws? Explain the key points of "Personal Data Protection Bill"?

Ans:

Data privacy laws are rules that protect personal information collected by businesses, such as names, addresses, phone numbers, or payment details.

Personal Data Protection Bill:

In Pakistan, the Personal Data Protection Bill says that businesses must:

- Collect only the information they need.
- Use the information only for the purpose they explained to the customer.
- Keep the information safe and do not share it without permission.

Privacy Laws in other countries:

Some other countries also have strong privacy laws, such as:

- General Data Protection Regulation (GDPR) to protect the personal data of people in European countries.
- Children's Online Privacy Protection Act (COPPA) to protect the personal data of children under 13.

These laws matter for Pakistani businesses if they have customers from other countries because they must follow the rules of those countries as well.

Q.9. What is regulatory awareness? Explain with example.

Ans:

Regulatory awareness means knowing which laws and rules apply to your business and making sure you follow them.

This involves:

- **Stay Updated:**

- Checking regularly if any laws have changed that may affect your business.

- **Compliance Audits:**

- A process where the business is checked to see if it is following all the required laws and rules.

Example:

If a school is willing to launch an online portal where students can check their homework, grades, and attendance. To use the portal, students must enter their name, roll number, and contact details.

The school follows data privacy rules by:

- Collecting only the information needed for the portal.
- Using the information only for school purposes, such as sending homework updates or exam schedules.
- Protecting the information with passwords so no one else can access it.

DO YOU KNOW

In 2019, Google and YouTube were fined \$170 million in the USA for breaking COPPA (Children's Online Privacy Protection Act) rules by collecting personal data from children without their parents' permission. This shows how seriously data privacy laws are enforced worldwide.

8.4

Legal Framework and Compliance

Q.10. What is Legal Framework and Compliance? Explain the process to register your business in Pakistan?

Ans:

Legal Framework & Compliance means the laws and rules a business must follow to operate legally. It includes registering the business, paying taxes, protecting customer data, and meeting industry requirements. There are some rules that prevent legal problems and build market trust for any business.

Business Registration in Pakistan:

Starting a business in Pakistan is not just about having a good idea. It also needs to be made legal by registering it with the government. Registration makes the business official, allows it to work without legal problems, and helps gain the trust of customers, banks, and other businesses.

Registration with SECP:

The Securities and Exchange Commission of Pakistan (SECP) is the main authority to register any new startup business in Pakistan. The registration process consists of the following steps:

- **Business Name:**

Choose a unique business name and get it approved through the SECP website

using the following URL (<https://secp.gov.pk/>).

- **Documentation:**

Prepare the required documents, such as the Memorandum and Articles of Association for companies or a partnership deed for partnerships.

- **Apply online:**

Get the Certificate of Incorporation, which proves that the business is officially registered.

Q.11. Explain processes of obtain NTN, Tax filling and record keeping and industry specification Regulation?

Ans: Obtain National Tax Number:

The NTN is an identification number for taxpayers in Pakistan. It is issued by the Federal Board of Revenue (FBR). Process to obtain an NTN:

- Apply through the FBR's "Iris" online portal.
- Provide SECP registration documents, proof of address, and business activity details.
- Once approved, the NTN allows the business to open bank accounts, issue invoices, and meet tax obligations.

Tax Filing and Record-Keeping:

Registered businesses must:

- File annual income tax returns and, if applicable, monthly sales tax returns.
- Keep accurate records of sales, purchases, salaries, and expenses.
- Avoid late or incorrect filings, as these can lead to fines or legal actions.

Industry-Specific Regulations:

Some businesses in Pakistan must follow special rules in addition to general registration and tax requirements.

Q.12. Explain with example all the steps of business registration?

Ans:

Consider two students from your class, Mr. X and Mr. Y want to start an "online bookstore" for students.

1. **SECP Registration:** They chose a meaningful and professional name like "E-book Hub" for their business and got it approved on the SECP website. They submit all the required documents online and receive a Certificate of Incorporation.
2. **Obtaining NTN:** They apply for a National Tax Number (NTN) through the FBR's Iris portal, using their SECP documents, address, and business details.
3. **Tax Filing:** They keep proper records of sales and expenses and file their annual tax returns on time.
4. **Industry Rules:** As an e-commerce business, they add terms of service, a privacy policy, and return/refund rules to their website to follow Pakistan's E-Commerce Policy rules.

Conclusion:

By completing these steps, Mr. X and Mr. Y start their new online bookstore legally, approved by the government, which is more trustworthy for customers and suppliers.

DO YOU KNOW

When we register a new business, we need to understand the purpose of above mentioned documents:

- I. Memorandum of Association: Basic details of a company, like its name, purpose, and location.
- II. Articles of Association: Rules for running the company.
- III. Partnership Deed: An agreement between two or more people who start a business together, explaining each person's share, role, and responsibilities.

Q.13. Explain contracts in digital business, basic elements of validation and its importance?

Ans:

A contract is a written or spoken agreement between two or more people or organizations that is legally binding. In digital business, contracts are important because they set out the terms and conditions for working together, whether it is with business partners, suppliers, or customers. They help prevent misunderstandings and provide legal protection if a disagreement occurs.

Basic Elements of a Valid Contract:

For a contract to be valid, it must have:

- Offer: One side promises to do something, such as sell a product or provide a service.
- Acceptance: The other side agrees to the offer without changes.
- Consideration: Something of value is exchanged, such as money, goods, or services.
- Legal Purpose: The contract must be about something lawful.
- Consent: Everyone agrees willingly, without being forced or tricked.

