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7-9 April 2020 /// Amsterdam

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By

K. Harald Drager
TIEMS President
www.tiems.org
“We cannot eliminate disasters, but we can mitigate risks, we can reduce damage, and we can save more lives.”

Ban Ki-moon
UN Secretary General
World at Risk

- During 1980-2013, weather-related disasters accounted worldwide for 87% of total disasters, 74% of total losses, and 61% of lives lost.

- Climate Change may increase the frequency and consequences of such events.

- Between 2010 and 2040 the number of people over 65 in less developed countries is expected to nearly triple.

- By 2030, 60% of the world’s population will reside in cities.

- 80% of the ten largest cities are at risk of being severely affected by an earthquake, and 60% are vulnerable to storm surge and tsunami waves.

- Vulnerability introduced by local conditions such as poverty, government corruption, poorly planned development, and environmental degradation are adding to the risk.
Cost of Disasters

- In the 10 years since Hurricane Katrina, the world has seen an annual average of 260 major natural disasters, with average annual economic losses of US$ 211 billion, insured losses of US$ 63 billion, and 76,000 lives lost.

- In 2014, 72 percent of global disaster losses were caused by extreme weather events.

- In 2015 the devastating Nepal earthquake resulted in close to 9000 lives lost alone.

- These figures do not include any of the many smaller-scale floods, storms, earthquakes and other localized disasters.
Sumatra Tsunami 2004
240,000 death
Nargis Cyclone 2008
120,000 Death
Sichuan Earthquake 2008
80 000 Death
Haiti Earthquake 2010
316 000 Death
Japan Earthquake & Tsunami 2011
23 000 Death
Philippines Taifun 2013
6 000 Deaths
Ebola Outbreak 2013
Until now 11 300 Death
Nepal Earthquake 2015
8 896 Death
Terrorism 2015 - 2016
Paris, Iraq, Pakistan, Belgium, etc.
Tianjin Explosion 2015
173 deaths
How to Prepare

Move Focus from Response to Preparedness!

- Learn from Others
  - Example from USA Emergency Management/State of Preparedness
- Research and Development Projects
  - Example of EU R&D Projects
- Education & Training
  - TIEMS Education Programs, GENERATE & QIEMD Certification
Preparedness is the foundation of emergency management.

In assessing the current levels of preparedness in USA, examples from FEMA’s full set of Preparedness Frameworks for Mitigation/Prevention, Response, Protection and Recovery is presented.
The National Preparedness Goal includes a set of 32 key core capabilities intended for the “Whole Community”

- Planning
- Public Information/Warning
- Operational Coordination
- Forensics/Attribution
- Intelligence/Information Sharing
- Interdiction/Disruption
- Screening, Search, Detection
- Access Control/Identity Verification
- Cybersecurity
- Physical Protective Measures
- Risk Management/Protection Programs/Activities
- Supply Chain Integrity/Security
- Community Resilience
- Long-Term Vulnerability Reduction
- Risk/Disaster Resilience Assessment
- Threats/Hazards Identification
- Critical Transportation

- Environmental Response/Health/Safety
- Fatality Management Services
- Fire Management/Suppression
- Infrastructure Systems
- Logistics/Supply Chain Management
- Mass Care Services
- Mass Search and Rescue Operations
- On-Scene Security, Protection, Law Enforcement
- Operational Communications
- Public Health, Healthcare, Emergency Medical Services
- Situational Assessment
- Economic Recovery
- Health and Social Services
- Housing
- Natural and Cultural Resources
National Incident Management System (NIMS)

NIMS is intended to be used by the whole community, individuals, families, communities, the private and non-profit sectors, faith-based organizations, and local, state, tribal, territorial, insular area, and Federal governments.

The National Incident Management System (NIMS) is a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work together seamlessly and manage incidents involving all threats and hazards—regardless of cause, size, location, or complexity—in order to reduce loss of life, property and harm to the environment.
FEMA’s Annual National Preparedness Report

Shows strengths and opportunities for improvement. FEMA’s preparedness cycle’s diagram delineates the sequencing of the traditional, continuing, and future preparedness steps.

