



Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) - 201306

**POST GRADUATE DIPLOMA IN MANAGEMENT (2017-19)**  
**END TERM EXAMINATION (TERM-IV)**

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Paper: **Management of Technology, Innovation & Change** Time: **02.00 hours**

Code: **PG-22** Max Marks: **50**

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**Note: 1. Writing anything except Roll Number on question paper will be deemed as an act of indulging in unfair means and action shall be taken as per rules.**

**2. All questions are compulsory in Section A, B & C. Section A carries 2 Case Studies of 10 marks each, Section B carries 2 questions of 10 marks each and Section C carries 5 questions 2 marks each.**

**SECTION – A**

**Q. 1: Analyze the given case and answer the following questions. (10 Marks)**

**Case-I: Incidents of Technology led fraud in Banks and Financial Markets in India**

In a study commissioned by the associated Chambers of Commerce and industry of India (ASSOCHAM) in July 2015 brought of several alarming facts of rising incidents of fraud in banking and financial sectors. The industry body ASSOCHAM estimated that financial fraud is leading to a whopping 20 billion USD losses every year and the actual numbers may be still higher. This is acting as a restraint to increase in FDI inflow into India. The report opines that the new technologies adopted by the financial institutions are making them increasingly vulnerable to the various risks such as phishing, identity theft, card skimming, viruses and Trojans, spyware, website cloning and cyber stalking. PwC Global Economic Crime survey 2014 pointed that cybercrime reported in organizations around the world including India. According to the Norton Report of 2013 India ranked amongst the top 5 countries in term of cyber crimes such as ransomware, identity theft and phishing attacks. If we account for black money, than the total amount of illicit money out of India raised to 28 lakh crore INR from 2003 to 2012. Minister of Communication and IT, Government of India, cyber fraud cases worth 497 crore INR have been reported by RBI and CBI since 2011. Even National Crime Records bureau Statics shows that the total number of cases of cyber crime registered in India in 2013 rose to 4356 and total number of arrests made were 2098. An analysis revealed that 80% of all fraud cases were valued for less than 1 lakh rupees. Incidentally, frauds worth 11,022 crore INR were unearthed in public sector banks in India between April-December 2014, 2100 cases of fraud were reported to RBI.

Expert opines that the only way to fight the fraud is to follow and adopt new and up to date technology. Organizations can prevent fraud by methodically accumulating and quickly analyzing large amount of data to identify any symptoms of potential fraud. Organizations must have regularly risk assessment to determine potential hazards and the likely outcomes. After which the mitigation plan for the potential loss and probability of occurrence is worked out. Wherever human beings are involved, background checks are the good idea. Some of the tools and methods used in cybercrime preventions are Data analytics, Behavioral analytics, Deep learning and conducting regular internal audits.

- a) Analyze the case and discuss that the use of IT in banking sector will ultimately slow down the cashless economy drive due to cyber crime. Give your answers with suitable reasons.

- b) Discuss your point of view to eliminate the negative consequences in adopting the technology.

**Q. 2: Analyze the given case and answer the following questions.**

**Case-II: Innovations and Mobile breakthroughs**

**(10 Marks)**

The mobile-phone industry provides an excellent example of innovation and illustrates many of its concepts. The industry has given the opportunity for many organizations to achieve spectacular growth over the period since the introduction of the first mobile phone. It is a little more than a decade ago that phones became truly mobile. Old films show the early mobile phone as a contraption the size of a brick used only by the most powerful business executives. In the early days phones were simply used for talking and it seemed that it was only business executives that needed to be constantly in touch. A key development was having a phone in the car.

Today the mobile phone is a multifunction essential gadget that is capable of delivering almost every communication need or a universal must-have accessory.

In the early days of mobile phones Jorma Ollila was the chief executive of a small diversified Finnish conglomerate. He had a vision to make Nokia the world's leading maker of mobile phones. Nokia was one of the fastest growing companies of the decade and in 2003 shipped 160 million handsets, more than twice that shipped by Motorola, the next largest competitor. Nokia, like other hardware and software manufacturers, used the latest technology to develop and manufacture miniaturized multifunction products. As the products became fashion items for young adults and teenagers, design was critical and Nokia lost market share substantially in 2004 after it failed to develop a clam shell design, which swept the market.

Technology and design breakthroughs continue as the 3G phones enable Internet access and the transfer of photographs, audio and video clips. The functionality of these phones is being enhanced as the communications technology is being combined with better photographic and screen technology and integration with mobile audio devices, such as the iPod.

Having swept through the developed countries, market development in emerging markets such as India and China is now key. But, as the market matures, the barriers to entry are falling and in these emerging markets entrepreneurs are developing competitive products offering high value for specific customer segments.

The breakthroughs in the industry have not been restricted to new technology and design. The growth of service providers, such as Vodafone, has been phenomenal too. Vodafone's growth has been driven by effective marketing and recruitment of customers, using a myriad of different contracts and partnerships with mobile-phone suppliers that enabled them to give away phones within the service contract as the bait to hook high-call revenue. Competition between service providers increased as new entrants offered 'free minutes'.

A significant breakthrough was achieved by 'Pay-as-you-go', which challenged some industry assumptions. In a similar way to other utilities, the customers of fixed-line suppliers had contracts, paid a monthly rental charge for the line and then paid for calls on top. Prepayment for mobile phones enabled customers to have more control over their expenditure and so led to the mobile phone becoming a children's and teenagers' 'must-have'.

Perhaps one of the most surprising breakthroughs, because its success was not predicted, has been texting. It was never imagined that this technology would be embraced so enthusiastically by teenagers, who often even prefer to text rather than talk to their friend standing next to them. For some customers the criteria for choosing a mobile phone is not the design or multi functionality but the speed at which they are able to text.

- a) Discuss the organizations, such as Vodafone and Nokia, been more successful in the mobile market than the former state-owned telecommunications businesses.
- b) What do you expect to be the next breakpoint in the sector? Justify your answer from your reflections on customer demands, competition and technological developments.

**SECTION-B**

**Answer the following questions:**

**(10×2=20)**

**Q3:** Differentiate between Invention and Innovation. Also discuss various Innovation Strategies used by the innovative organizations in detail.

**Q4:** Discuss innovation concept by considering Tata motors and explain the types of innovations using suitable examples for each type.

**SECTION – C**

**Q5: Answer the following questions**

**(02×05=10)**

- a) Illustrate the relationship between Technology and Innovation.
- b) Distinguish between lateral thinking and literal thinking.
- c) Converse the advantages and disadvantages of Concurrent Engineering.
- d) Discuss various stages of Technology Life Cycle with the Samsung mobile example.
- e) Analyze the impact of E-Business in Retail Sector with respect to major investment and market entrants.