### BINDURA UNIVERSITY OF SCIENCE EDUCATION

#### **FACULTY OF COMMERCE**

### GRADUATE SCHOOL OF BUSINESS

# MASTER OF SCIENCE DEGREE IN ENTREPRENEURSHIP AND INNOVATION

## INNOVATION MANAGEMENT (MEI 501)

### **EXAMINATION PAPER**

**DURATION: 3 HOURS 30 MINUTES** 



## INSTRUCTIONS AND INFORMATION TO CANDIDATES

- 1. Section A is compulsory and carries 40 marks.
- 2. Answer Question One from Section A and any three (3) questions from Section B.
- 3. The paper carries six questions.
- 4. All questions in Section B carry equal marks of 20 each.
- 5. The use of cell phones is not allowed in the examination.

**SECTION A: [COMPULSORY]** 

**QUESTION 1** 

CASE STUDY: RUSE UNIVERSITY ENTREPRENEURSHIP CENTRE

In June 2008, the Ruse University Academic Council approved all documents legalizing the Entrepreneurship Center as a unit in the Research & Development Sector (R&DS), next to the Technology Transfer Centre (TTC); funds are being sought to finance the activity. It is expected that the Entrepreneurship Center will be the main organizational element for techno starters, together with the lectures of the Faculty of Business and Management. It will allow techno starters, other students, alumni and other interested individuals to commercialize their know-how. The Centre must have horizontal hierarchical links with all faculties and departments and vertical hierarchical links with the Rectorate. There is a need to develop the University regulations regarding the generation of income from know-how commercialization and the adoption of a financial reward system to stimulate the academic staff to encourage students to become techno starters. The more generous the reward system is towards entrepreneurs, the more activities will be initiated in and around the University, thus making it more interesting to students and staff. Generating income from techno starters is not the first priority.

The Entrepreneurship Centre is a long-term initiative and it should effectively facilitate the University's efforts towards the adoption of know-how commercialization. It should be a driving force and a coordination tool for all activities concerning techno starts and know-how commercialization. The following main activities of the Center to encourage entrepreneurship have been developed in close cooperation with the Department of Management and Business development, from where the majority of the academics involved in this process come:

## Business Plan Competition (http://www1.ecs.uni-ruse.bg/fbm/BMD/Student.html)

This has been organized since 2000 and has played an important role in stimulating the development of entrepreneurial activities at Ruse University. Although the competition is open to students from all faculties it is mainly the students of the Faculty of Business and Management that participate. The practice of stimulating students to develop entrepreneurial skills by participating in the competition has to be spread to all faculties. In 2005, 2007 and 2009 some of the business plans were developed in answer to requests from firms. In 2010 many of the participants forwarded their business plans to Bulgarian funds.

## Small Business Management (http://www.uni-ruse.bg/UD/uchpBak/14400UPLB\_B.xls)

The next step was initiated in 2007 by two lecturers in Small Business Management. They have invited some businessmen to share their experience with the students and give them opportunities to work on business proposals for the development of their firms. The students have to become practitioners and initiate new products, target new markets or make managerial improvements. This brings them face-to-face with economic reality.

## Student Company of Junior Achievement Foundation

(http://nis.uni-use.bg/uchebna\_kompania/)

Since 2007 Ruse University has participated in this initiative, which is national and international. The Business Plan Competition has developed some expertise, which has been further upgraded by the Student Company. Every year the members (students) are different and they create unusual products. The main idea is to develop the business side of the products. In the period 2008-2011, 27 students from four faculties have participated in this initiative. Their activities have been broadcast on local and national TV (http://play.novatv.bg/play/238754/), as well as web newspapers.

# RESITA NET (http://www.uni-resita.eu/FH-Sites/uem/index.php?id=1450):

In 2008, Ruse University became a co-founder and member of RESITA NET, which is an international academic network for educators in Entrepreneurship and Innovation. In 2010, it had participation from 15 universities and one institute from 12 countries. Through this network, it became possible for some students from the University to participate in different activities, related to entrepreneurship: PhD students in Zaichar (2009, Serbia) and Resita (2010, Romania), master's students in Tirana, Albania (2009) and bachelors in Zenica, Bosnia and Herzegovina (2010). The network has become a cradle for a variety of initiatives.

# Web-based Journal in Entrepreneurship and Innovation (http://fbm.uni-ruse.bg/jei)

Due to the cooperation of RESITA NET, it became possible to establish this international journal in 2009. The editorial board are from RESITA NET, while the authors and the peer reviewers are more diversified. The text is bilingual (English and the native language of the author) which makes it possible for starters from different countries to get some analyses and case studies at no cost.

## Master's program in Entrepreneurship and Innovation

(http://fbm.uni-ruse.bg/index.php?catid=43)

This was launched in 2009 with 15 students. The main aim is to help starters by educating them and giving them a variety of mentoring and coaching support. The classes are conducted at the weekend so students have time to develop businesses during the week. Some of the master's students have also participated in the initiatives of RESITA NET (2009) and STARTENT (2010).

