# MANAGEMENT FUNDAMENTALS

# FOUNDATION LEVEL EXAMINATION

# APRIL 2022

## NOTES:

**Section A:** You are **required** to answer **Question 1**.
**Section B:** You are also required to answer **any three** out of Questions 2 to 5. Should you provide answers to all of Questions 2 to 5, only the answers to Questions 2, 3 and 4 will be marked.

**TIME ALLOWED:**
3.5 hours, plus 10 minutes to read the paper. This is a closed book examination.

**INSTRUCTIONS:**
During the reading time, you are encouraged to use this time to read each Question carefully. Please note, however, you will not be prevented from using this time to start typing notes and solutions.

Marks for each question are shown. The pass mark required is 50 marks in total over the whole paper.

You are reminded to pay particular attention to your communication skills, and care must be taken regarding the format and literacy of your solutions. The marking system will take into account the content of your answers and the extent to which answers are supported with relevant legislation, case law or examples, where appropriate.

**N.B.** Please note that the right click function has been disabled during your examination. Should you wish to copy and paste, please use the following shortcuts: Copy (Ctrl + C) and Paste (Ctrl + V).

## Section A: Question 1 is Compulsory

## Question 1

Answer any ***four*** of the following:

**(a)** Discuss how competition influences business. Support your answer with examples.

**(b)** Identify and explain the different types of entrepreneurships. Support your answer with examples.

**(c)** Using examples, discuss the economic and environmental effects of Corporate Social Responsibility (CSR) on society.

**(d)** Discuss the key non-price determinants of demand. Give an example for each non-price determinant identified.

**(e)** Discuss the advantages and disadvantages of buying an existing business. Illustrate your answer in relation to an industry of your choice.

**(4 x 10 marks each)**

**(Total: 40 Marks)**

**Section B:** You are also required to answer **any three** out of Questions 2 to 5.

## Question 2

**(a)** Identify and explain the external resources that can be used for recruitment and discuss whether technology has enhanced or complicated the recruitment process.

**(10 marks)**

**(b)** Describe the different types of compensation strategies used by organisations. How do these help organisations to become and remain competitive?

**(10 marks)**

**(Total: 20 Marks)**

## Question 3

**(a)** With reference to at least two theories of motivation, discuss how managers can enhance employees' motivation. Support your answer with examples.

**(10 marks)**

**(b)** Discuss, with examples, how different leadership styles affect employee engagement.

**(10 marks)**

**(Total: 20 Marks)**

## Question 4

**(a)** Discuss how a firm's business environment has an influence on its marketing strategy.

**(10 marks)**

**(b)** Using examples, discuss a new product development process.

**(10 marks)**

**(Total: 20 Marks)**

## Question 5

**(a)** Outlining the security challenges faced by businesses with the increased use of technology, discuss their impact on privacy.

**(10 marks)**

**(b)** Discuss the legal jurisdiction and taxation challenges of online businesses.

**(10 marks)**

**(Total: 20 Marks)**

**END OF PAPER**

THE INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IN IRELAND

# MANAGEMENT FUNDAMENTALS

FOUNDATION LEVEL - APRIL 2022

## SOLUTION 1

**(a)** In a market-based economy, competition is the fundamental force. Competition arises when two or more businesses vie with one another to attract customers and gain an advantage. Competition in the marketplace is good for consumers and good for business. Competition from many different companies and individuals through free enterprise and open markets is the basis of the U.S. economy. When firms compete with each other, consumers get the best possible prices, quantity, and quality of goods and services. For example, if two florists are next door to each other, they will each need to make sure their products are the best quality they can be with the aim of attracting more customers than the other business. In addition, if one of the businesses charges a higher price for a very similar product, that business will lose customers. Antitrust laws encourage companies to compete so that both consumers and businesses benefit.

One important benefit of competition is a boost to innovation. Competition among companies can spur the invention of new or better products, or more efficient processes. Firms may race to be the first to market a new or different technology. Innovation also benefits consumers with new and better products, helps drive economic growth and increases standards of living. Products that are commonplace today once were technological breakthroughs: cars, planes, phones, televisions, the personal computer, and modern medicines all show how innovation can change your life and increase prosperity.

