



UTHM

Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2014/2015**

COURSE TITLE : ENVIRONMENTAL TECHNOLOGY
COURSE CODE : BPF 42003
PROGRAMME : 4 BPC
EXAMINATION DATE : DECEMBER 2014 / JANUARY 2015
DURATION : 3 HOURS
INSTRUCTION : ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF **THREE (3)** PAGES

Q1 “Some industries install scrubbers in their smokestacks to reduce the amount of sulphur dioxide released into the atmosphere. Factories that use fuels with high sulphur content should install flue gas desulfurization systems. The installation of denitrification and desulfurization facilities can significantly reduce the nitrogen oxide and sulphur oxide emissions. Strengthening existing regulations and emissions standards can help to enforce the installation of these facilities”.

Based on the statement, there are strategies to control pollutions, but the best strategy is to avoid the pollution.

Discuss **FIVE (5)** strategies that has been done in Malaysia to control the air.

(25 Marks)

Q2 “Industry can take several actions to alleviate the problems of acid deposition include hazardous waste. The best solution is to limit the emission of pollutants at their source. Emissions from industrial activities can be reduced by enforcing regulations, flue gas treatment, control technologies and careful environmental planning” .

Hazardous waste is one of industrial waste and characteristic of hazardous waste include are flammable, erosive, reactive and toxicidable.

Analyze with example these hazardous waste.

(25 Marks)

Q3 Some countries have set very stringent limits to emissions. Emission standards are normally set based on either of the following:

- i. To achieve a certain reduction of emissions, assuming that the technology to achieve the required efficiency will be developed; and
- ii. To choose a suitable available technology and set emissions standards at a level that technology can achieve.

According on this statement discuss how can improve the environment?

(25 Marks)

- Q4** “In many cases, biotechnology can certainly help farmers get higher yields from their land. If biotechnology is used to provide low cost solutions to improve village farms, then it can help to address world poverty. One example is efforts by such groups as the CGIAR centers around the world, or by WARDA in West Africa, or the potato center in Lima, Peru, to develop genetically engineered pest resistant seeds for distribution to local farmers. Planting rice, banana, wheat, or potato that are hardier or resistant to major diseases, for example, will help provide improved yields while reducing the need for chemical applications”.

Explain on the **FIVE (5)** benefit biotechnology to human health.

(25 Marks)

- END OF QUESTION -