- **Incorporating Emergency Preparedness into Technology Platforms:** Businesses and public-private partnerships are increasingly incorporating emergency preparedness into technology platforms, such as Internet and social media tools and services.

- **Challenges Assessing the Status of Corrective Actions:** While Federal departments and agencies individually assess progress for corrective actions identified during national-level exercises and real-world incidents, challenges remain to comprehensively assess corrective actions with broad implications across the Federal Government.

- **Response Coordination Challenges for Events that Do Not Receive Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) Declarations:** Recent events, including the epidemic of Ebola virus disease, have highlighted challenges with coordinating the response to and recovery from complex incidents that do not receive Stafford Act declarations.
FEMA’s National Training Program (NTP) supports the National Preparedness Guidelines, providing policy, guidance, and tools that address training design, development, delivery, and evaluation, as appropriate.

FEMA’s training centers include the Emergency Management Institute (EMI), the Center for Domestic Preparedness, and the National Fire Academy.

The FEMA Higher Education Program is an extremely fast-growing instrument for building the emergency management profession. After 20 plus years, it now collaborates with about 300 degree and certificate programs around the country, which depend upon FEMA for a weekly update on related activities in higher education institutions and related research and activities in the practice area, as well as an annual conference on the EMI campus, attended by hundreds of academicians and practitioners, as well as students and government officials.
The FEMA Emergency Planning Exercises web page offers free, downloadable table top exercises for reviewing, sharing and using by the public, especially the private sector. The National Exercise Program is primarily for members of the emergency management professionals.

The NEP uses the Homeland Security Exercise and Evaluation Program (HSEEP) methodology and related tools and resources provided by the National Exercise and Simulation Center (NESC). HSEEP provides guiding principles for exercise programs, as well as a common methodology for exercise program management, design and development, conduct, evaluation and improvement planning. HSEEP exercise and evaluation doctrine is flexible, scalable and adaptable to the needs of stakeholders and is applicable for exercises across all national preparedness mission areas—prevention, protection, mitigation, response and recovery. These HSEEP templates and guidance may be accessed on the FEMA Exercises webpage.
Nonprofit Collaboration

FEMA decided to bring back the American Red Cross to head the Mass Care Emergency Support Function about five years ago, signing a Memorandum of Agreement and forming the National Mass Care Council.

The Council is Co-Chaired by the American Red Cross, FEMA, the National Emergency Management Association (NEMA) and the National Voluntary Organizations Active in Disaster (National VOAD) and is comprised of Council members from Big City Emergency Managers, Department of Health and Human Services, Feeding America, North American Mission Board - The Southern Baptist Convention and The Salvation Army.

The Council serves as the steering body and focuses on:

- Sheltering (including household pets)
- Feeding
- Distribution of emergency supplies
- Family reunification services
- Immediate health, emotional and spiritual health services
- Access to information
The International Association of Emergency Managers, founded originally by US local emergency managers primarily and now attracts international participants as well as professionals from every level and the private sector, has for 30 years served as the credentialing of emergency managers through their Certified Emergency Manager® administered through their CEM Commission, comprised of professional emergency managers who have obtained the CEM, some for multiple times. The certification is for five years and requires a test, an essay, as well as three years of membership in a professional organization, attendance at a professional conference, six public service contributions to the profession, and 100 hours of emergency management training or education plus 100 hours of general management training.
The Emergency Management Accreditation Program (EMAP) provides guidance and assessments for states, localities, tribes, territories, and campuses, with plans for expansion internationally and private sector.