Competition can lead companies to invent lower-cost manufacturing processes, which can increase their profits and help them compete—and then, pass those savings on to the consumer. Competition also can help businesses identify consumers' needs—and then develop new products or services to meet them.

For example, if two businesses offer the same product and one of the businesses offers a discount for a limited time, the other business may need to do the same. Similarly, if a business brings out a new product (eg a seasonal coffee that will be available for a limited time only), its competitors may also wish to bring out a limited-edition drink. Supermarkets like Aldi and Lidl are commonly seen to have similar discount offers etc.

Competitors can be problematic for businesses. For example, some competition can be territorial (within the same location or area), where one business tries to force other businesses to close down by setting its prices extremely low or putting on offers those other businesses can't compete with. For example, if two driving instructors operate in the same area and one offers ten lessons for €100 but the other offers ten lessons for €280, the more expensive instructor is unlikely to be able to compete with the cheaper one.

(10 marks)

**(b)** At its most fundamental level, entrepreneurship is setting up a business and taking on financial risk with the goal of making a profit, but the term can encompass so much more than that. Entrepreneurship is possible whether you're a big business or a sole proprietorship. At the heart of entrepreneurship is the concept of innovation — that by developing something totally new that solves a problem, a business can change the way people live for the better.

As a result, entrepreneurship sometimes focuses on bigger ideas and can be categorised under different types as follows:

**Social entrepreneurship**
A socially conscious business is focused on solving social problems, such as access to food, money, and education. The stated goal of these companies is to make the world better. Such companies develop products and services with the goal of achieving this goal. This model sometimes describes non-profit organizations as well.

*Example:* Fifteen – Founded by English celebrity chef Jamie Oliver in 2002, Fifteen started out as an ambitious effort to offer disadvantaged youths (aged 18-24) a means of creating better futures for themselves through the art of good food. Since the first establishment opened, Fifteen has opened two other restaurants in Amsterdam and Cornwall. Trained 220 young locals in the art of cooking and hospitality and inspired many of its graduates to pursue successful careers in the restaurant business.

**Innovation entrepreneurship**
Innovation entrepreneurship is rooted in new inventions and ideas, which are then transformed into ventures. These firms aim to change how people live and seek ways to make products and services stand out, thereby accomplishing something that other companies haven't. Products such as the iPhone show how innovation can completely alter how people go about their daily routines. This kind of entrepreneurship is ambitious and often requires significant investment to get off the ground.

*Example*: Founded in 2003, Tesla sought to innovate the automobile market by launching a line of affordably priced cars that were entirely electric, which hadn't been done successfully on a large scale until then. By 2019, Tesla had reportedly sold 367,849 units globally, a 50% increase over the year before. Because of how early Tesla was to the market, the company enjoys massive market share in a rapidly growing industry.

**Big business entrepreneurship**
One major disadvantage for a business when it gets larger is that it starts to move slowly. As a result, big businesses often try to jump-start entrepreneurship by taking up a smaller company and delegating innovation to the new acquisition. The larger company may leverage limited product or service life cycles and have experienced professionals take the reins of new projects. Massive tech firms such as Google and Microsoft often do this by buying out a small developer with promising technology as part of its long-term focus.

*Example:* After being partners for years, Disney finally purchased animation studio Pixar in 2006. Rather than create its own studio to compete with Pixar, Disney decided it would simply buy the up-and-coming studio behind Toy Story and other hit movies.

**Scalable start-up business entrepreneurship**
The concept of scalable start-up business entrepreneurship begins with a founder's belief that they can change the world. Venture capitalists often swoop in to fund these sorts of start-ups in the hope of landing massive returns. They then hire highly skilled and educated professionals to run them, seeking to address market holes or disrupt entire industries.

*Example*: Uber started as an idea to revolutionize the taxi industry and, after attracting investment, the company exploded and grabbed massive market share in a very short time.

(10 marks)

**(c)** Businesses do not operate separately from society as a whole, so CSR affects society in many ways. More and more, companies are realizing that CSR is not a luxury, but a benefit for the business and it is their responsibility to give back to and to make a positive impact on society, their staff and the environment. Beside ethics, there are several aspects of CSR that directly affect growth and stability of companies.

