



FACULTY OF HOSPITALITY & TOURISM

FINAL EXAMINATION

Student ID (in Figures) : 

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Student ID (in Words) : \_\_\_\_\_  
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Course Code & Name : **HOS2023 SUSTAINABLE OPERATIONS IN HOSPITALITY AND TOURISM**  
Semester & Year : May-August 2021  
Lecturer/Examiner : Ms. Haryati  
Duration : 3 Hours

**INSTRUCTIONS TO CANDIDATES**

1. This question paper consists of 2 parts:  
SECTION A : FIVE (5) short questions. Answers are to be written in the Answer Booklet provided.  
SECTION B : TWO (2) case study questions. Answers are to be written in the Answer Booklet provided.
2. Candidates are not allowed to bring any unauthorized materials except writing equipment into the Examination Hall. Electronic dictionaries are strictly prohibited.
3. This question paper must be submitted along with all used and/or unused rough papers and/or graph paper (if any). Candidates are NOT allowed to take any examination materials out of the examination hall.
4. Only ballpoint pens are allowed to be used in answering the questions, with the exception of multiple choice questions, where 2B pencils are to be used.

**WARNING:** The University Examination Board (UEB) of BERJAYA University College regards cheating as a most serious offence and will not hesitate to mete out the appropriate punitive actions according to the severity of the offence committed, and in accordance with the clauses stipulated in the Students' Handbook, up to and including expulsion from BERJAYA University College.

**Total Number of pages = 4 (Including the cover page)**

**PART A : SHORT ANSWER QUESTIONS (60 MARKS)**

**INSTRUCTION(S) : FOUR (4) short answer questions. Write your answers in the Answer Booklet(s) provided.**

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1. Define each of the following terms and provide an example of each:
  - a. Destination Management
  - b. Tour Operators (10 marks)
2. Analyse **FIVE (5)** factors that encourage sustainability action (10 marks)
3. Designing and implementing policy on sustainability requires detailed plans and assessment. You are required to explain **FIVE (5)** consequences and causes of policies in the hospitality and tourism industry. (10 marks)
4. Elaborate on **FOUR (4)** human health issues pertaining to the sustainable of food, purchasing and supply chain. (20 marks)
5. EMS (Environmental Management System) are to be implemented by the hospitality and tourism industry to ensure less impact of the development of the industries towards the environment, to optimize the use of resources, to ensure transparent in managing the system. Discuss **FOUR (5)** benefits of EMS to the industry. (10 marks)

**END OF PART A**

**Part B : CASE STUDY QUESTION (40 Marks)**

**INSTRUCTION(S) : TWO (2)** Case study questions. Write your answers in the answer booklet provided.

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**Environmental aspects of food wastage in trade – a case study**

Food production is connected with a negative effect on the environment. It is linked with the utilization of natural resources such as fresh water and with the emission of greenhouse gases (GHGs). It is, therefore, essential to prevent the wastage of food at all food chain stages. Special attention should be paid to the phenomena which burden the environment in an unjustified way.

One such example may be the waste of final products at the stage of retail sale objects. On the grounds of the collected data, the participation of food withdrawn from the trade, the reasons for the mentioned phenomenon and the size of the wasted food products and donated to charities were established.

As compared to other entities of the food chain, the losses in trade are found to be at a relatively low level; however, it is an extremely important and crucial stage in limitation of the wastage phenomenon due to the possibility of utilizing the food (which may be obtained in meaningful quantities from the discussed area) for social purposes [Bilska et al., 2014]

Food losses and waste also affect other natural resources .Many are found in limited quantities, e.g. fresh water utilized in 23% -24% for food waste production[Kummu et al., 2012]. It is estimated that the agricultural sector is responsible for 70% of global fresh water intake [Döll 2009, Shiklmanov, 2000], and one-third of the water is destined for animal origin food products [Mekonnen and Hoekstra 2012].

Based upon such data, the level of CO<sub>2</sub> emission and the water print of the products which have not been utilized according to their destination were estimated. In spite of the fact that the animal origin products were characterized by a small participation in the weight of the unsold food (ca. 13.34% annually), they constituted the main source of CO<sub>2</sub> emission and water footprint estimated from the food waste. It was calculated that the annual turnover and waste of the products only in one trade network was connected with the unjustified emission of ca. 12 thousand tonnes of CO<sub>2</sub> and 13 million m<sup>3</sup> of water footprint.

References :

- Biliska, B. , Wrzosek, M., Kolozyn- Krajewskad, D. and Krajewski, K.(2016) Risk of food losses and potential of food recovery for social purposes. 2016, *Waste Management* ,52: 269-277
- Bilska, B., Tomaszewska, M., Kolozyn-Krajewska, D., Laba, R. and Laba, S.(2020) Environmental aspects of food wastage in trade – a case study, *Environmental Protection and Natural Resources*, 31(2): 24-34
- Doll, P. (2009). Vulnerability to the impact of climate change on renewable groundwater resources: a global-scale assessment. *Environmental Research Letters* 4:1-12
- Kummu, M., De Moel, H., Porkka, M., Siebert, S., Varis, O. and Ward, P.J. (2012) Lost food, wasted resources: global food supply chain losses and their impacts on freshwater, cropland, and fertilizer use. *Science of the Total Environment* 438: 477- 489
- Mekonnen, M.M. and Hoekstray, A.Y (2012) A global assessment of the water footprint of farm animal products. *Ecosystems* 15: 401-415.
- Shiklomanov, I.A (2000) Appraisal and assessment of world water resources. *Water International* 25: 11–32.

1. Evaluate **FIVE (5)** negative impacts of food wastage in trade and give example. (20 marks)

2. Propose **FIVE (5)** measures that mix policy and planning initiatives the government can consider at local , regional and national levels, especially in reducing the impact of food wastage and provide relevant example to the initiatives.

(20 marks)

**END OF EXAM PAPER**