EMAP has a set of general areas of program evaluation, including the following:

1. Emergency Response
2. Mitigation
3. Prevention
4. Recovery
5. Protection
6. Threats and Hazard Identification
7. Operational Coordination
8. Risk and Disaster Resilience Assessment
9. Planning
10. Public Information
11. Operational Communications
Is the professional organization started by those who serve as State Directors of Emergency Management but now includes professionals throughout the emergency management community and include the following committees:

• Emergency Management Assistance Compact (EMAC) Committee
• Mitigation Committee
• Private Sector Committee
• Preparedness Committee
• Response & Recovery Committee
• Legislative Committee
• Homeland Security Committee
• Legal Counsel Committee

The State of Preparedness in the US has never been stronger. Emergency Managers at all levels of government, the private/nonprofit sectors, and the general public have united under the Whole Community organizing principle, accepting the challenge of working together to insure a strong emergency preparedness for the nation.
How to best build up bridges for improving crisis management from EU to regional levels

EU Research & Development Projects
Between 2014 and 2020, the EU will provide almost €80bn in funding for research, mainly through its flagship research programme Horizon 2020. This funding usually takes the form of grants, to part-finance a broad range of research projects.
TIEMS is a partner in the EU project ASSET (Action plan in Science in Society in Epidemics and Total pandemics), which is a 48 month Mobilisation and Mutual Learning Action Plan (MMLAP), which aims to:

- Forge a partnership with complementary perspectives, knowledge and experiences to address affectively scientific and societal challenges raised by pandemics and associated crisis management
- Explore and map SiS (Science in Society)-related issues in global pandemics
- Define and test a participatory and inclusive strategy to succeed
- Identify necessary resources to make sustainable the action after the project completion

ASSET combines public health, vaccine and epidemiological research, social and political sciences, law and ethics, gender studies, science communication and media, in order to develop an integrated, transdisciplinary, strategy, which will take place at different stages of the research cycle, combining local, regional and national levels.
HERACLES main objective is to design, validate and promote responsive systems/solutions for effective resilience of Cultural Heritage (CH) against climate change effects, considering as a mandatory premise an holistic, multidisciplinary approach through the involvement of different expertise (end-users, industry/SMEs, scientists, conservators/restorators and social experts, decision, and policy makers).

This will be operationally pursued with the development of a system exploiting an ICT platform able to collect and integrate multisource information in order to effectively provide complete and updated situational awareness and support decision for innovative measurements improving CH resilience, including new solutions for maintenance and conservation.

HERACLES system will be designed and developed by accounting for the economic sustainability and future acceptance by the market and for the social and economic impact for public and local communities while respecting the integrity of CH and the value it hold for communities.
The HERACLES EU PROJECT

HERACLES Case Study Sites

- Medieval Town of GUBBIO, Italy
- Old harbour and Venetian fortress, HERAKLION, Crete, Greece
- Knossos Palace HERAKLION, Crete, Greece
The HERACLES EU PROJECT
The mission of TARGET is to develop, trial and assess a comprehensive open distributed pan-European Platform for serious gaming leveraging state-of-the-art decision support tools, for the training and competence assessment of Security Critical Agents (SCA) including counterterrorism units, border guards and first responders (police, firefighters, ambulance services, civil security agencies or critical infrastructure operators). TARGET favours joint development of serious gaming Training Content (TC) and collaborative transnational training. TARGET will trigger the emergence of a marketplace for sharing, licensing and paying for serious TC between SCA, leveraging the existing European wealth of exercises.
POP-ALERT is a two-year project financed by the European Commission’s Seventh Framework Programme. It has carried out behavioural research and a series of empirical studies, taking into account new issues related to targeting both local populations and visitors such as expats or tourists (cultural differences, language barriers, etc.). A portfolio of case studies on social networking and community self-reliance initiatives has been developed and POP-ALERT has identified the best ways to blend contemporary tools with existing practices in order to create flexible and easily deployable toolkits for preparing and alerting the European population in case of a crisis. The project has focused on improving current practices around the use of messaging and cultural sharing technologies that offer the best form of accessibility and use by citizens and authorities.
The DRIVER EU PROJECT