**Economic Effects**
The efforts to promote CSR and implement its management principles are vital to the economy. Sustainability as an imperative to CSR is not only concerned with preservation of natural resources, but reduction of energy costs that positively affects the growth. Energy efficiency is therefore a combination of responsible business and rational cost management, all complying with CSR. There is a number of benefits that comes with integrating

CSR into business practice: risk minimisation is certainly one of them. When a company's occupational safety and health management is in good shape, costs are lower. There are fewer accident-related interruptions of production and workers miss fewer working days.

For example, Many Indian companies are beginning to follow a practice, coined by Bill Gates, called “creative capitalism.” That is to say that CSR does not need to be a corporate cash donation, but rather businesses can use their specialized skill sets and resources to produce a greater impact. Indian tech company ZMQ Technologies, a software company applies the CSR mandate toward building programs and donating supplies to rural areas in India. This empowers the communities through information and learning, creating more skilled modern workers, and thus helping to boost the economy.

**Environmental Effects**
Environmentally, how businesses operate has both local and global effects. Some companies use the term “environmental stewardship” to refer to such initiatives. Companies that seek to embrace environmental responsibility do so in several ways like:

- Reducing pollution, greenhouse gas emissions, the use of single-use plastics, water consumption, and general waste.
- Increasing reliance on renewable energy, sustainable resources, and recycled or partially recycled materials.
- Offsetting negative environmental impact; for example, by planting trees, funding research, and donating to related causes.

For example: With the powerful influence of being one of the most well-known toy companies in the world, Lego has taken the initiative to encourage children, through the use of their products, to understand the importance of fostering a healthy planet. After making a powerful promise to reduce its carbon footprint, Lego became the first toy company in the world to receive a World Wildlife Fund Climate Savers Partner.

Lego displayed its commitment to the environment by announcing its plans to use only environmentally friendly materials to produce all of its core products and packaging by the year 2030.

The company has already taken numerous steps to make this goal a possibility, including shrinking their box sizes by 14 percent and opting to use a certain amount of sustainably sourced materials for their signature building blocks.

(10 marks)

**(d)** Non-price Determinants of Demand refers to the factors other than the current price that can potentially influence the demand of a service or product and hence result in a shift in its demand curve. In other words, these factors are very crucial economically as they can impact the demand for a service or product, irrespective of its current price.

The following list enumerates the non-price determinants of demand:

**Branding.** Sellers can use advertising, product differentiation, product quality, customer service, and so forth to create such strong brand images that buyers have a strong preference for their goods. Example: year on year new models of Apple iphone enjoy high demand irrespective of the price.

**Price of substitute goods.** Two goods substitute each other because they fulfill the same need. So, when consumers have chosen one, they will let go of the other. When the price of one increases, consumers can turn to its substitute. Example: Pepsi and Coca-Cola. When the price of Coca-Cola rises, some consumers will turn to Pepsi. Thus, Pepsi’s demand curve shifts to the right. Vice versa, when the price of Pepsi rises, some consumers turn to Coca-Cola, shifting the curve to the right.

**Demographics.** A change in the proportions of the population in different age ranges can alter demand in favour of those groups increasing in size (and vice versa). Thus, an aging population will increase the demand for arthritis drugs, while a younger population will increase the demand for sporting goods.

**Seasonality.** The need for goods varies by time of year; thus, there is a strong demand for lawn mowers in the Spring, but not in the Fall.

**Available income.** If the amount of available buyer income changes, it alters their propensity to purchase. Thus, if there is an economic boom, someone is more likely to buy, irrespective of price.

**Complementary goods.** If there is a price change in a complementary item, it can impact the demand for a product. Thus, a change in the price of popcorn in a movie theatre could impact the demand for movies, as could the price of nearby parking.

**Future expectations.** If buyers believe that the market will change in the future, such as may happen with an anticipated constriction of supplies, this may alter their purchasing behaviour now. Thus, an expected constriction in the supply of rubber might increase the demand for tires now. Example: purchase behaviour of people before imposition of COVID-19 lockdown in March 2020 was driven by future expectations.