Importance in Digital Business:

In digital businesses, contracts can be signed on paper or electronically. They are used for:

- Partnerships, to set clear roles, responsibilities, and how profits will be shared.
 - Suppliers, to fix delivery times, payment terms, and quality standards.
 - Online Transactions, to state terms of service, refund rules, and customer rights
- Clear contracts build trust and make business dealings smooth and safe.

Q.14. Explain Intellectual Property Rights? Explain the originations who are responsible for registration all IPR in Pakistan?

Ans:

IPRs are legal rights that protect the creations of a person or business. These creations can include inventions, books, songs, artwork, brand names, or logos. IPR ensures that no one can use or copy these creations without permission. This protection encourages people to be creative and helps businesses keep their unique identity.

Registration of Intellectual Property in Pakistan.

The following fundamentals are required to register an intellectual property in Pakistan:

Trademarks:

Protect brand names, logos, or symbols used to identify goods or services.

- Apply at the Intellectual Property Organization of Pakistan (IPO Pakistan).
- Apply with the name or logo, description of goods or services, and the required fee.
- Once approved, the trademark stops others from using a similar name or logo.

Copyrights:

Protect original creative works such as books, songs, computer programs, or drawings.

- Apply to the Copyright Office under IPO Pakistan.
- Send details of the work, proof that you created it, and a copy of the work.
- Copyright is given automatically when the work is created, but registration gives stronger legal protection.

Patents:

Give legal protection to a new product, design, or method that someone has created. This means only the inventor can make, use, or sell it for a certain time.

- Apply at the Patent Office under IPO Pakistan.
- Submit details, drawings, and descriptions of the invention.
- Once approved, only the inventor can make, use, or sell the invention for a set period.

Protecting Trade Secrets in the Digital Age:

➤ A trade secret is private business information that gives an advantage, such as a recipe, a formula, or a list of customers.

- Keep this information secure, both on paper and in digital form.
- Use passwords, encryption, and limit access to authorized people only.
- Ask employees or partners to sign a Non-Disclosure Agreement (NDA) so they cannot share the information.

Think of your business name and logo as your identity in the market; make them original, easy to recognize, and meaningful. A strong trademark not only protects your identity from being copied but also builds customer trust, supports marketing, and gives your business a lasting competitive edge.

8.6

Strategic Marketing and Branding

Q.15. Explain Strategic Marketing & Branding? Also explain Data Driven Marketing?

Ans:

Strategic marketing is the process of planning and carrying out activities to promote a business in a way that attracts customers and keeps them loyal. In today's digital age, businesses use data, technology, and customer insights to design better marketing strategies, strengthen their brand, and build long-term relationships.

Data-Driven Marketing:

Data-driven marketing means making marketing decisions based on facts, numbers, and analysis rather than guesswork. Businesses collect information from customers, websites, and sales records to plan effective campaigns to grow.

1. Setting Measurable Goals and KPIs (Key Performance Indicators):

Example:

An online clothing store in Lahore sets a target to increase T-shirt sales by 20% within three months. They track progress using KPIs such as the number of T-shirts sold each week, website visits, and customer reviews.

2. Using Analytics Tools:

Example:

A Karachi-based bakery uses Google Analytics to see which Facebook ads bring the most customers to their website. They notice that ads showing cakes for birthdays get more clicks than general ads, so they focus more on birthday-themed promotions.

3. Measuring ROI (Return on Investment):

Example:

A small bookstore spends Rs. 10,000 on Instagram ads and earns Rs. 25,000 in sales from those ads. By comparing the cost with the profit, they confirm the campaign was successful and decide to repeat the strategy.

Q.16. Explain Customer Relationship management? Explain How CRM Tools works?

Ans:

CRM is a way of handling all interactions with customers to build trust and create long-term relationships. A good CRM approach helps a business understand its customers better and serve them in a more personal way.

• How CRM Tools Work?

Example:

A sports shop in Islamabad uses Zoho CRM to store customer names, contact details, shoe sizes, and purchase history in one system. When a new sports shoe arrives in the size a customer usually buys, the shop can send them a quick message or email about it.

• Retaining Customers:

Example:

A coffee shop in Karachi uses a loyalty program where customers get a free drink after every 10 purchases. They also send personalized emails with the customer's name and favorite drink offers, making customers feel valued and more likely to return.



Figure 8.1: CRM organizes customer data to build lasting relationships.

Q.17. Explain Customer Relationship management? Explain How CRM Tools works?

Ans:

Marketing automation means using special software to handle marketing tasks automatically, without needing to do each step manually. This helps businesses save time, work more efficiently, and stay connected with customers.

Examples:

- Mailchimp can automatically send welcome emails to new customers, share special offers, and post updates on social media.
- HubSpot can track customer activity, send follow-up messages, and create reports on marketing performance.

Benefits for Small Businesses:

- Saves time by handling routine tasks automatically.
- Reduces costs by lowering the need for extra staff.
- Sends timely updates to customers, improving engagement.
- Helps reach a wider audience with less effort.
- Tracks campaign results to see what works best.

TIDBIT

A brand is not just a logo; it is the feeling customers have about your business. Every message, product, and service shapes that feeling.