1) Improving civil society resilience so that local communities are better prepared to respond to, and recover from, a disaster
2) Strengthening first responders in terms of the crisis management solutions they have available to them
3) Training and learning solutions designed to enhance the capacities and capabilities of trainers and human resources professionals dealing with those involved in crisis management

The DRIVER consortium consists of 36 organizations from 13 EU Member States and two associated countries
EU Security Call 2016

TOPIC: Integrated tools for response planning and scenario building

<table>
<thead>
<tr>
<th>Topic identifier:</th>
<th>SEC-01-DRS-2016</th>
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<tr>
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<td>14 October 2015</td>
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<td>Types of action:</td>
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<td>DeadlineModel:</td>
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<td>Opening date:</td>
<td>15 March 2016</td>
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<tr>
<td>Deadline:</td>
<td>25 August 2016 17:00:00</td>
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1. **List of countries and applicable rules for funding:** described in part A of the General Annexes of the General Work Programme.

Note also that a number of non-EU/non-Associated Countries that are not automatically eligible for funding have made specific provisions for making funding available for their participants in Horizon 2020 projects (follow the links to China, Japan, Republic of Korea, Mexico, Russia, Taiwan).
TIEMS was founded in 1993 in Washington, USA, and is today registered as an international, independent, non political, not for profit NGO in Belgium.

TIEMS is a Global Forum for Education, Training, Certification and Policy in Emergency and Disaster Management.

TIEMS provides a platform for all stakeholders within the global emergency and disaster management community to meet, network and learn from each other and exchange knowledge and experience.

TIEMS aims to influence policy makers worldwide to improve global cooperation and to establish global standards within emergency and disaster management.
TIEMS ACTIVITIES

- International Conferences, Workshops and Exhibitions, focusing on different Emergency Management and Disaster Topics
- Electronic Newsletter with latest News and Articles of Interest and Monthly Messages from TIEMS President
- Research & Development Project Initiatives and Coordination of RTD Projects
- International Education, Training and Certification Programs (GENERATE)
- Global Young Scientist Network
- Local Chapter Activity to Stimulate Local Initiatives and Build a Global Expert Network where different Cultural Practises are added value
- Task Force Groups
TIEMS EDUCATION, TRAINING AND CERTIFICATION PROGRAM OBJECTIVES

- Put International Focus on the Profession of Emergency Management and Disaster Response
- Contribute to an Internationally Shared Understanding in Education, Training and Certification in Emergency Management and Disaster Response
- Contribute to Education in Emergency Management and Disaster Response in order to Promote the State of the Art in Technology, Systems and Methods available in the Field
- Contribute to Education at all Levels, from Policy Documents to Courses in Primary School Education
- Establish a TIEMS Certification of Qualifications in International Emergency Management and Disaster Response (TIEMS QIEDM)
- Contribute to Capacity Building in Countries where little or no Education and Training in this field is available
- Recruit International Teachers and Trainers in this field to TIEMS Pool of International Teachers and Instructors
A TIEMS RTD PROJECT PROPOSAL

GENERATE

Global Education Network for Emergency Resilience and Training Excellence

Developed and Sponsored by:

Thomas Robertson  K. Harald Drager  Connie White

Thinking Teams  QUASAR  ITSFEM
Resilience to Emergencies is a Global Problem

Education is the Foundation for Resilience

A RTD Proposal to Improve Access to Education

Resources to Build Upon

Extreme Events will Happen every 5 Years instead of every 20

Between 2010 and 2040 the Number of People over 65 in Less Developed Countries is Expected to Triple

80% of the most Populous Cities in the World are at Risk being Severely Affected by an Earthquake

And 60% are Vulnerable to Storm Surge and Tsunamis
WE ARE INTERCONNECTED

- Climate Change
- Global Economy
- Energy Interdependence
- Cyber Connectivity
- Global Travel and Epidemics and Pandemics
WE CAN LEARN FROM EACH OTHER

