The Entrance Examination for the Graduate School of Department of Environmental Resources & Management

Part (A):
Reading Comprehension Test (4 points for each question) (4 x 10 = 40)
Please answer the questions below with alphabets (A) (B) (C) or (D) and put it in the parentheses ( ).

Environmental Movement

Concern for the environment in the US extends back into the nineteenth century, when nature lovers and sports enthusiasts first sought protection for areas of exceptional nature beauty or significance. But it was not until the late 1960’s that environmental concerns entered the mainstream of American political debate. By then many Americans had come to the conclusion that more development was not necessarily desirable, especially if it meant more polluted air, dying lakes and rivers, and a landscape strewn with unsightly waste, and crowded with sprawling construction projects. In May of 1970, several environmental groups staged the first Earth Day celebration, designed to heighten public awareness of environmental problems. The success of that initial effort led to it becoming a regular annual event.

During the 1950’s and 1960s, industrial and vehicle population levels had become a serious threat to public health, so the environmental movement of this period focused heavily on restoring and ensuring the cleanliness of basic air and water supplies. Rapidly expanding development pressures were also spurring effects to preserve unique lands and threatened wildlife habitats, and to protection movement was so successful because of its grass roots support; groups of activists in hundreds of towns that took the initiative in cleaning up their own communities. During the 1970s, this local activism reinforced support for the passage of key laws at the national level, such as the Clean Water Act, Clean Air Act, Endangered Species Act, and National Environmental Policy Act, which together have constructed the foundation for environmental standards in the US ever since.

In addition to this national legislation, the year after the first Earth Day, by executive order, President Nixon established the Environmental Protection Agency (EPA); an organization dedicated to restoring and protecting the environment. The EPA spearheaded many contemporary efforts to protect the environment, but it was not working alone. It was allied with a wide variety of distinctly different and separate organizations ranging from a small number of well-funded high-profile national and international organizations to many thousands of smaller special interest groups and even individuals working at the local level. The EPA has now become one of the government’s largest and most influential regulatory agencies. Through its own efforts and in cooperation with other organizations, it has earned a large measure of credit for protecting and restoring the quality of the environment in the United States.

Although one might assume that the cause of environmental protection would engender universal support, it does have its detractors. One criticism that has been leveled against the movement is the claim that its predictions about the dire consequences of environmental damage have often been in error. Environmentalists counter this assertion by pointing out that their warnings have often brought about changes on the part of the public, the government and private industry, and that these changes prevented the predictions from being realized. However, just as it is often very difficult to gauge the impact of human activity on something so complex as the environment, it is equally difficult to determine which side is right in this debate. Because
environmental issues cover such a wide range of concerns, this is a question that must be considered on a case by case basis. These voices of dissent have demonstrated to environmentalists the need to apply quantitative methods in assessing the extent of the destruction they have witnessed, or the degree to which their work has been manifested in actual improvement of the environment.

However vocal the critics of environmental protection efforts may be, given the very considerable body of environmental legislation that exists, it is safe to assume that their views do not represent the majority opinion. Private advocacy groups, the EPA, state legislatures and Congress have worked together to enact numerous laws regarding air and water quality, land use and waste management. That should be evidence enough of the broad extent of the popular support that underlines the movement.

1. On which of the following does the passage mainly focus?
   Answer: (____)
   (A) Earth Day’s impact on the environmental movement.
   (B) How to protect the environment of the planet.
   (C) The environmental protection movement, and how it began.
   (D) The success of the EPA in protecting natural resources

2. The word spurring in the passage is closest in meaning to
   Answer: (____)
   (A) opposing
   (B) managing
   (C) supporting
   (D) motivating

3. According to paragraph 2, why was the environmental protection movement so widely successful?
   Answer: (____)
   (A) It protected plants and animals people cared about.
   (B) It functioned well at the local level.
   (C) It voted unsympathetic politicians out of office.
   (D) It forced ratification of important national laws.

4. According to paragraph 3, which of the following accurately describes how the EPA helped the environmental movement?
   Answer: (____)
   (A) It coordinated action at the local and national levels.
   (B) It obtained presidential support.
   (C) It took over from local organizations to expedite action.
   (D) It provided funding to local organizations.