Objective Type Questions

Additional MCQ's

Multiple Choice Questions prepared in the light of new Examination Techniques
(Knowledge, Understanding, Application, Analytical & Conceptual)

8.1

From Basics to Advanced Entrepreneurship

1. Why is entrepreneurship important?
(A) It reduces communication
(B) It creates economic growth and job opportunities
(C) It stops innovation
(D) It decreases business activities
2. Advance concepts of Entrepreneurship are:
(A) Legal compliance
(B) Ethical from work
(C) Strategic Marketing
(D) All of these

8.2

Problem Solving and Adaptability

3. What is the primary goal of "Root Cause Analysis"?
(A) To fix the surface problem quickly
(B) To find the main reason behind a problem to prevent it from returning
(C) To identify the competitors of a business
(D) To calculate the total profit of a business
4. In SWOT analysis, which two factors focus on the internal environment of a business?
(A) Opportunities and Threats
(B) Strengths and Weaknesses
(C) Strengths and Opportunities
(D) Weaknesses and Threats
5. An online store starts offering home delivery because customers no longer want to visit physical shops. This is an example of:
(A) Root cause analysis
(B) Resilience
(C) Adaptability
(D) Competitive analysis
6. "Threats" in a SWOT analysis are defined as:
(A) Things the business does well
(B) Areas that need improvement
(C) Outside factors that can harm the business
(D) Chances to grow the business
7. Which skill helps a business recover quickly after a major setback, such as a loss or failure?
(A) Adaptability
(B) Resilience
(C) Marketing
(D) Registration
8. Why is structured problem-solving better than guesswork?
(A) It is much faster
(B) It helps prevent the same issue from happening again
(C) It requires no effort
(D) It always results in higher prices

9. A bakery changes its recipe after receiving complaints about taste and invites customers back. This is an example of:
(A) Strategic marketing (B) Setback recovery and resilience
(C) Data privacy (D) Conflict of interest
10. Netflix changing from a DVD-by-mail service to a streaming giant is a classic example of:
(A) Data privacy laws (B) Adopting a unique business name
(C) Adapting to changes in technology/ideas
(D) Intellectual Property Rights
11. In SWOT, "slow customer service" would be categorized as a:
(A) Strength (B) Weakness (C) Opportunity (D) Threat
12. A "Root Cause" is best described as:
(A) The most expensive part of a problem
(B) The first person to report a problem
(C) The main reason a problem occurs (D) The final result of a problem

8.2

Ethics Business Practices and Digital Ethics

13. What does "Ethics" in business mean?
(A) Maximizing profit at any cost
(B) Following moral principles and doing what is right and fair
(C) Only following laws when the government is watching
(D) Copying a competitor's successful ideas
14. A shop owner hiring a cousin for a job without giving other skilled people a chance is an example of:
(A) Professionalism (B) Conflict of interest
(C) Strategic hiring (D) Customer welfare
15. Balancing profit with customer welfare means:
(A) Increasing prices during a shortage to make more money
(B) Ensuring products are safe and good quality while earning a fair profit
(C) Selling low-quality goods to save on costs
(D) Ignoring customer complaints to focus on sales
16. Digital ethics includes which of the following?
(A) Using the internet and digital tools responsibly and respectfully
(B) Hacking into competitor websites
(C) Sharing customer data with other companies for money
(D) Posting fake reviews to help your business
17. Responsible marketing requires businesses to:
(A) Use exaggerations to make products look better
(B) Provide truthful and clear information without hidden conditions
(C) Show ads to children without parent permission
(D) Use customer data without asking for consent

18. If a business sells food at a high price using low-quality ingredients, what is the likely result?
- (A) The business will grow faster
 - (B) Customers will lose trust and the business will suffer in the future
 - (C) The business will become the market leader
 - (D) It will improve the business's image in society
19. What must a business do before collecting data for targeted advertisements?
- (A) Nothing, data is public
 - (B) Obtain clear permission and explain how the info will be used
 - (C) Only do it if the customer is over 18
 - (D) Only do it if the customer is over 18
20. Why is ethical decision-making important for long-term growth?
- (A) It helps the business avoid paying any taxes
 - (B) It earns respect and trust from customers and the community
 - (C) It ensures the business never faces competition
 - (D) It makes the business's products the cheapest
21. In the digital age, businesses maintain safe online spaces by:
- (A) Ignoring rude comments
 - (B) Setting clear rules and taking action against harassment
 - (C) Deleting their social media accounts
 - (D) Charging users to post comments
22. Which is a core principle of the Personal Data Protection Bill in Pakistan?
- (A) Collect as much data as possible "just in case"
 - (B) Use information for any purpose the business chooses
 - (C) Collect only the information that is actually needed
 - (D) Share customer data with partners without asking
23. The GDPR is a data privacy law designed to protect people in:
- (A) Pakistan
 - (B) The United States
 - (C) European countries
 - (D) Asia
24. COPPA is a law specifically designed to protect the privacy of:
- (A) Business owners
 - (B) Children under the age of 13
 - (C) Government officials
 - (D) International exporters
25. Why must Pakistani businesses care about international laws like GDPR?
- (A) They don't need to care unless they live in Europe
 - (B) Because they must follow the rules of the countries where their customers are
 - (C) Because Pakistan does not have its own laws
 - (D) Because international laws are easier to follow
26. "Regulatory Awareness" means:
- (A) Knowing and following the laws that apply to your business
 - (B) Avoiding all government contact
 - (C) Creating your own laws for your shop
 - (D) Only following laws that are profitable