These determinants will alter the demand for goods and services, but only within certain acceptable price ranges. For example, if non-price determinants are driving increased demand, but prices are very high, it is likely that buyers will be driven to look at substitute products.

(10 marks)

**(e)** Buying an established business rather than setting up a new business has many advantages but is not without risk. The advantages and disadvantages of buying an existing business can be outlined as follows:

**Advantages of buying a business**
Buying a business is generally considered less risky than starting your own business, especially if buying a well-managed, profitable business for the right price. The advantages include:

- The difficult start-up work has already been done. The business has plans and procedures in place.
- Buying an established business means immediate cash flow.
- The business will have a financial history, which gives an idea of what to expect and can make it easier to secure loans and attract investors.
- The business already has existing customers, contacts, goodwill, suppliers, staff, plant, equipment and stock.
- A market for the product or service is already established.
- Existing employees and managers have experience they can share.

**Disadvantages of buying a business**
Not every business on the market is a good prospect. Many owners will be selling unprofitable or under-performing businesses. While this can be a chance to buy and develop a cheap business, it can also be a risky investment. The disadvantages include:

- The business might need major improvements to old plant and equipment.
- Investment a large amount up front is needed, and will also have to budget for professional fees for solicitors and accountants.
- The business may be poorly located or badly managed, with low staff morale.
- External factors, such as increasing competition or a declining industry, can affect future growth.
- Under-performing businesses can require a lot of investment to make them profitable.
- The seller's personality and their established relationships may be a major factor for the success of the business.

## SOLUTION 2

**(a)** Employee recruiting is the activity of identifying and soliciting individuals—either from within or outside an organization—to fill job vacancies or staff for growth. With external recruitment, businesses source candidates outside of the organization. Job seekers who are not currently employed with the business are hired. There are several sourcing strategies in recruitment for finding candidates outside of the company. The following are common external sources of recruitment.

**Job portals**
One of the most common recruitment sources are third-party job pages or portals. These can be divided into the generic portals, that companies advertise on to reach a higher number of candidates, or portals specialising in a certain type of profile.

**Jobs webpage**
Businesses websites include a "Jobs" or "Work with us" section, where current opportunities are advertised. Having a page with these features can enhance the organisation's brand and help ranking higher on search engines.

**Social networks**
Social media sites specifically for the professional community like LinkedIn, Data.com etc are increasingly being used to find outside candidates. LinkedIn is an excellent recruitment tool. It is the top professional social network and has more than 600 million users connected. Businesses can also make use of other sites such as Facebook, Instagram or any other social network where they have a presence and an active community.

**Job fairs**
Job fairs offer a space for companies, normally within a specific sector, to meet talent and vice versa. This format is common, for example, among developers, IT technicians, engineers, etc. Participating in these types of events provides the opportunity to hold an initial meeting with candidates, get to know them in person, and start to assess whether they might have what the organisation is looking for.

**Recruitment agencies or headhunters**
Another source of external recruitment are the agencies or headhunters who carry out the selection process for businesses. They screen and provide a shortlist of candidates to businesses for recruitment.

**Job Boards**
Businesses post opening on the top job boards to recruit external candidates. The job advertisement should include a detailed description. Include the skills and qualities needed. Businesses can also integration the job board with their website and applicant tracking system. The applicant tracking system can organize candidates who apply through the job board.

**Temping agencies**
If it is a temporary vacancy, businesses can also use temping agencies that have their own database of professionals looking for work. It's a quick and simple option for certain cases.

**Adverts**
Although print job adverts are now practically extinct, they were for many years a company's main source of external recruitment (especially before the internet existed). Nowadays they are rarely used, but they can be an option depending on the profile organisations are looking for.

**Referrals**
Another way to find candidates externally is through recruiting referrals. Business can reach out to their network to seek referrals for candidates they are looking for.

There are both opportunities and challenges that come with the use of technologies. Technology can improve the effectiveness and efficiency of the recruitment and selection process in a number of ways:

**The role of technology in recruitment leads to cost savings** - Most organisations, previously deterred by the costs associated with international recruitment, are now using technology tools such as career websites and Attendance Tracking Systems to reduce costs while expanding the pool of candidates. With the right tools, the HR department will not only have access to a larger pool of talent but will also be able to recruit the right candidates. Better candidate retention has a direct impact on cost savings.

