INSTRUCTIONS TO STUDENTS

1. ENSURE THAT YOU COMPLETE THE INFORMATION REQUIRED ON THE FRONT COVER OF EACH EXAMINATION ANSWER BOOK USED, i.e., STUDENT NUMBER, QUESTION NUMBERS AND SEAT NUMBER.

2. THIS PAPER CONSISTS OF SIX PAGES; IT IS YOUR RESPONSIBILITY TO ENSURE THAT YOUR PAPER IS COMPLETE.

3. THERE ARE TWO SECTIONS AND FOUR QUESTIONS. YOU MUST ANSWER THE QUESTION IN SECTION A, AND CHOOSE ANY TWO QUESTIONS FROM THE THREE QUESTIONS IN SECTION B. ALL QUESTIONS ARE SUPPORTED BY THE SUPPLIED CASE STUDY.

4. ALL QUESTIONS ARE WORTH EQUAL MARKS
All of the questions in this examination are supported by the case study entitled “Battle for supremacy: Apple Inc. vs Samsung Telecommunications” that begins on page 4.

It is recommended that you devote roughly thirty minutes to reading the case study, and the remaining 150 minutes to preparing, in equal proportion, your three answers.

**SECTION A**

You must answer this question.

**QUESTION ONE**

According to Shane, your text book author, companies need to defend against imitation to “appropriate the returns to investment” in innovation. We know this can be achieved through intellectual property mechanisms, as well as non-legal mechanisms such as control of key resources, building a brand name reputation, establishing architectural control and obtaining first mover advantage. These all sound like core competencies. However, Shane also points out that companies can suffer from **core rigidities** - the inability to adapt capabilities to meet new market needs, or market needs expressed differently, or atypical competitive hostility.

Ultimately, we realise that a company can create competitive advantage by doing a much better job than rivals of managing the activities comprising its value chain – but based upon the information available in the case study, would you say that Apple are perhaps victim of core rigidity?

You are required to explain competitive advantage, and in particular how competitive advantage can be enjoyed by a firm with threats from new technology or new standards employed by a competitor. In light of your explanation, discuss what you believe is the most appropriate way for Apple to manage their way out of the situation in which they currently find themselves.
SECTION B

You must answer the choose ANY TWO of the following three questions.

QUESTION TWO

In industries in which new products and services are easy to imitate and a dominant design has been established, innovators’ success is said to depend on control of complementary assets. However, while both Apple and Samsung would like to contend that they have produced the dominant design, this is not yet clear and in fact remains the subject of protracted legal dispute.

You are required to elaborate on the concept of appropriating the returns to investment in innovation as clarified by Shane and, knowing what you should about the methods by which firms capture value from innovation, comment on the Apple move to forge their own innovations in a market characterised by Samsung technical dominance. It is recommended that you use the Teece model to assist in constructing your commentary.

QUESTION THREE

Technical standards are specifications that ensure compatibility between different components both within a single product architecture, and beyond. Standards permit independent companies to produce different components for the same product – and in the case of Apple and Samsung, the adoption of a common standard appears to have favoured the one competitor more than the other.

Is it possible for Apple to sustain itself in the marketplace when it is as heavily reliant on Samsung’s supply as it has been? Or should it seek to expand its range by seeking to obtain advantage over Samsung with alternative innovations?

Explain why companies seek to establish design dominance in the market place, and the paradox between Apple’s simultaneous reliance on Samsung’s supply of components, while competing in the same heavily traded market segment. Discuss, with supporting analysis, whether Apple has lost, in your opinion, any opportunity it may once have enjoyed to develop a competitive advantage with respect to technical design dominance in the smartphone market.

QUESTION FOUR

It can be argued that building an installed base is very important in industries characterised by increasing returns, and that first mover advantage is an important element of obtaining strategic
advantage in any environment characterised by increasing returns. Given this background, it is extraordinary that Apple and Samsung have continued to collaborate for as long as they have. Shane, your textbook author, asserts that analysis by a firm of its core technology, the nature of the industry within which it operates and the relative advantages and disadvantages of collaborative arrangements, must be undertaken when a firm develops its strategy.

There are clear risks to collaboration, and Apple has evidently weighed up the disadvantages in originally choosing to collaborate with Samsung in bringing its products to market. You are required to explain the advantages and disadvantages to collaboration. Against this background, and using substantiating argument, discuss whether or not in your opinion, Apple are likely to present any form of competition to Samsung’s dominance.

Battle for supremacy: Apple Inc. vs Samsung Telecommunications

Samsung Telecommunications is one of five business units within Samsung Electronics, belonging to the Samsung Group, and consists of the Mobile Communications Division, Telecommunication Systems Division, Computer Division, MP3 Business Team, Mobile Solution Centre and Telecommunication R&D Centre. Telecommunication Business produces a full spectrum of products from mobiles and other mobile devices such as MP3 players and laptop computers to telecommunication network infrastructure. Headquarters is located in South Korea.

Samsung’s mobile telecommunications business was initiated in 1983 with the hope that this would become the company's future growth engine. In 1986, Samsung was able to release its first built-in car phone, the SC-100, but it was a failure due to the poor quality. In spite of this unsuccessful result Samsung pursued a strategy of ongoing R&D and market penetration and in November 1993, the development team finally unveiled a remarkable new handset, with compact design and substantially improved quality over its predecessors.

In 1998 Samsung changed its market entry strategy by adopting a high-end strategy. Samsung needed to escape from its low-end image. It figured that its new mobile phone, with its sophisticated design and distinguished functionality, would help it do just that. Samsung was granted the "Best Manufacturer" award twice by the Mobile News Awards, an award that was previously given to handset pioneers, Nokia and Ericsson.