27. A process where a business is checked to see if it is following all required laws is called a:
- (A) SWOT analysis (B) Compliance audit
(C) Marketing strategy (D) Loyalty program
28. Google and YouTube were fined \$170 million in 2019 for breaking which law?
- (A) GDPR (B) SECP Registration rules
(C) COPPA (D) Income tax laws
29. When a school portal uses student data, they follow privacy rules by:
- (A) Posting it on a public notice board
(B) Protecting the information with passwords
(C) Sharing it with local bookstores for marketing
(D) Deleting it every single day
30. Personal data includes which of the following?
- (A) The business's bank balance
(B) Names, addresses, and payment details
(C) The color of the business logo (D) The total number of employees
31. What is the primary purpose of data privacy laws?
- (A) To help businesses sell more products
(B) To protect personal information collected by businesses
(C) To increase the speed of the internet
(D) To help the government track every transaction
32. Staying updated on law changes that affect your business is part of:
- (A) Digital ethics (B) Regulatory awareness
(C) Root cause analysis (D) Strategic marketing
33. Which organization is the main authority for registering a startup in Pakistan?
- (A) FBR (B) SECP
(C) IPO Pakistan (D) The Ministry of Education
34. What does "NTN" stand for in the context of Pakistani business?
- (A) New Technology Network (B) National Tax Number
(C) National Trade Name (D) Natural Trust Node
35. The document containing basic details like a company's name, purpose, and location is:
- (A) Articles of Association (B) Memorandum of Association
(C) Partnership Deed (D) Intellectual Property Right
36. Which portal is used to apply for an NTN in Pakistan?
- (A) SECP Website (B) Iris (FBR portal)
(C) Google Analytics (D) Mailchimp

37. A "Partnership Deed" is an agreement that explains:
- (A) The rules for the entire industry
 - (B) The roles and shares of people starting a business together
 - (C) How to use social media for marketing
 - (D) The history of the company's founders
38. What is the "Certificate of Incorporation"?
- (A) A permit to sell food
 - (B) A document proving a business is officially registered
 - (C) A list of all customers
 - (D) A receipt for paying taxes
39. Why is it important to choose a unique name and get it approved by SECP?
- (A) To make it sound more expensive
 - (B) To ensure it is official and doesn't conflict with other names
 - (C) To avoid having to pay any taxes
 - (D) To get free advertising from the government
40. "Articles of Association" typically describe:
- (A) The names of all competitors
 - (B) The rules for running the company
 - (C) The price of every product
 - (D) The personal hobbies of the owners
41. In digital business, a legally binding agreement between parties is called a:
- (A) SWOT
 - (B) KPI
 - (C) Contract
 - (D) CRM
42. Which of these is a required element for a valid contract?
- (A) A secret handshake
 - (B) Consideration (something of value exchanged)
 - (C) A minimum of 10 pages
 - (D) A video recording of the agreement

8.5

Intellectual Property Rights (IPRs)

43. What does a "Trademark" protect?
- (A) Inventions and new methods
 - (B) Brand names, logos, or symbols
 - (C) Books and songs
 - (D) Customer lists
44. Copyright protects original creative works such as:
- (A) Brand names
 - (B) New inventions
 - (C) Books, songs, and computer programs
 - (D) Business tax numbers
45. A "Patent" gives an inventor the exclusive right to make or sell an invention for:
- (A) Forever
 - (B) A set period of time
 - (C) One week
 - (D) Only in their home city
46. Which organization handles trademark and patent applications in Pakistan?
- (A) FBR
 - (B) SECP
 - (C) IPO Pakistan
 - (D) The High Court

47. Private business information like a recipe or list of customers is a:
(A) Patent (B) Copyright (C) Trade Secret (D) Trademark

8.5

Strategic Marketing and Branding

48. What is an "NDA" (Non-Disclosure Agreement) used for?
(A) To register a business with the SECP
(B) To ensure partners/employees cannot share private information
(C) To apply for a National Tax Number
(D) To calculate the Return on Investment (ROI)
49. In a contract, "Acceptance" means:
(A) One side offers a service
(B) The other side agrees to the offer without changes
(C) Money is paid immediately
(D) The contract is written in English
50. If a contract is for something illegal, it fails which basic element?
(A) Offer (B) Legal Purpose (C) Consent (D) Consideration
51. Digital contracts can be signed:
(A) Only on paper (B) Only with a witness present
(C) Both on paper and electronically (D) Only by the government
52. Registering a trademark helps a business by:
(A) Reducing the cost of electricity
(B) Stopping others from using a similar name or logo
(C) Automatically filing their taxes
(D) Hiring new employees
53. "Data-driven marketing" means making decisions based on:
(A) Guesswork and intuition (B) Facts, numbers, and analysis
(C) What the owner likes personally (D) What competitors say in their ads
54. KPI stands for:
(A) Key Performance Indicators (B) Knowledgeable Price Increase
(C) Kids Privacy Internet (D) Known Product Interests
55. What does ROI (Return on Investment) measure?
(A) How many employees a business has
(B) Success by comparing the cost of a campaign with the profit earned
(C) The speed of the office internet
(D) The total number of followers on social media
56. What is the primary purpose of a CRM system?
(A) To automatically send emails
(B) To build long-term relationships and loyalty
(C) To register a trademark (D) To calculate income tax