**The use of technology in the recruitment process reduces human error** - has removed the human element from the selection process and ensures a standardized and unique selection process that helps to make valid and accurate decisions.

**Impact of technology on recruitment in terms of improving efficiency and quality** - the use of different technologies such as online talent platforms for recruitment is to improve the efficiency of recruitment systems by automating processes such as CV checking. Improved efficiency leads to shorter recruitment cycles and thus improves the competitiveness of companies in recruiting the best talent, who might otherwise accept another offer if the selection process takes longer.

However, some challenges include, large pool of candidates applying through online portals, making the process time consuming and cumbersome at times. The use of technology also calls for appropriate trainings for HR professionals. Additionally in case of usage of recruitment software, since recruiting software relies on predefined rules, candidates that think outside the box may be removed from the running for reasons unrelated to their skills or fit. You may pass over a candidate that could've been ideal for your company based on their "soft" skills like communication and creativity because they didn't possess certain certifications or enough experience to match other candidates.

(10 marks)

**(b)** Building an attractive compensation strategy is a vital component to not only hiring the right people but retaining them over time as well. Compensation includes the total package including salary, benefits, paid time off and more. Companies that pay attention to current salary conditions and market trends develop compensation strategies that align with budgets and attract talent.

Compensation strategies come in many different forms and may vary across departments and positions. Some companies may offer one or more benefits in their compensation package, some of which may offset a smaller salary. There are two main types of compensation:

- Direct compensation (financial)
- Indirect compensation (financial & non-financial)

Common compensation strategies include:

- Overtime pay
- Variable salary based on experience or longevity
- Employee healthcare
- Raises and bonuses
- Retirement package
- Profit sharing (Equity or Stock Options)
- Paid time off (sick days, personal days or vacation time)
- Education reimbursement or on the job training
- Flexible schedules
- Employee perks (gym membership, on-site childcare or free parking)

In today's tight talent market where employees have more bargaining power and greater access to salary information than ever before, getting compensation right is crucial. What you pay, how you pay, and why you pay the way you do affect your ability to retain and attract top talent. The compensation strategy also affects a company culture, employees' satisfaction with their jobs, and help organisations to become and remain competitive by:

**Ensuring company goals**
Developing a compensation strategy can encourage employees to work toward reaching the company's objectives. By structuring compensation to reward performance that aligns with the company's objectives, businesses can motivate new hires and tenured employees. This can also lead to improved productivity and a more positive work environment.

**Improve the recruitment process**
A company's compensation strategy can also impact recruitment and encourage employees to continue in their positions. For example, if the company where you work has competitive compensation strategies, candidates may prefer this company over its competition. Having an attractive compensation strategy can also help you target employees that can provide the best results in a company.

**Ensure budget management**
Following a compensation strategy can help a company operate within its budget. For example, with a compensation strategy that states $400,000 is available for promotion bonuses, you can plan promotions to ensure you stay within this amount. Similarly, if a company's strategy is to offer $500,000 to $600,000 in raises every year, you can estimate how many employees to offer a raise.

**Ensure equity in the company**
Having an effective compensation strategy can ensure pay equity, which is equal pay for equal value of work. As a strategy outlines the compensation packages and how employees earn them, companies that implement a plan can be more transparent about compensation. Creating and following a compensation strategy where top performers receive the highest compensation can also encourage others to perform at higher productivity levels.

(10 marks)

**[Total: 20 Marks]**

## SOLUTION 3

**(a)** Motivation theories are hypotheses backed by evidence. In a business context, motivation theories relate specifically to the factors (both internal and external) that make people interested in doing their job and motivated enough to do it well. Humans behave and respond to circumstances differently – and are more or less motivated at different times. Therefore for leaders and managers, it's important to understand motivation theories because they can unlock the key to employee behaviour and higher employee performance. For example:

**1. Herzberg's Motivation-Hygiene (Two-Factor) Theory**

Herzberg hypothesized that individuals were motivated or demotivated by two categories of variables. His theory was that intrinsic (motivational) factors could increase satisfaction, and extrinsic (hygiene) factors could decrease it if they were not managed (or were poorly managed).

| **Intrinsic Factors** | **Extrinsic Factors** |
|---|---|
| Achievement | Company Policies |
| Recognition | Working Conditions |
| Responsibility | Supervisor Support |
| Advancement | Salary |
| Nature of Work | Interpersonal Relationships |

Today, most managers work on the assumption that motivational factors help employees do better work and want to do better work. And, mostly, they're proven right. But when the conditions under which people work are poor – when they're not supported, aren't paid enough, aren't acknowledged, or have to adhere to company policies that don't make sense – their motivation decreases.

