TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF BUSINESS

DEPARTMENT OF BUSINESS ADMINISTRATION

UNIVERSITY EXAMINATION FOR:

MASTERS OF BUSINESS ADMINISTRATION

BSM 5101 : MANAGEMENT OF INNOVATIONS

END OF SEMESTER EXAMINATION

SERIES:DECEMBER2016

PAPER ONE

TIME:3HOURS

DATE: Pick DateSelect MonthPick Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. AttemptChoose instruction. **Question one Compulsory and any other THREE questions**

Do not write on the question paper.

Question ONE

Read the following **case Study** and answer the questions.

(a) Outline how technology innovation can be used to reduce poverty ***(20 marks)***

(b) How can technological innovation address environmental degradation (***20 marks)***

Innovation- Envisioning the future for posterity

New technologies are emerging so rapidly that we are now having trouble coping with their impact on society. By affecting everything from the nature of work to what it means to be human, technological changes could overwhelm us if we do not collaborate to understand and manage them.

Entire industries are being redefined and created from scratch, owing to groundbreaking developments in artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing. We at the World Economic Forum have dubbed this wave of innovation the Fourth Industrial Revolution because it is fundamentally changing the way we live, work, and relate to one another.

New technologies such as the steam engine and the cotton mill launched the First Industrial Revolution, which was accompanied by historic sociopolitical developments such as urbanisation, mass education, and mechanised agriculture. Thanks to electrification and mass production, the Second Industrial Revolution introduced new social models and forms of work. And with the advent of digital technology and instant telecommunications, the Third Industrial Revolution, playing out over the past five decades, has connected the planet and shrunk time and space.

SHAPING LIVES

The Fourth Industrial Revolution will be no less transformative: individual technologies will be influential, but changes in our social and economic systems will do far more to shape our future lives. What is needed is a conceptual framework to help businesses, governments, and individuals to anticipate the radical technology-driven shifts – in business models, ethics, and social issues – on the horizon. To ensure our future prosperity, we must ask ourselves if new technologies are being designed to meet social needs or if they are simply ushering in change for its own sake.

Four principles should guide our policies and their implementation. For starters, we should focus on systems rather than any individual technology; only by observing how divergent technological, social, and economic forces interact with one another can we determine and predict how business, society, and economics may change.

Second, we should push back against the common fatalistic view that progress is predetermined. Communities and individuals should be educated and empowered to master technologies for productive purposes rather than being mastered by them for someone else's ends.

Third, we should design new technologies and systems with the future in mind rather than blindly accepting change. Integrating transformative technologies into our social and economic systems will require close collaboration between stakeholders in government, industry, and civil society.

Finally, social and ethical considerations are not a bug to overcome or override; our shared values should be the central feature of all new technologies. If technologies are being used in ways that exacerbate poverty, discrimination, or environmental degradation, they have not been optimised for the future we want to build.

ADDRESS CHALLENGES

No single stakeholder can address the Fourth Industrial Revolution's social and economic challenges. The business community, for its part, must create an environment in which technologies are developed and deployed safely, and with social considerations in mind. Governments, too, must be actively engaged in how innovations are introduced to society. Policymakers should maintain close collaboration with the technologists and entrepreneurs leading the revolution lest they fall behind. And all of us, as individuals, must stay informed so that we can understand and take action on new issues that emerge from the complex interplay between technology and society.

The fourth industrial revolution will usher in systemic changes that demand collaborative engagement, and we will need to consider new ways of working together across public and private spheres. Because the pace of change will only

continue to accelerate, we must maintain transparency for all stakeholders so that they can weigh the risks and rewards of each new development.

This is an age of complexity, and sound leadership calls for a wholesale shift in how we think about collaborative engagement for the future. If we are to avoid the dystopian outcomes that technology can easily produce, we must collectively envision the future that we want to create.

Question TWO

(a) Discuss in detail the different types of innovation ***(10 marks)***

(b)What are the key features of perspectives on Management Innovation (***10 marks)***

Question THREE

Outline the key factors influencing the innovation process ***(20marks)***

Question FOUR

(a) Describe the challenges facing the innovation process in organizations **(10 marks)**

(b) What are the possible solutions? ***(10 marks)***

Question FIVE

Explain the conditions should managers put in place to invent and implement new management practices ***(20 marks)***

Question SIX

(a) Discuss how innovation can contribute to change in Organizational Culture ***(10 Marks)***

(b) Who are the key players responsible for innovation in organizations ***(10 Marks)***