57. Which tool would a bakery use to see which ads are bringing the most website visitors?
- (A) SECP Portal
(B) Analytics Tools (e.g., Google Analytics)
(C) Partnership Deed
(D) SWOT analysis
58. Marketing automation helps businesses by:
- (A) Increasing the price of products
(B) Handling routine marketing tasks automatically to save time
(C) Avoiding the need to pay for advertising
(D) Preventing competitors from entering the market
59. A "Loyalty Program" (e.g., a free drink after 10 purchases) is a strategy used in:
- (A) Root cause analysis
(B) Customer Relationship Management (CRM)
(C) Intellectual Property registration
(D) Regulatory awareness
60. Which software is an example of marketing automation used for sending welcome emails?
- (A) Zoho CRM
(B) Mailchimp
(C) Iris
(D) SECP
61. Why do businesses use personalized emails with a customer's name?
- (A) Because it is a legal requirement
(B) To make customers feel valued and more likely to return
(C) To save on the cost of paper
(D) To test if the customer's email address is real
62. Setting a goal to "increase T-shirt sales by 20% in three months" is an example of:
- (A) A Trade Secret
(B) Setting a measurable goal and tracking progress
(C) A legal framework
(D) An ethical conflict

Answers

1. B	2. D	3. B	4. B	5. C	6. C	7. B
8. B	9. B	10. C	11. B	12. C	13. B	14. B
15. B	16. A	17. B	18. B	19. B	20. B	21. B
22. C	23. C	24. B	25. B	26. A	27. B	28. C
29. B	30. B	31. B	32. B	33. B	34. B	35. B
36. B	37. B	38. B	39. B	40. B	41. C	42. B
43. B	44. C	45. B	46. C	47. C	48. B	49. B
50. B	51. C	52. B	53. B	54. A	55. B	56. B
57. B	58. B	59. B	60. B	61. B	62. B	

Additional Short Question's

Short Answer Questions prepared in the light of new Examination Techniques
(Knowledge, Understanding, Application, Analytical & Conceptual)

Introduction

1. Why legal, ethical and strategic skills are important in business?

Ans: Legal, ethical, and strategic skills that are important to operate a successful digital business. It explains how entrepreneurs can comply with relevant data privacy laws, such as Pakistan's Data Protection Bill, the General Data Protection Regulation (GDPR), and the Children's Online Privacy Protection Act (COPPA).

8.1

From Basic to Advance Entrepreneurship

2. Define Advance Entrepreneurship Concepts.

Ans: We build upon that foundation to explore advanced skills required in the competitive digital business environment. These include:

Legal Compliance:

Ethical framework:

Strategic Marketing:

3. What is strategic Marketing?

Ans: Strategic marketing, to strengthen a business's presence and relationship with its customers.

These skills matter because today's entrepreneurs are expected to protect their intellectual property, respect customer rights, safeguard data privacy, and maintain the trust of their community.

8.2

Problem Solving and Adaptability

4. What are the challenges today's entrepreneurship face?

Ans: Challenges facing today by entrepreneurship are:

- Losing customers by facing new competitors
- Changes in technology.

5. How Root cause Analysis help us? Give example?

Ans: Every problem has a main reason behind it, called the root cause. If we only fix the surface problem, it may return. Root cause analysis helps in finding and addressing the main reason, so the solution is long-lasting.

Example:

If an online shop receives many complaints, the owner should investigate whether the cause is late delivery, unclear product descriptions, or poor packaging. Once the root cause is found, it can be corrected.

6. What is SWOT Tool stands for?

Ans: SWOT is a simple tool that stands for:

- Strengths, things the business does well (e.g., high-quality products).
- Weaknesses, areas that need improvement (e.g., slow customer service).
- Opportunities, chances to grow or improve (e.g., high demand for a new product).
- Threats, outside factors that can harm the business (e.g., new competitors).

7. Define Adaptability and Resilience.

Ans: **Adaptability:** Adaptability means being willing and able to change when needed.

Resilience: Resilience means a business can recover quickly after a setback.

8. What is setback recovery?

Ans: Mistakes, failures, or losses can happen in any business. A resilient business accepts the setback, learns from it, and works harder to improve.

Example: If a bakery receives complaints about taste, it can improve its recipe, test the new version, and invite customers to try it again.

8.3 Ethical Business Practices and Digital Ethics

9. What do you mean by ethical decision making?

Ans: Ethical decision-making means making choices in business that are fair, honest, and responsible. It is about doing the right thing, even when it may be easier or more profitable to choose another way.

10. Write down advantages of ethical decision making.

Ans: Advantages of ethical decision making are as follows:

- A business that follows ethical decision-making earns respect and trust from customers, employees, and the community.
- Ethical decision-making is not always the easiest path, but it is the one that helps a business grow with integrity.
- Keep loyal customers, and maintain a positive image in society.

11. Why digital ethics are important now a days?

Ans: Digital ethics means using the internet and digital tools responsibly and respectfully. Businesses keep customer information safe, provide accurate details, and interact politely online. Customers also follow rules, treat others with respect, and avoid harmful actions.

12. How responsible marketing beneficial for Entrepreneurship?

Ans: Responsible marketing means promoting products and services honestly and fairly, providing customers with correct and complete information, and avoiding false promises.

13. Write down the advantages of responsible marketing.

- Ans:**
- Customer can trust your product and your business growth up gradually
 - Customer shows his trust on you to give his personal detail for advertisement.

14. What do you know about Personal Data Protection Bill?

Ans: In Pakistan, the Personal Data Protection Bill says that businesses must:

- Collect only the information they need.
- Use the information only for the purpose they explained to the customer.
- Keep the information safe and do not share it without permission.