5. The word spearheaded in the passage is closest in meaning to
   Answer: (____)
   (A) inspired
   (B) led
   (C) conceived
   (D) modified
6. According to paragraph 4, which was a common criticism of the environmental movement?  
   Answer: (_____)
   (A) It suggested measures that would harm the economy.
   (B) Its predictions could not be prevented through practical action.
   (C) That it lacked the support needed to make any real progress.
   (D) The environmental damage it claimed was not seen.

7. According to the passage, what effect did the criticism of the environmental movement have?  
   Answer: (_____)
   (A) It caused the environmentalist to change their methods.
   (B) It decreased federal assistance for environmental protection.
   (C) It diminished popular support for the EPA.
   (D) It revitalized support for the environmental protection movement.

8. Which of the sentences below best express the essential information in the underlined sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.  
   Answer: (_____)
   (A) Critics of the movement were successful in dissuading many environmentalists from supporting some of the more drastic measures that had been suggested by questioning the quantitative method they employed.
   (B) Opponents of the environmental protection movement succeeded in getting the activists to take another, more objective, approach to substantiating their claims.
   (C) People who disagreed with the environmentalists eventually were able to persuade many that the methods employed by the environmental movement were invalid and their conclusion incorrect.
   (D) Members of the environmental groups were reluctant to employ quantitative methods in assessing environmental damage because they felt the results might not substantiate their claims.

9. The word **dire** in the passage is closest in meaning to  
   Answer: (_____)
   (A) unrealized
   (B) possible
   (C) grave
   (D) imaginary

10. The word **dissent** in the passage is closest in meaning to  
    Answer: (_____)
        (A) opposition
        (B) support
        (C) indifference
        (D) ambivalence
Part (B):
Integrated Writing Test (15 points for each question) (15 x 2 = 30)

Managing Ocean Pollution

(Reading)
Studies show that the ocean has proved to be amazingly resilient when it comes to pollution. Even when a clean-up program has been necessary, the oceans have provided an environmentally sound way to dispose of uncollected waste. However, the continual stress that population growth and uncontrolled coastal development have put on the marine environment cannot be good in the long term for the ocean and its ecosystems. Although increased contamination of coastal regions seems inevitable, it is possible to impose limits and manage disposed waste.

Better strategies should not only be developed to manage marine pollution problems, but they should also be accepted and applied internationally. To encourage such global implementation a range of measures could be employed. Environmental awareness should be promoted by governments so that individuals, municipalities, and industries become knowledge about the problems and the solutions. Such a program would encourage the reuse of materials, the development of secondary materials and the use of less polluting materials. All of these approaches together would not only make a difference to the problem, but also have business potential. Profit is often the most powerful incentive for such programs.

Some industries have already begun to employ conservation and recycling as part of their operations. Scrap plastic resins are recycled into new products, including plastic lumber which is better suited for marine construction as it doesn’t erode like wood, concrete or steel. Restrictions and replacement of toxic substances with less polluting materials have already decreased the concentrations of such pollutants as PGS’s (polychlorinated biphenyls) in coastal marine sediments and some marine organisms.

Marine systems appear to have the ability to rejuvenate. Oceans have the capacity to dilute, neutralize and disperse wastes. Compared to land based disposal, which tends to pollute soil and groundwater, it is more environmental sound to use the oceans for disposal. Instead of stopping the use of the oceans as a way of handling wastes, more attention should be paid to the methods of pre-treating effluents and minimizing the impact of residual sludge. If every community makes the efforts, the problem of ocean pollution can be managed.

(Writing)
Questions:
1. Based on the messages provided above, would you please elaborate what the main issues the author concerns about and what the solutions could be manipulated?
2. Please review the surroundings in your community, what environmental movements have been accomplished and what environmental programs would you propose to be conducted to contribute our community, and why?
Part (C):
Translation Test (30 points) (30 x 1 = 30)
Please translate the text below into Chinese. (請翻譯以下文本至中文)

Marine systems appear to have the ability to rejuvenate. Oceans have the capacity to dilute, neutralize and disperse wastes. Compared to land based disposal, which tends to pollute soil and groundwater, it is more environmental sound to use the oceans for disposal. Instead of stopping the use of the oceans as a way of handling wastes, more attention should be paid to the methods of pre-treating effluents and minimizing the impact of residual sludge. If every community makes the efforts, the problem of ocean pollution can be managed.