**2. McGregor's Theory X and Theory Y**

Another commonly-used motivation theory is McGregor's Theory X and Theory Y approach. First explained his book, The Human Side of Enterprise, this is also considered to be an approach to management styles. McGregor's Theory X is used by managers who assume workers are inherently lazy or unmotivated. Employees who show this kind of behaviour need an authoritarian approach that often involves micromanagement to ensure things get done.

Theory Y is a participative approach. People who show this attitude are intrinsically motivated. People who operate with a Theory Y attitude seek responsibility, want to be self-directing, and get involved in solving problems.

In reality, the nature of the organization determines whether managers will use a Theory X or Theory Y approach. In highly regulated industries, or where there are genuine daily risk factors, or the need for very precise, and accurate work, it might be more appropriate to apply a bit of micromanagement (more akin to a Theory X style).

But the world has moved forward since this theory was first published in 1960. Even employees in workplaces like this want to solve problems. Perhaps the best approach lies towards the Y side of the spectrum (while adjusting for context).

(10 marks)

**(b)** Leadership plays a significant role in the success or failure of any organization. And great leadership directly impacts employee engagement and profitability– engaged employees can lead to greater revenue. Impactful employee engagement falls on leadership and the way they direct teams and individuals. And each successful leader develops a style based on their own personality, goals, and business culture.

Although business leaders can have a substantial influence on their employees' work, their own responsibilities can make it difficult for them to drive high-quality performance effectively and consistently. Taken together, managers' varied responsibilities (which include ensuring team success, creating a positive atmosphere in the workplace, and solving complex problems, among others) can quickly become unbalanced. For example, a sudden shift in the market could take leaders' attention away from their teams, leading to a drop in productivity.

Leaders can stabilize their own resources by adopting different leadership styles for different situations, like:

**Autocratic leadership**
Marked by a clear separation between leaders and employees, this style centralizes decision-making powers in a single person. Decisions are made quickly, and employees are expected to follow their instructions.

**Democratic leadership**
This style uses a consultative approach in which leaders solicit feedback from individual team members. Decisions are made more slowly, with leaders considering the input of relevant stakeholders.

**Participative leadership**
In this approach, leaders leave most of the decision-making process to trusted team members. Leaders provide guidance as necessary and delegate tasks to individuals based on their skills.

Each style has a unique impact on employee engagement and performance and this can be outlined as follows:

The autocratic approach is useful for driving short-term performance. In situations in which teams comprise new employees, authoritarian leaders are better at defining solutions to difficult business challenges and driving employee engagement.

The democratic approach is effective in both the short term and the long term. Specifically, the feedback loop created by soliciting opinions from team members leads not only to higher productivity but also to higher morale and engagement.

The participative approach is less effective in the short term but very useful in the long term, with a positive impact on employee performance and engagement. This style leads to a positive work environment in which creativity is encouraged.

This indicates that there is no single best style of leadership. Rather, leaders need to assess their goals and determine which style—or combination of styles—is right for the current situation to ensure employee engagement and performance.

(10 marks)

**[Total: 20 Marks]**

## SOLUTION 4

**(a)** The marketing environment is everything a company must take into consideration when developing and presenting their products and services. The elements of a marketing environment include, but are not limited to, the changing preferences of customers, competition, the legal, political and regulatory environment, organisation's own resources and budget, current trends and the overall economy. All these elements affect an organisations marketing decisions.