Apple is the world's second-largest information technology company by revenue after Samsung Electronics, and the world's third-largest mobile phone maker after Samsung and Nokia. Established on 1st April 1976, the company set out to produce and sell early versions of the personal computer using a proprietary operating system. Development of what was to become the iPhone began in 2004. Apple created the device during a secretive collaboration with AT&T Mobility—Cingular Wireless at the time. The estimated development cost of US$150 million over thirty months led to the public launch of the iPhone at the end of June 2007. The product was enthusiastically snapped up by the American public, and iPhones outsell other smartphones in the USA.

When we fast forward to the present day, we gather that Apple are talking about a “post-PC revolution” – according to Apple’s CEO, “we’re talking about a world where the PC is no longer the centre of your
digital world, but just another device. The devices you use the most are more portable, more personal and dramatically easier to use than any PC has ever been.” According to Apple, smartphones and tablets are where the bulk of our computing will occur.

It is clear that Apple and Samsung are competitors, operating in the highly competitive consumer electronics market place, competing for consumers who are spoilt for choice. One would be forgiven for thinking that design dominance would be each rival’s key priority. Unusually, then, we discover that Apple is one of Samsung's biggest customers for processors and memory chips. But the two firms compete directly in the mobile-phone market and have spent the better part of the past two years suing and countersuing over the look, feel and features of their gadgets.

They were ideal partners a decade ago, when the two didn't really compete. Then Samsung started rolling out smartphones that today eclipse the iPhone in units shipped. In the past year, Apple executives have expressed concern that their dependence on Samsung limits Apple's ability to control its destiny by constricting Apple's negotiating power and ability to use different technologies, Apple has cut back on some purchases - it no longer buys iPhone screens from Samsung and has reduced iPad-screen purchases, suppliers say. And Apple has been buying more flash-memory chips—an essential component for storing data—from other makers, say former Apple executives and officials at another chip supplier.

But Apple remains critically dependent on Samsung. The microprocessor brains that control iPods, iPhones and iPads are Samsung-built. And some new iPads still use Samsung screens, according to examinations of the devices by industry analysts.

Apple's conundrum: Samsung is the world's biggest maker of some of the most sophisticated parts that Apple craves, such as processors, memory and high-resolution screens. Apple also has more than a half-decade invested in working with Samsung to build custom chips. Replicating that elsewhere is daunting, former Apple executives say, and this is reinforced by Michael Marks, who is chairman of SanDisk Corp., which sells memory chips to Apple. Says Marks, “the component choices for Apple aren't good, which is why they keep buying from Samsung: the maturing tech business has left fewer big players to partner with and that's forced more of these strange bedfellows, because the choices are limited.”

This month, after years of technical delays, Apple finally signed a deal with Taiwan Semiconductor Manufacturing Co. to make some of the chips starting in 2014, according to a TSMC executive. The process had been beset by glitches preventing the chips from meeting Apple's speed and power standards, TSMC officials said, and added that despite the deal, Samsung will remain the primary supplier through to 2015.

Apple's component orders from Samsung were set to hit around $10 billion last year, and it is estimated that the Apple processor, where Samsung is currently the sole supplier, accounted for $5 billion of purchases in 2012.

"If Samsung loses Apple as a client, it will have an impact because Apple represents a large portion” of Samsung’s sales of non-memory chips, he says.

Apple's serious relationship with Samsung goes back to early iPod music players when Apple locked Samsung into a deal to supply flash memory for iPads in 2005. When Apple's iPhone hit the market in 2007, its brains were Samsung-made, too.
Apple executives weren't blind to Samsung’s ambitions to compete with it, and set out from 2008 to shift its flash-memory purchases away from Samsung. This has been largely successful, with Samsung fulfilling less than 10% of Apple’s flash memory requirements.

Apple also broke up with Samsung on screens. Screen quality had become an increasingly important way that Apple tried to differentiate its gadgets. When Apple launched the iPhone 4 in 2010, it dubbed the screen a "retina display" to draw attention to its high resolution, sourcing the technology from Sharp and Toshiba.

However, other efforts to ditch Samsung have faltered. In 2011, when Apple was designing its third-generation iPad, the company asked Sharp, which was already supplying iPhone screens, to produce the new iPad's high-resolution displays. But when Apple launched the third-generation iPad in March 2012, it came mainly with Samsung displays. Sharp had missed the launch deadline as it struggled to mass-produce displays using a new technology.

In March, Samsung agreed to buy a 3% stake in Sharp and to buy more LCD panels from it. The deal would make Samsung not only Sharp's fifth-largest shareholder but its key client, potentially preventing Apple from gaining more bargaining power with Sharp.

However, both companies have not been able to excite customers in the past year. While early reviews of Samsung’s Galaxy S5 are largely positive, some reviewers are asking if the insane pace of innovation in the smartphone industry in recent years is petering out.

The Wall Street Journal’s Geoffrey Fowler, in his review of the S5, muses that Samsung’s update to its top-selling Galaxy S4 “barely moves the needle”. Apart from the fact that it’s waterproofed, the S5’s “most original new feature is a heart-rate sensor that works well only if you hold very, very still”. Critics have also accused Apple of falling behind the innovation curve with its iPhone, sticking stubbornly to a small screen size (relative to Android-powered phones made by rivals). They say Apple has been adding new features at a snail’s pace in recent years. They argue that the company is not innovating nearly as quickly as it did when the late Steve Jobs was at the helm.

And, even though Apple has announced a large display on its iPhone 6, expected later this year, critics say that screen size doesn’t really amount to innovation.