

高雄醫學大學 106 學年度 研究所碩士班 招生考試 系所：公共衛生學系碩士班-環境衛生學組
 科目：環境暨職業衛生學

請務必於試卷紙上作答，違者該科不於計分。

- I. Please choose ONE most appropriate answer for each question (27%)
- The followings are notable examples of nondegradable waste except (a) wastes from petroleum refining (b) DDT (c) phenol (d) the salts of heavy metals
 - _____ are a class of compounds that might be formed as a result of drinking water disinfection. (a) Aldehydes (b) Trihalomethanes (c) Haloacetic acids (d) All of the above.
 - Which one of the followings cannot cause eutrophication? (a) detergents (b) fertilizers (c) antibiotics (d) animal waste
 - Minimizing the production of hazardous waste NOT included (a) solidification (b) segregating waste (c) eliminating raw materials (d) changing manufacturing process
 - Which of the following statement is not true? (a) CERCLA stands for Comprehensive Environmental Response, Compensation, and Liability Act (b) NPL stands for National Priorities List (c) RCRA stands for Resource Conservation and Recovery Act (d) USNRC stands for United States Nuclear Regulatory Committee
 - The following agents can contribute to indoor air pollution, with the exception of (1) Carbon Dioxide (2) Formaldehyde (3) Asbestos (4) PCB's
 - All of the following except _____ are components of photochemical air pollution (1) Ozone (2) Sulfur dioxide (3) Hydrocarbons (4) Oxides of Nitrogen
 - The three barriers between inner and outer environment except (1) skin (2) GI tract (3) Liver (4) Lung
 - _____ is not the category of carcinogenesis (1) bioactivation (2) initiation (3) promotion (4) progression

II. Please match the biological effect to the specific nonionizing radiation (12 %)

- | | |
|---|--------------------------------------|
| 1. () UV | a. Erythema |
| 2. () Static magnetic field | b. Irritating sparks |
| 3. () IR | c. Lose tract of day-night cycles |
| 4. () Radiofrequency and microwave radiation | d. possible promoter of tumor growth |
| 5. () Steady electric field | e. Retinal burns |
| 6. () time-varying subradiofrequency field | f. Temporary male sterility |

III. (1) What is the sound pressure level (dB) when the sound pressure is $40\mu\text{pa}$? (6%)

(2) An employ is exposed to the following noise level during the workday:

85 dB for 3 hr; 90 dB for 2hr; 95 dB for 2.5 hr; 110 dB for 0.5 hr;

Dose this noise exposure exceed the regulation? (6%)

(3) How to control noise? (15%)

OSHA Permissible Noise Exposure

Duration per day (hours)	Sound level (dB)
8	90
6	92
4	95
3	97
0.5	110

IV. What are particle deposition mechanisms? (10%)

V. Please write down four kinds of disinfectants applied in drinking water and its advantages and disadvantages (24%)