**Tastes and Trends**
To be successful, a marketing plan should focus on consumer preferences and current market trends. For example, many large retailers have decided to adapt to consumers' increasing enthusiasm for social media by establishing corporate Twitter accounts and opening online storefronts in Facebook. Consumers no longer need to visit a retailer's main website to buy; some platforms allow them to make the purchase without ever leaving Facebook. Companies that fail to take major trends into account may find their sales lagging behind competitors'.

**Budget and Economy**
The budget plainly has a role in a firm's marketing decisions. It dictates how much advertising the firm can buy and where it can afford to place it. The overall economy also has a massive influence on the marketing decisions. If marketing in a down economy, consumers won't be willing to pay a premium for the product, and the advertising should probably point out that the product saves the customers money, costs less than the competitor's product, or lasts a long time and is therefore a good value. In a strong economy, the strategy mostly changes. Firms are able to charge more, and the ad message may stress the pleasure or convenience the product offers the customers.

**Competitors**
Prudent marketing decisions must factor in competitors -- how many a firm has and how good they are at what they do will affect the marketing plans. If, for example, competitors are able to offer their product for a much lower price, a firm's marketing strategy must stress the fact that their product is of a higher quality, that the warranty is better, or that the product lasts longer. If there are few or no local competitors, a firm is free to expand into new markets. They may choose to broadcast their ad on a Spanish-language television station, for example.

**Legal and Political**
Changes in the political and legal environment can restrict or even end certain marketing activities. The tobacco industry is a case in point for example. The U.S. government first mandated cigarette warning labels in 1965, and, as evidence of cigarettes' harmful health effects grew, it battled the tobacco industry more and more vigorously. These battles culminated in the passage of a 2009 law that gave the federal government the authority to regulate tobacco, which also includes its marketing and labeling. Before offering a product, firms need to consider whether it is a candidate for legal or regulatory trouble.

(10 marks)

**(b)** New product development (NPD) is a process of taking a product or service from conception to market. The process sets out a series of stages that new products typically go through, beginning with ideation and concept generation, and ending with the product's introduction to the market. Occasionally, some of the stages overlap or vary depending on the nature of the business.

Key stages in the process of new product or service development
The NPD process involves eight key stages:

1. Idea generation - brainstorming and coming up with innovative new ideas.
2. Idea evaluation - filtering out any ideas not worth taking forward.
3. Concept definition - considering specifications such as technical feasibility, product design and market potential.
4. Strategic analysis - ensuring your ideas fit into your business' strategic plans and determining the demand, the costs and the profit margin.
5. Product development and testing - creating a prototype product or pilot service.

6. Market testing - modifying the product or service according to customer, manufacturer and support organisations' feedback. This involves deciding the best timing and process for piloting your new product or service.
7. Commercialisation - determining the pricing for your product or service and finalising marketing plans.
8. Product launch - a detailed launch plan can help ensure a smooth introduction to market.

In most cases, a phased approach to the product development process helps to keep schedule, resources and costs under control.

Example for NPD process:
For creating a brand new meal delivery app with some unique features that aren't available anywhere.

**Stage 1 Idea Generation:** You come up with an idea to create a food delivery app. Food delivery apps already exist, but you plan to include two features that don't currently exist in the market.

1. A quick-purchase option for people who are too hungry to think. All they need to do is enter their address and budget, and the app will automatically order something with fast delivery time, and falls within their price range.

2. A dietary restriction setting that automatically removes meals that contains ingredients you're allergic to.

**Stage 2 Screening:** This idea passes your proof of concept check, and your designers and engineers agree that only the first feature is possible. Restricting meals according to dietary needs would require too much work to be feasible, especially with so many partners.

**Stage 3 Concept Development and Testing:** With one feature remaining, it's time to develop a specific concept. Your concept behind your app is to take the pain out of meal delivery. Instead of picking and choosing different meals, it's all taken care of with the push of a button. It's perfect for people that: 1.Are in a rush 2.Families or groups of friends who can never decide what to eat 3.People who don't care what they order

**Stage 4 Marketing Strategy & Business Analysis:** After crunching the numbers and devising a marketing strategy, you decide that your product can be developed and provide positive ROI.