- Some Nations may have more Experience with the Disasters we may Face in the Future than Others
- Vast Worldwide Experience can be used to Develop an Education and Certification Scheme Useful to All
- Shared Knowledge and Terminology makes International Cooperation Easier
- New Lessons are Learned every Day
THE EDUCATION ACCESS PROBLEM

[Map showing school life expectancy by country, with color coding for different ranges of years.]
GENERATE PROJECT OBJECTIVES

- Develop an Internationally Shared Understanding of Emergency Management Elements, Qualifications and Terminology
- Help Students Find and Connect with Useful Online and Live Education Resources
- Make Increasing Amounts of Emergency Management Knowledge Available Online, Especially to Vulnerable Societies
- Provide a Platform to Share Critical Lessons Learned
WHAT IS GENERATE?

- **An International Community** of emergency management organizations, educators, practitioners, and students
  - GENERATE Centers of Excellence

- **An eLearning and Certification platform** promoting shared understanding of EM elements, standards, and terminology

- **A Directory** of live and online degree programs, courses, workshops, and knowledge bases

- **An online Community of Practice** to share lessons learned
GENERATE PROJECT ORGANIZATION STRUCTURE

Project Board
(INCLUDING THOSE GIVING FINANCIAL SUPPORT TO THE PROJECT)

Advisory Board of Partners
(INCLUDING THOSE PARTICIPATING IN THE PROJECT AS PARTNERS, LIKE UNIVERSITIES)

Advisory Group of Students

Project Management
PROJECT RESPONSIBLE
PROJECT MANAGER
QUALITY MANAGER

WP 5
WP 3
WP 2
WP 0
WP 1
WP 4
WP 7
WP 6

Advisory Board of Supporters
(INCLUDING THOSE SUPPORTING THE PROJECT AND ITS OUTCOME WITHOUT ACTIVELY PARTICIPATING IN THE PROJECT)
TIEMS QIEDM CERTIFICATION
APPLICATION REQUIREMENTS

QIEDM – Qualifications in International Emergency and Disaster Management

- Being Certified in Emergency Management/Disaster Response or Similar by Another Certifying Institution Approved by TIEMS
- Document a Practical or Theoretical Background in Emergency and Disaster Management for a minimum of 4 years

OR

- Provide a Letter of Recommendation to TIEMS QIEDM Program from a Current or Former Employer
Emergency Management Certifications in the USA

- **National Level**
  - FEMA (Federal EM Agency)
    - PDS (Professional Development Series)
    - APS (Advanced Professional Series)
  - Both based off courses and an exam
    - IAEM (International Association of EM)
      - AEM (Associate EM)
      - CEM (Certified EM)
  - Exam, training, experience, contributions, essay, (CEM only) degree

- **State Level**
  - FEPA (Florida Emergency Preparedness Association)
    - FPEM (Florida Professional EM)
  - ADEM (Arkansas Department of EM)
    - ACEM (Arkansas Certified EM)
  - **Many other states**
    - **Some have levels:**
      - Basic
      - Advanced
      - Professional
Prior Certification OR Background Experience → Prep Exam → QIEDM
QIEDM CERTIFICATION OBJECTIVES

- Availability Globally
- Web-based On-Line
- Low Cost
- A Common Understanding of Emergency and Disaster Management
- The Common Language is English, but local language adaption in TIEMS Chapter Countries
- Lessons Learned Focus
- State-of-the-Art and Up-to-Date
EXAMPLE OF ANOTHER CERTIFICATION
IAEM – CEM Certified – Certified Emergency Manager

- Emergency Management Experience (3 years full-time equivalent minimum)
- Three Professional References
- Actual Disaster/Contingency Experience or Substantive Role in Managing a Full Scale Exercise
- Education (any 4-year BA/BS degree) * (2 additional years of “applicable” full-time job experience may be substituted for each year of college education)
- 100 hours of Emergency Management Training and 100 hours of General Management Training (No more than 25 hours in any one subject matter area, and needs to show training in all phases of CEM)
- Contributions to the Profession (minimum of 6 out of 12) Examples include speaking, teaching, publishing, service on a Board, Commission, leadership role, memberships, etc.
- Comprehensive Management Essay CEM® Certification Requirements
- Comprehensive 100-question Multiple-Choice Examination (Applicant must get 75% or better to PASS. Test is multiple choice and administered through a variety of methods)
- Recertification Requirement every 5 years
TIEMS QIEDM CERTIFICATION
COMPETENCE REQUIREMENTS

