BOTSWANA COLLEGE OF DISTANCE AND OPEN LEARNING

CERTIFICATE IN DISASTER MANAGEMENT

TECHNOLOGY IN DISASTER MANAGEMENT

TD 011

SPECIAL EXAMINATION

Marks: 100

Duration - 3 hours

Instructions to students:

1. The examination consists of **Four** sections: A, B, C and D

2. Begin each answer to a new question on a new page

3. Answer questions according to instructions given in each section

4. Write answers in the answer booklet provided

5. Write in grammatical English

SECTION A: Multiple-choice questions. **[10 Marks]**

Answer all the questions by choosing the correct answer from the alternatives given.

1. Which is the most important strategy that continuously help to improve emergency management systems (EMS)?

    a. Routinely debug the system to keep it free from dangerous viruses.

    b. Document the lessons learnt from each experience to reduce the recurrence of problems.

    c. Appoint the brightest and best talent to operate the system

    d. Keeping abreast with cutting with cutting edge global technology as much as possible, without fail.

2. EMS can assists in managing _____.

    a. Firemen, medical workers and other response officials

    b. Hazardous material management

    c. The build of an intricate national stadium to strict international safety standards.

    d. School programs

3. Select the option that best defines emergency management systems.

    a. Any technical or technological aid that facilitates information sharing, coordination of critical resources and the effective management of disasters.

    b. Disaster based work systems.

    c. Systems used during disasters.

    d. Programs used in disaster management.

4. _____ refers to object or system that absorbs all electromagnetic radiation that falls.

    a. Blackbody Radiation

    b. Infrared Radiation

    c. Landsat

    d. Radiation

5. Automated vehicle location is used at _____ stage.

    a. Mitigation

    b. Preparedness

    c. Response

    d. Recovery

6. The ultimate purpose of emergency management is to _____.

    a. Train

    b. Protect property

    c. Test

    d. Recover

7. _____ can use Geographical Information System.

    a. Pilots

    b. Electricians

    c. Managers

    d. Emergency Planners

8. _____ is satellite that produces images on earth.

    a. Sensor

    b. Landsat

    c. Radar

    d. Vaccine preventable disease

9. _____ is not an example of print media.

    e. Radio

    f. Newspapers

    g. Journals

    h. Magazines

10. Select the two major types of mass media from the choices below

    a. Television and Radio

    b. Radio and Satellite radio

    c. Electronic and print

    d. Television and Print

SECTION B: True/False questions.   [10 Marks]

Indicate if the statement is True or False

1. Landsat is a series of satellite that produce images of the earth.

2. X-ray utilizes useful property of microwave radiation.

3. Media is always a trusted source for disaster related information.

4. Passive remote sensing makes use of emitted electromagnetic waves from radars.

5. Emergency management is a shared responsibility between government and citizens of a country towards building a sustainable disaster- resilient society.

6. Geographic information system can be integrated with databases.

7. The ultimate purpose of emergency management is to protect property.

8. GIS is a tool that allows users to create interactive queries.

9. Radio is not the most popular and widespread information tool used in disaster management.

10. Roadside detectors can monitor for the presence of hazardous cargo in sensitive areas and confirm that the cargo is on the expected route.

SECTION C: Short answer questions. [30 Marks]

Answer all questions from this section.

QUESTION 1

List and explain four technological tools that can aid in the processes of disaster prevention and mitigation. **(8 marks)**

QUESTION 2

List and explain any four roles of media in disaster management. **(8 marks)**

QUESTION 3

    a. Identify five people who can use GIS **(5 marks)**

    b. List 3 challenges of remote sensing. **(3 marks)**

QUESTION 3

Explain how transportation of HAZMAT affects the environment in cases of accidents.

(6 marks)

SECTION D: Essay-type questions.   [50 Marks]

Answer all questions in this section.

QUESTION 1

    a. Examine the advantages of using GIS in disaster management.   **(15 marks)**

    b. Advance argument for and against remote sensing in disaster management.
(10 marks)

QUESTION 2

Discuss the response and recovery of disaster management.   **(20 marks)**

QUESTION 3

Analyse the impacts of media during any disaster that has happened in your country.

(15 marks)

END OF THE PAPER!