15. What is regulatory awareness?

Ans: Regulatory awareness means knowing which laws and rules apply to your business and making sure you follow them. This involves:

- **Stay Updated:**
- **Compliance Audits:**

8.4

Legal framework and Compliance

16. How do you define the concept of legal framework?

Ans: Legal Framework & Compliance means the laws and rules a business must follow to operate legally. It includes registering the business, paying taxes, protecting customer data, and meeting industry requirements.

17. Why it is important to registered a business in Pakistan?

Ans: Registration makes the business official, allows it to work without legal problems, and helps gain the trust of customers, banks, and other businesses.

18. Write the process to obtain NTN in Pakistan.

Ans:

- i) Apply through the FBR's "Iris" online portal.
- ii) Provide SECP registration documents, proof of address, and business activity details.
- iii) Once approved, the NTN allows the business to open bank accounts, issue invoices, and meet tax obligations.

19. What type of documents need to understand before register a business?

Ans:

- I. Memorandum of Association: Basic details of a company, like its name, purpose, and location.
- II. Articles of Association: Rules for running the company.
- III. Partnership Deed: An agreement between two or more people who start a business together, explaining each person's share, role, and responsibilities.

20. Define contract in digital business.

Ans: A contract is a written or spoken agreement between two or more people or organizations that is legally binding.

21. Why contracts are important in business?

Ans: In digital business, contracts are important because they set out the terms and conditions for working together, whether it is with business partners, suppliers, or customers. They help prevent misunderstandings and provide legal protection if a disagreement occurs.

8.5

Intellectual Property Rights (IPRs)

22. Define Intellectual property rights.

Ans: IPRs are legal rights that protect the creations of a person or business. These creations can include inventions, books, songs, artwork, brand names, or logos.

23. Explain how can we protect trade secret in digital age.
Ans: A trade secret is private business information that gives an advantage, such as a recipe, a formula, or a list of customers.
- Keep this information secure, both on paper and in digital form.
 - Use passwords, encryption, and limit access to authorized people only.
 - Ask employees or partners to sign a Non-Disclosure Agreement (NDA) so they cannot share the information.

8.6

Strategic Marketing and Branding

24. Define strategic Marketing.

Ans: Strategic marketing is the process of planning and carrying out activities to promote a business in a way that attracts customers and keeps them loyal. In today's digital age, businesses use data, technology, and customer insights to design better marketing strategies, strengthen their brand, and build long-term relationships.

25. How CRM tool works? Explain with example.

Ans: A sports shop in Islamabad uses Zoho CRM to store customer names, contact details, shoe sizes, and purchase history in one system. When a new sports shoe arrives in the size a customer usually buys, the shop can send them a quick message or email about it.

26. Write down benefits of small business.

Ans:

- Saves time by handling routine tasks automatically.
- Reduces costs by lowering the need for extra staff.
- Sends timely updates to customers, improving engagement.
- Helps reach a wider audience with less effort.
- Tracks campaign results to see what works best.

Exercise Questions (Solved)

Multiple Choice Questions

- An example of intellectual property is:
(a) Shop furniture (b) Brand logo (c) Raw materials (d) Office rent
- Which of the following laws protects personal data in the European Union?
(a) COPPA (b) GDPR (c) DMCA (d) Cybercrime Act
- The document is required to register a trademark is:
(a) A bank statement (b) Proof of product purchase
(c) A copy of the logo and business name
(d) Social media profile link
- Which of the following is a risk of poor data privacy?
(a) Increased customer trust (b) Cyberbullying
(c) Identity theft (d) Lower ad costs

5. Which of the following is an example of personal data?
 (a) Office address (b) Employee ID card number
 (c) Store opening hours (d) Website theme color
6. A conflict of interest occurs when:
 (a) Employees share company goals
 (b) Personal benefit affects a business decision
 (c) A business increases profits (d) Customers give feedback
7. Which is part of digital ethics?
 (a) Using false information in ads (b) Protecting customer data respectfully
 (c) Cyberbullying (d) Avoid online presence
8. Which of the following is a CRM tool?
 (a) Photoshop (b) to Zoho (c) Google Maps (d) Canva
9. Which tool is used for marketing automation?
 (a) Mailchimp (b) PowerPoint (c) MS Word (d) Paint
10. In marketing, RoI means:
 (a) Return on Investment (b) Rate of Information
 (c) Revenue on Ideas (d) Reach of Internet

Answers

1. (b) 2. (b) 3. (c) 4. (c) 5. (b)
 6. (b) 7. (b) 8. (b) 9. (a) 10. (a)

Short Questions

1. How does copyright protect creators in the digital world?

Ans: Protect original creative works such as books, songs, computer programs, or drawings.

- Apply to the Copyright Office under IPO Pakistan.
 - Send details of the work, proof that you created it, and a copy of the work.
- Copyright is given automatically when the work is created, but registration gives stronger legal protection.

2. Differentiate between a patent and a trademark.

Ans:

Patent	Trademark
Protects new inventions, processes, or technological products.	Protects brand identities such as names, logos, and symbols.
Grants the right to exclude others from making or selling the invention.	Distinguishes the goods or services of one business from another.
Typically lasts for 20 years from the filing date.	Can last indefinitely, as long as it is used in commerce and renewed.