1. Global Overview of International Emergency and Disaster Management (EDM)
2. International Emergency and Disaster Management Definitions, Tools and Techniques
3. International Emergency and Disaster Management Planning and Operations
4. International Emergency and Disaster Management Research and Development Worldwide
5. International Emergency and Disaster Management Miscellaneous Issues of Importance
## Global Overview of International Emergency and Disaster Management (EDM)

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<th>International EDM Organizations</th>
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<th>International Humanitarian Aid Organizations</th>
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<th>Natural Disaster Types</th>
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# Emergency and Disaster Management Definitions, Tools and Techniques

<table>
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<th>Emergency and Disaster Management Definitions, Tools and Techniques</th>
<th>Definitions of EDM terms and expressions</th>
<th>Emergency and Disaster Phases Characteristics</th>
<th>Risk And Damage Assessments Techniques</th>
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<th>Social Media in EDM</th>
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<th>Emergency Communication</th>
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<td>etc.</td>
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<td>Vulnerability</td>
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PREPARING FOR TIEMS QIEDM CERTIFICATION EXAM

Re-Certification each 3rd Year

Exam in Qualification in International Emergency and Disaster Management to become a TIEMS QIEDM Certified Professional

Test Exam for Professionals becoming TIEMS QIEDM Certified

Certification Schemes Worldwide for Emergency/Disaster Management or Similar to be Approved as Qualifications for TIEMS QIEDM Certification

Courses Offered for Preparing for TIEMS QIEDM Certification?

Free Courses Offered On-Line

Courses Offered by GENERATE Education Institution Partners On-Line

Courses to be Developed by TIEMS and GENERATE Partners to be offered On-Line

CEM by IAEM

Others?
Example of Free/Low Cost Courses in Emergency Management Offered On-Line

Disaster Preparedness

About this course: Have you ever viewed a news report depicting the aftermath of a devastating natural disaster? The damage to human life and property are both staggering and heartbreaking. All parts of the world face the possibility of floods, hurricanes, tornados, fires, landslides, earthquakes, tsunamis, and other natural phenomena. Are you prepared if disaster would strike you? This course will help you prepare! The course is appropriate for any learner who is proactive about developing the core competencies of disaster readiness and survival planning. It is especially useful if you are seeking techniques that can ensure your personal protection, as well as the safety of your family, property, and belongings, during a natural disaster. In addition, it offers essential preparation for a variety of emergency situations and inconveniences, even if you do not live in major tornado, flood, hurricane, tsunami, or earthquake zone.
Example of Free/Low Cost Courses in Emergency Management Offered On-Line

Disaster Preparedness

Taught By: Michael Beach, Assistant Professor
School of Nursing

Created By: University of Pittsburgh

### Level
BEGINNER

### Commitment
10-15 hours of lectures, quizzes, and assignments

### Language
English

### How To Pass
Pass all graded assignments to complete the course.

### User Ratings
Average User Rating 4.5  See all 29 reviews
QIEDM Exam

• Essay questions, e.g.,
  “Describe how the United Nations has worked to bring about a reduction in global
disaster risk”

• Fill-in-the-blank questions, e.g.,
  “In May 1994, UN member states met at the World Conference on Natural Disaster
Reduction in __________, Japan, to assess the progress attained by the IDNDR. At
this meeting they developed the ___________ Strategy and Plan of Action for a Safer
World”

• Multiple choice questions, e.g.,
  “Which of the following UN Agencies typically coordinates the response to major
disasters:
  • UNHCR
  • UNOCHA
  • WFP
  • UNDP”
**Question**: List and briefly explain the five overarching international disaster trends.
Example Essay Question