## STARTENT (www.startent.eu)

For the period of 2009-2011 Ruse University is a member of the STARTENT project, funded by the European Commission. It unites 9 partners from 6 EU states. It has a variety of initiatives to encourage entrepreneurship. Some of them are useful for the academics (like preparation of cases studies, teaching methods, knowledge exchange, etc.); other initiatives are useful for starters, because they can exchange experience in various ways; a third group of initiatives like business plan competitions with financial awards and face-to-face meetings with starters, benefit the students (would-be-entrepreneurs). In 2010 over 20 students from RESITA NET formed teams to enter STARTENT's 'Transnational Business Plan Competition'.

BG-RO research project (http://www.nsfb.net/system/storage/Anne\_es\_2\_and\_3.doc)

For the period of 2010-2012 Ruse University and Timisoara Polytechnics (Romania) are expected to develop a bilateral project related to the study of the entrepreneurship training needs of the students in the two countries. It is co-funded by the two Ministries of Education (the Bulgarian Department for Science and the Romanian National Authority for Scientific Research). This project has been initiated thanks to the two universities' membership of RESITA NET.

# Harvard Business School Colloquium in Entrepreneurship (http://www.efer.eu)

This is organized by EFER and Ruse University academics were participants in 2008 and 2009. The project has brought knowhow to all dimensions of the entrepreneurship support provided at the University. For example, in October 2010, two Skype conferences were organized between the Bulgarian students from the Faculty of Business and Management and the Deputy-Head of the Centre for Innovation and Entrepreneurship at Lomonosov State University (Moscow).

## ENTREPEDUC (www.entrepeduc.org)

In the autumn of 2010 over 100 students from the Faculty of Business and Management were involved in this global project (www.entrepeduc.org/collaborators), related to entrepreneurship education. Their responses will contribute to this global survey and increase the self-efficacy and identity of students intending to choose the career of an entrepreneur.

The underlying principle of the Third Generation University (3GU) is the development and support of entrepreneurship. The existing units and activities at Ruse University are fundamental to this and it should be just a matter of time before positive results are achieved. The key milestone is to find students and academics, willing to collaborate, but also to develop effective forms of collaboration. The existence of the Ruse University Entrepreneurship Centre and the activities which it has been developing together with the Department of Management and Business Development, are the basis for entrepreneurship support and the transition to the 3GU. Together they have managed to develop the institutional infrastructure within Ruse University and to begin to meet the needs of the starters.

The number of students who make use of this infrastructure is however still few. Therefore, the key areas of research interest are: first, how the Ruse University capacity and entrepreneurship activities described above actually can encourage the entrepreneurial culture among the students; second, to find ready-to-act, innovative students and upgrade their business skills and knowledge through the Master's programme in Entrepreneurship and Innovation. One specific problem is that the Ruse University Entrepreneurship Centre has about 10 academics and they all combine teaching with mentoring (consulting) in their classes. This means that they are paid indirectly for their consultancy work. There are no non-academic personnel working in the front-office from 9.00am until 5.00pm. Therefore, the Entrepreneurship Centre is in effect in the classrooms and offices of the academics from the Faculty of Business and Management.

Required:

Carefully consider the following questions and answer them based on the case study above as well as your broad appreciation of issues in Innovation Management.

- a. Briefly describe the main purpose of having The Entrepreneurship Centre at Ruse University in Bulgaria as approved by the University Council. (5 marks)
- b. Identify the key elements of an innovation management ecosystem which Ruse University had to develop as a matter of urgency to boost entrepreneurship and (5 marks) innovation.
- c. This case study illustrates the opportunities which existed for Ruse University to develop into a 3GU via collaborations between entrepreneurs and universities. In your view, how well prepared (10 marks) was Ruse University to undertake the transition to the 3GU?
- d. At the centre of Innovation Management is the issue of reward management system? In what ways could the reward management system have been a major drawback at Ruse (10 marks) University
- e. Knowledge management systems are very key in ensuring that the fruits of innovation efforts are enjoyed by the innovative organisations. How can the benefits of extensive (10 marks) collaborations be protected by Ruse University and its partners?
- f. Drawing some insights from the case of Ruse University, how can a Master's programme in Entrepreneurship and Innovation play a linking role between the academics and the (5 marks) students who are potential techno-starters?

[Total: 40 marks]

SECTION B: (Choose any 3 questions from this Section).

### **QUESTION 2**

a) Define technology and innovation.

(6 marks)

- b) Innovative organisations may be identified by their approaches to business. Briefly (7 marks) discuss any seven (7) of the characteristics of such organisations.
- c) Explain how culture influences innovation management, giving examples from your (7 marks) experience.

[Total: 20 marks]

### **QUESTION 3**

- i) Briefly describe each of the types of innovation and explain which one is a dominant one in an industry of your choice in Zimbabwe.
  (10 marks)
- ii) Explain the role of the government in creating innovative organisations and society in general. (5 marks)
- iii) Briefly explain the factors that act as key barriers to innovation.

(5 marks)

[Total: 20 marks]

#### **QUESTION 4**

- a) Discuss the relationship between strategic management and innovation. (10 marks)
- b) Explain how you would go about creating a balanced innovative team in your organisation. (10 marks)

[Total: 20 marks]

### **QUESTION 5**

Using the Most Innovative Companies (MIC) Model you studied, describe the main characteristics of the most innovative companies and briefly show how the model explains innovative companies in Zimbabwe. [20 marks]

### **QUESTION 6**

Explain key asset management and show how organizations may protect their intellectual property. [20 marks]

#### END OF EXAMINATION PAPER.