3. Define data privacy.

Ans: Data privacy laws are rules that protect personal information collected by businesses, such as names, addresses, phone numbers, or payment details.

4. Give one example of ethical decision-making in business.

Ans: Ethical decision-making means making choices in business that are fair, honest, and responsible. It is about doing the right thing, even when it may be easier or more profitable to choose another way.

Example: If a shop owner hires their cousin for a job without giving a chance to apply to other skilled people, it's unfair. The fair and ethical way is to let everyone apply, check their skills, and then hire the person who is best for the job.

5. Why is honesty important in business decisions?

Ans: Honesty in business is important because:

- A business that follows ethical decision-making earns respect and trust from customers, employees, and the community.
- Ethical decision-making is not always the easiest path, but it is the one that helps a business grow with integrity.
- Keep loyal customers, and maintain a positive image in society.

6. Explain the purpose of data-driven marketing.

Ans: Data-driven marketing means making marketing decisions based on facts, numbers, and analysis rather than guesswork. Businesses collect information from customers, websites, and sales records to plan effective campaigns to grow.

7. What does SWOT analysis help identify?

Ans: SWOT analysis helps businesses understand their current situation and plan wisely for the future.

8. Explain the purpose of setting KPIs in marketing.

Ans: Suppose an online clothing store in Lahore sets a target to increase T-shirt sales by 20% within three months. They track progress using KPIs such as the number of T-shirts sold each week, website visits, and customer reviews.

Long Questions

1. Explain the process of problem solving and adaptability.

Ans: Structured problem-solving:

Structured problem-solving means using a step-by-step approach to identify a problem, understand why it is happening, and decide the best solution. This avoids guesswork and helps prevent the same issue from happening again.

Root Cause Analysis:

Every problem has a main reason behind it, called the root cause. If we only fix the surface problem, it may return. Root cause analysis helps in finding and addressing the main reason, so the solution is long-lasting.

Example:

If an online shop receives many complaints, the owner should investigate whether the cause is late delivery, unclear product descriptions, or poor packaging. Once the root cause is found, it can be corrected.

SWOT Analysis:

SWOT analysis helps businesses understand their current situation and plan wisely for the future. SWOT is a simple tool that stands for:

- Strengths, things the business does well (e.g., high-quality products).
- Weaknesses, areas that need improvement (e.g., slow customer service).
- Opportunities, chances to grow or improve (e.g., high demand for a new product).
- Threats, outside factors that can harm the business (e.g., new competitors).

Adaptability:

Adaptability means being willing and able to change when needed. This skill help a business in surviving and growing even in difficult times.

Respond to Change in Market or Technology:

The business environment changes quickly. New customer needs, competitors, or technologies can appear at any time. A business that adapts to these changes has a better chance of success.

Example: A shop that starts home delivery when customers prefer online shopping.

Setbacks Recovery:

Mistakes, failures, or losses can happen in any business. A resilient business accepts the setback, learns from it, and works harder to improve.

Example: If a bakery receives complaints about taste, it can improve its recipe, test the new version, and invite customers to try it again.

2. Write a note on ethical business practices and digital ethics.

Ans: Ethics in business means following moral principles and doing what is right, fair, and honest.

Importance:

In the digital age, businesses must ensure that their decisions, marketing, and online activities respect both the law and customer rights. Ethical practices build trust and help a business grow in a responsible way.

Ethical Decision-Making:

Ethical decision-making means making choices in business that are fair, honest, and responsible. It is about doing the right thing, even when it may be easier or more profitable to choose another way.

Advantages of Ethical Decision Making:

- A business that follows ethical decision-making earns respect and trust from customers, employees, and the community.
- Ethical decision-making is not always the easiest path, but it is the one that helps a business grow with integrity.
- Keep loyal customers, and maintain a positive image in society.

Digital Ethics:

Digital ethics means using the internet and digital tools responsibly and respectfully. Businesses keep customer information safe, provide accurate details, and interact politely online. Customers also follow rules, treat others with respect, and avoid harmful actions. Businesses maintain safe online spaces by setting clear rules and taking quick action against harassment or bullying.

Responsible Marketing:

Responsible marketing means promoting products and services honestly and fairly, providing customers with correct and complete information, and avoiding false promises. This approach helps customers make informed decisions and builds trust in the business.

- Every business advertisement must present truthful and clear information, without exaggerations or hidden conditions that may mislead customers.
- When a business collects personal data of users to show targeted advertisements, businesses must obtain clear permission from customers and explain how the information will be used

3. (a) Discuss how CRM tools and loyalty programme help in retaining customers.

(b) Explain marketing automation and describe their benefits for small businesses.

Ans: CRM is a way of handling all interactions with customers to build trust and create long-term relationships. A good CRM approach helps a business understand its customers better and serve them in a more personal way.

How CRM Tools Work?

Example: A sports shop in Islamabad uses Zoho CRM to store customer names, contact details, shoe sizes, and purchase history in one system. When a new sports shoe arrives in the size a customer usually buys, the shop can send them a quick message or email about it.

Marketing automation:

Marketing automation means using special software to handle marketing tasks automatically, without needing to do each step manually. This helps businesses save time, work more efficiently, and stay connected with customers.

Examples:

- Mailchimp can automatically send welcome emails to new customers, share special offers, and post updates on social media.
- HubSpot can track customer activity, send follow-up messages, and create reports on marketing performance.