**Stage 5 Product Development:** You successfully create and test various porotypes before finalizing your design.

**Stage 6 Test Marketing:** Before pulling the trigger and publishing your app, you alpha and beta test your product, uncovering some user-interface issues which must be fixed before proceeding. After some fine-tuning, you're happy with the results and proceed to stage 7.

**Stage 7 Commercialisation:** It's time to introduce your new meal delivery app with a unique feature to the market for the final stage.

(10 marks)

**[Total: 20 Marks]**

## SOLUTION 5

**(a)** Big data refers to data that is so large, fast or complex that it's difficult or impossible to process using traditional methods. The act of accessing and storing large amounts of information for analytics has been around for a long time. But the concept of big data gained momentum in the early 2000s when industry analysts articulated the now-mainstream definition of big data as the three V's:

**Volume.** Organizations collect data from a variety of sources, including transactions, smart (IoT) devices, industrial equipment, videos, images, audio, social media and more. In the past, storing all that data would have been too costly – but cheaper storage using data lakes, Hadoop and the cloud have eased the burden.

**Velocity.** With the growth in the Internet of Things, data streams into businesses at an unprecedented speed and must be handled in a timely manner. RFID tags, sensors and smart meters are driving the need to deal with these torrents of data in near-real time.

**Variety.** Data comes in all types of formats – from structured, numeric data in traditional databases to unstructured text documents, emails, videos, audios, stock ticker data and financial transactions.

Examples Of Big Data:
The New York Stock Exchange is an example of Big Data that generates about one terabyte of new trade data per day.

The statistic shows that 500+terabytes of new data get ingested into the databases of social media site Facebook, every day. This data is mainly generated in terms of photo and video uploads, message exchanges, putting comments etc.

While big data offers a variety of benefits to organizations of all shapes and sizes, it also comes with several noteworthy privacy risks including:

1. Data breaches: Data breaches occur when information is accessed without authorization. In most cases, data breaches are the result of out-of-date software, weak passwords, and targeted malware attacks. Unfortunately, they can cost an organization a damaged reputation and a great deal of money. Keeping software up-to-date, changing passwords often, and educating employees on best security practices can all help prevent data breaches.

2. Data brokerage: The sale of unprotected and incorrect data is considered data brokerage. Some companies gather and sell customer profiles, which contain false information that leads to flawed algorithms. Before buying data, organizations should do their research and make sure they are receiving data from a reputable provider that offers accurate data.

3. Data discrimination: Since data can consist of customer demographic information, organizations may develop algorithms that penalize individuals based on age, gender, or ethnicity. Organizations should always have a thorough and accurate representation of customers, account for biases, and put fairness above analytics.

(10 marks)

**(b)** Nearly all companies now use online or mobile websites and/or social media network pages to promote their businesses, sell goods or services, conduct business transactions, and connect and communicate with customers, clients, or other businesses. While these "e-commerce businesses" confront a variety of the same legal issues faced by traditional brick-and-mortar companies, they also must manage other challenges that are unique to conducting business operations and transactions in an electronic environment. The range of legal issues to consider and manage continues to grow, and ignoring this reality could lead to financial liability, regulatory penalties, or unauthorized exploitation of company intellectual property.

Because e-commerce exists in a borderless environment, it creates challenges like –

- Whose jurisdiction?
- Where to take action?
- What test and laws to be followed?
- When individual resides outside jurisdictional area?
- Laws of which country applies on a particular e-Commerce transaction?
- Courts/Authorities of which country are to be approached for enforcement of rights?

While most e-commerce merchants want consumers from all over, whether that means all 50 U.S. states, Canada, Mexico, Europe, or the world. But e-retailers need to consider local laws when they ask for business in another state or another country. And it is important to understand which jurisdictions. In many cases, laws from the customer's state are the ones that will apply in the event a problem arises. While in others the exercise of jurisdiction across national borders is governed by treaties between the countries.

Challenges in taxing e-commerce transactions include:

- Determination of economic activity (to avoid double taxation)
- Identification of the existence of permanent establishment
- Tracing commencing and end point of transaction
- Lack of documentation to know the nature of contract.
- The Indirect tax laws needs to be evolved and redesigned to consider the changing business dynamics of e-Commerce since the activities involve high volume and low-value supplies.

(10 marks)

**[Total: 20 Marks]**