**Question**: List and briefly explain the five overarching international disaster trends.

**Answer**:

- The number of people affected by disasters is rising
- Overall, disasters are becoming less deadly
- Overall, disasters are becoming more costly
- Poor countries are disproportionately affected by disaster consequences
- The number of disasters is increasing each year
Knowledge Area: Climate Change/Disaster Trends

Given the sophistication of present day data gathering techniques implemented around the world, a clearer picture of disaster activity has been identified by past patterns providing trends that are occurring with disasters. Discuss some of the reasons for disasters occurring more frequently, with deadlier, costlier outcomes. Discuss a few of the trends that have been identified. (300 words per trend)
Question: In May 1994, UN member states met at the World Conference on Natural Disaster Reduction in ____________, Japan, to assess the progress attained by the IDNDR. At this meeting they developed the ___________ Strategy and Plan of Action for a Safer World.”
Example Fill-In-the-Blanks Question

**Answer:** In May 1994, UN member states met at the World Conference on Natural Disaster Reduction in ___Yokohama___, Japan, to assess the progress attained by the IDNDR. At this meeting they developed the ___Yokohama___ Strategy and Plan of Action for a Safer World”
Example Multiple Choice Question

**Question:** Which of the following UN Agencies typically coordinates the response to major disasters:

- UNHCR
- UNOCHA
- WFP
- UNDP
Example Multiple Choice Question

**Question:** Which of the following UN Agencies typically coordinates the response to major disasters:

- UNHCR
- **Answer:** UNOCHA
- WFP
- UNDP
Example Multiple Choice Question

Question: Which of the following is the primary reason for the drastic drop in the number of earthquake deaths in the developing countries in the last century:

• Nonstructural mitigation
• Building codes
• Public education
• None of the above
Example Multiple Choice Question

Question: Which of the following is the primary reason for the drastic drop in the number of earthquake deaths in the developing countries in the last century:

• Nonstructural mitigation
• Answer: Building codes
• Public education
• None of the above
GENERATE PROJECT CONCLUSIONS

- Interconnection makes Resilience to Emergencies to an International Problem
- Interconnections can make us more Resilient if we share Knowledge and the latest Lessons Learned and make this information more accessible
- On-Line International Education and Certification will Promote sharing Best Practices and Collaboration
- GENERATE will realize these Goals by Creating a Networked Coalition
- TIEMS looks forward to Ideas and Participation

- TIEMS QIEDM Certification is a certification for all working within emergency management, for ex. practitioners, academics, medical personnel, authority personnel, etc.
- TIEMS QIEDM exams includes questions in the prep course and exam about a comparison between the way emergency management is done nationally in the country of the candidate, with the global trend and way of doing it. This is what TIEMS chapters will add into the exam and the prep course. This will be a two way learning, and capacity building
Welcome to San Diego by the City Mayor

On behalf of the citizens of San Diego, I would like to welcome you to The International Emergency Management Society 2016 Annual Conference. San Diego has worked diligently at fostering communication, collaboration and sharing best practices among our countless professionals in the fields of healthcare, public health, emergency medical services and emergency management. As we are often reminded, ensuring disaster readiness and building healthier, safer and more resilient communities must be a top national priority.

San Diego is a shining example to the nation in the field of emergency preparedness, drawing on our thriving defense industry, expertise in innovation, and cross-border collaboration.

San Diego is known for its world-class restaurants, beautiful beaches and thriving neighborhoods. While visiting, I hope that you have the opportunity to experience some of the attractions that America’s Finest City has to offer.

Please accept my warmest wishes for an enjoyable event in San Diego.

Best personal regards,

Kevin L. Faulconer
San Diego City Mayor
Thank You for Your Attention!

See you at TIEMS 2016 Annual Conference on Innovation and Urban Planning For Emergency Resilience in Large Cities

September 13 - 15, 2016
San Diego, California USA