Benefits for Small Businesses:

- Saves time by handling routine tasks automatically.
 - Reduces costs by lowering the need for extra staff.
 - Sends timely updates to customers, improving engagement.
 - Helps reach a wider audience with less effort.
 - Tracks campaign results to see what works best.
-

Pairing Scheme/ Instructions for Preparation of Exam Paper of Computer Science & Entrepreneurship for Grade-10

ESSENTIAL INSTRUCTIONS FOR PAPER SETTERS

The paper of Computer Science & Entrepreneurship for class 10 will consist of 50 marks. The duration for the Multiple-Choice Questions (MCQs) section will be 15 minutes, while the time allocated for the short and long questions section will be 1 hour and 45 minutes. The paper will be made as per following details:

Part-I: Objective:	Q-1: 10 Multiple-Choice Questions. MCQs will be developed from the entire content of the textbook. • One MCQ will be asked from each Chapters No. 1, 3-6 and 8. • Two MCQs will be asked from each Chapter No. 2 and 7.	(1×10=10)
Part-II: Subjective:	This section will contain three short answer questions. Each short answer-question will be asked from the content of the textbook. The detail is as follows:	(2×4=8)
	Q-2: Four short answer questions have to be answered out of 6. The detail is as follows: • One short answer question should be asked from Chapter No. 1 • Two short answer questions should be asked from Chapter No. 2 • Three short answer questions be asked from Chapter No. 3	(2×4=8)
	Q-3: Four short answer questions have to be answered out of 6. The detail is as follows: • Two short answer questions should be asked from Chapter No. 4 • Four short answer questions should be asked from Chapter No. 5	(2×4=8)
	Q-4: Four short answer questions have to be answered out of 6. The detail is as follows: • Two short answer questions should be asked from each Chapter No. 6-8	(2×4=8)
Part-III: Subjective:	This section will contain three detailed questions and students have to attempt two questions carrying 8 marks each. Each detailed question should be asked form the content of the textbook. The detail is as follows: Q-5: • One detailed question should be asked from Chapter No. 1 Q-6: • One detailed question should be asked from Chapter No. 4 Q-7: • One detailed question should be asked from Chapter No. 6 or Chapter No. 8.	(2×8=16)

Time Allowed: 15 Min

Max. Marks: 10

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle with marker or pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

Q.1: Multiple Choice Questions (MCQ)

- (i) In multi-user environments, the OS ensures:
- (A) ✓ Equal access and data privacy
 - (B) All users share the same files privacy
 - (C) Hardware is never used
 - (D) Internet speed is increased
- (ii) The Power-On Self-Test (POST) is performed:
- (A) During system
 - (B) After login shutdown
 - (C) ✓ At system startup
 - (D) When installing software
- (iii) Windows Defender provides
- (A) File compression
 - (B) ✓ Virus protection
 - (C) Disk formatting
 - (D) Music playback
- (iv) Which of the following operators is used for exponentiation in Python?
- (A) *
 - (B) ✓ **
 - (C) //
 - (D) #
- (v) Which method is used to add an item at the end of the list in python?
- (A) insert()
 - (B) ✓ append()
 - (C) add()
 - (D) extend()
- (vi) Which method is best for collecting opinions from many students?
- (A) IoT Devices
 - (B) ✓ Survey
 - (C) Web Scraping
 - (D) Database
- (vii) In supervised learning, the data is:
- (A) Unorganized
 - (B) Without any answers
 - (C) ✓ Labeled with correct answers
 - (D) Only text-based
- (viii) What does AI stand for?
- (A) Automatic Intelligence
 - (B) ✓ Artificial Intelligence
 - (C) Active Interface
 - (D) Applied Information
- (ix) What is the role of robots in factories?
- (A) Watching videos
 - (B) Making websites
 - (C) ✓ Doing repeated or dangerous tasks
 - (D) Writing stories
- (x) Which document is required to register a trademark?
- (A) A bank statement
 - (B) Proof of product purchase
 - (C) ✓ A copy of the logo and business name
 - (D) Social media profile link

Q.2: Write short answers to any four (04) questions:

(2 × 4 = 8)

- (i) How does the OS act as a translator between the user and hardware?
- (ii) Why is virtual memory slower than RAM?
- (iii) List the two benefits of running regular disk cleanup.
- (iv) Why is it important to setup Python Development Environment?
- (v) Write down two variable naming rules in Python.
- (vi) Differentiate between arithmetic and logical operations in Python.

Q.3: Write short answers to any four (04) questions:

(2 × 4 = 8)

- (i) How does the if-statement differ from the if-else statement?
- (ii) What is the purpose of append operation in Python lists?
- (iii) Write down two real world applications of Data Science.
- (iv) Why is it important to validate data before using it?
- (v) Write the important to choose right source for data collection.
- (vi) What is the purpose of visualizing data using charts?

Q.4: Write short answers to any four (04) questions:

(2 × 4 = 8)

- (i) How does supervised learning work?
- (ii) Why does AI need large and good-quality data?
- (iii) Write the role of Natural Language Processing (NLP)?
- (iv) What is meant by bias in AI systems?
- (v) Give one example of ethical decision-making in business.
- (vi) What does SWOT analysis help identify?

Subjective Type (Part II)

Note: Attempt any two (02) questions.

(2 × 8 = 16)

Q.5: Describe the architecture of an operating system.

(8)

Q.6: Write a Python program using a loop that prints all the odd numbers between 1 and 20.

(8)

Q.7: Explain the process of problem solving and adaptability.

(8)