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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION  
SEMESTER II  
SESSION 2022/2023**

COURSE NAME : ENVIRONMENTAL MANAGEMENT TECHNOLOGY

COURSE CODE : BNS 21103

PROGRAMME CODE : BNS

EXAMINATION DATE : JULY/AUGUST 2023

DURATION : 3 HOUR

INSTRUCTION :

1. ANSWERS **ALL** QUESTIONS.
2. THIS FINAL EXAMINATION IS CONDUCTED VIA **CLOSED BOOK**
3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK.

THIS QUESTION PAPER CONSISTS OF **FIVE (5)** PAGES

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**TERBUKA**

- Q1** (a) Explain **THREE (3)** importance of Act 127 towards industries in Malaysia. (6 marks)
- (b) Identify **TWO (2)** benefits of preserving the environment and natures to the society. (6 marks)
- (c) EQ (Industrial Effluent) Reg. 2009 and EQ (Sewage) Reg. 2009 both highlighted the importance of point of discharge to be clearly indicated by the owner of a premises on the layout plans and engineering drawings certified by a professional engineer. List **FOUR (4)** specifications of point of discharge for sewage or industrial effluent. (8 marks)
- (d) Classify **TWO (2)** responsibilities of an owner of a landfill as specified in EQ (Control of Pollution from Solid Waste Transfer Station and Landfill) Reg. 2009. (4 marks)
- (e) For industrial companies producing wastewater as part of its process, some type of wastewater treatment system is usually necessary to ensure safety precautions and discharge regulations are met. State definition of industrial effluent treatment system as in Reg. 2 EQ (Industrial Effluent) Reg. 2009 (3 marks)
- Q2** Management of scheduled waste is still one of the most critical environmental issue in Malaysia. There are still a lot of challenges to be tackled to reduce improper management and can only be achieved if waste generators give commitments and comply with regulations.
- (a) Based on **Figure Q2(a)** identify **TWO (2)** violation of regulation by the premise owner. (4 marks)

- (b) As the premise owner, Mr. Salleh has been instructed by the Director General to properly manage the scheduled waste as seen on **Figure Q2(a)**. Identify which regulation should be used and determine **FOUR (4)** related regulations in Environmental Quality (Schedule Wastes) Regulations 2005 that Mr. Salleh requires to comply.

(12 marks)

- (c) Interpret **THREE (3)** impacts to environment and human health if the scheduled wastes are not managed properly.

(9 marks)

**Q3** The construction industry utilizes different materials and byproducts, many of which have considerable environmental impacts and most significant sources of construction waste are generated during the construction phase. **Figure Q3(a)** shows a typical generated construction waste of a construction site.

- (a) List **TWO (2)** regulations/ guideline the construction site as in **Figure Q3(a)** violates.

(2 marks)

- (b) Does Site Safety Supervisor (SSS) job description relate with the management of construction waste? Scrutinize your answer with **THREE (3)** points of discussion (If not related why and if related, what are the justifications?).

(7 marks)

- (c) Outline **FOUR (4)** construction solid wastes from **Figure Q3(a)**.

(4 marks)

- (d) Based on your answer in Q3 (c), explain **FOUR (4)** possible waste management technologies that can be applied to reduce or eliminate the wastes from construction site.

(12 marks)

- Q4**
- (a) List **THREE (3)** natural events that contributes to the rise in air pollution globally.  
(3 marks)
  - (b) Fabric filtration is a physical separation process in which a gas or liquid containing solids passes through a porous fabric medium, which retains the solids. Identify **TWO (2)** fabrics commonly used in industry and state the differences between both.  
(6 marks)
  - (c) Analyze **THREE (3)** mechanism of filtration used to remove particulates from the air.  
(12 marks)
  - (d) List **TWO (2)** types of scrubbing process that is available in the industry.  
(1 mark)

**-END OF QUESTIONS –**



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Figure Q2(a)

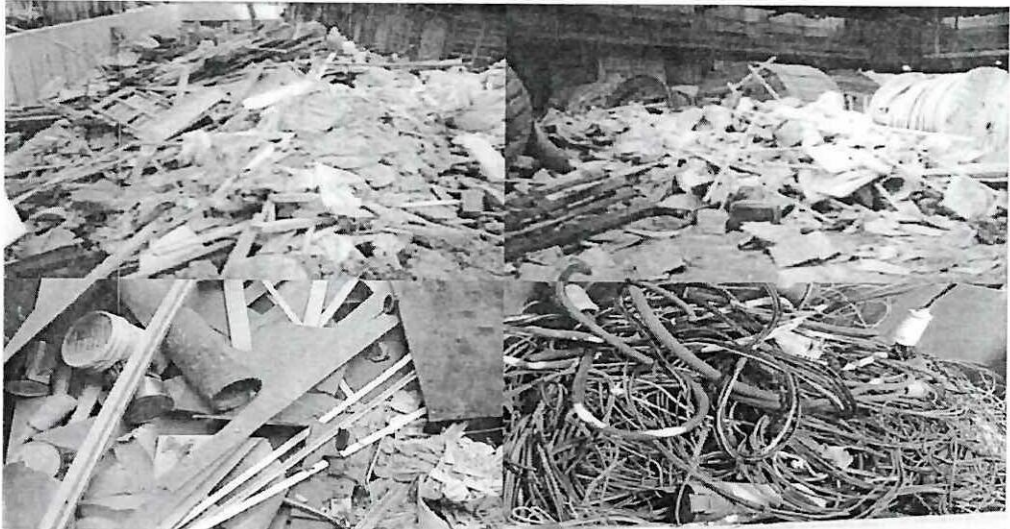


Figure Q3(a)

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