جامعة دمشق
كلية العلوم
قسم العلوم البيئية

الفصل الثاني
أنظمة الجودة البيئية باللغة الانكليزية
المدة ساعتان
الدرجة 100

أجب على الأسئلة السبعة التالية:

1. Define clearly the following terms: **(21 degrees)**

EMS, organizational learning, gap analysis, integrated management systems, corrective actions, environmental policy, PDCA cycle

EMS: EMS is a framework or set of guidelines that helps your business reach specific environmental goals. The system provides continuous review, evaluation and improvement checkpoints to ensure an organization achieves its goals. An EMS is tailored to each company, helping you define your objectives and get to work. EMS is basically voluntary and not defined by law (3 درجات)

Organizational learning: It is one of elements of integrated management systems. It is the process of creating, retaining, and transferring knowledge within an organization (3 درجات)

A gap analysis: A gap analysis is a procedure that determines the "gap" between a process, system, or organization's desired and present states. Types of Gap Analysis: Strategic Gap Analysis, Financial/Profit Gap Analysis, Skill Gap Analysis, Compliance Gap Analysis, Product Development Gap Analysis, Market Gap Analysis. A gap analysis helps businesses stay competitive by comparing their current practices with industry standards, and best practices and provides valuable insights into customer needs and expectations (3 درجات)

Integrated management systems: integrates all of an organization's systems and processes into one complete framework, enabling an organization to work as a single unit with unified objectives. There is no certification for an IMS, but there are various guidelines in place for different management systems that organizations must take into account when building an IMS. It can include quality management system, environmental management system, safety management system, energy management system, food safety management system, information security management system (3 درجات).

Corrective actions in an EMS are steps taken to eliminate the cause of a detected nonconformity and prevent its recurrence, typically initiated after audits, inspections, or incident reports reveal deviations from EMS requirements or environmental objectives (3 درجات).

An **environmental policy** is the foundational statement of commitment within an EMS, outlining an organization's dedication to environmental protection, sustainability, and legal compliance. It

serves as the guiding principle for all EMS activities, influencing decisions and actions to achieve environmental objectives and targets (3 درجات).

The Plan-Do-Check-Act (PDCA) cycle, also known as the Deming cycle or Shewhart cycle, is a four-step management method used for continuous process improvement and problem-solving. It's a cyclical and iterative approach that encourages systematic testing and learning before broader implementation of changes (3 درجات).

2. Explain in detail the documentation in the environmental management system and what does it include? (**14 degrees**)

Records/documents must be stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration or loss (درجة), clear, up-to-date (درجة), identifiable (i.e., clearly marked), dated, stored neatly and logically, and kept for a specified period of time (درجة), developed, reviewed, revised, and approved only by authorized personnel (درجة),

Some instances for which ISO 14001 specifies 'documented' procedures are: compliance with legislation and regulations (درجتين), environmental policy (درجتين), roles, responsibilities, and authority for the EMS (درجتين), management review (درجتين), monitoring and measurement of operations that have actual or potentially significant environmental impacts (درجتين).

3. What are 5 tips to prepare for an ISO Audit? (**10 degrees**)
(درجة لكل تعداد ودرجة لشرح كل تعداد)
1.**Create an Audit Schedule:** Create a schedule for your audits, including a timeline for certification, if that is your goal — and stick to it. 2. **Compile Audit Checklists:** Audit Checklist covers each component of the specific ISO standard for which you seek compliance, and assesses whether you are meeting those requirements or need modification to your systems, processes, or products. 3. Determine Your Goals: Being aware of your goal to certify will help you to streamline your energies and save time and money during ISO audits. 4. **Get Organized**: If you are inviting a third-party auditor into your work environment, it helps if that space is well-organized and clean. Having your documents ready for review will shorten the time it takes to conduct the audit, and help your auditor streamline the work to provide the best possible feedback for improvement. 5. **Conduct Internal Audits First:** An internal audit will start that process and demonstrate to your auditors that your organization is serious about ISO compliance.

4. What are components of EMS? Explain each one. (**9 degrees**)
• **Core processes** (درجتين): The core processes include an overview of what they are and their outputs. You'll also identify environmental impacts and aspects.(درجة) • **Key supporting processes** (درجتين): This component covers awareness of legal environmental management requirements, employee competence, communication, infrastructure for EMS, and monitoring and evaluating EMS performance (درجة). • **Management system**

supporting operations (درجتين): You will engage in document control, internal auditing and record maintenance.(درجة)

5. What are six elements of integrated management? (**12 degrees**)

(درجتين لكل تعداد)

1. Systematic management 2.Standardization 3. Organizational Learning. 4 Strategic, tactic, and operational integration 5.Reducing bureaucracy 6.Continuous improvement

6. What are elements of emergency response plans and what do they include? Mention some examples of the potential emergencies in different organizations (**16 degrees**)

<u>elements of emergency response plans</u>: **First alert procedures** (0.5 درجة) – What should be done when an environmental emergency (or potential emergency) is discovered – who to contact, emergency phone numbers, reporting requirements, initial response actions.(0.5 درجة للشرح) • **Define a chain of command** (0.5 درجة) – Describe the organizational structure of the emergency response team - who is in command, what are the reporting relationships and individual responsibilities (0.5 درجة للشرح) • **Describe responses to different kinds of emergencies** (0.5 درجة) – Outline the action plans for Level 1, 2, and 3 fire, spill, gas leak, and other types of emergencies, including setting up a command post, site security, notification of external assistance, internal and external communications, evacuation plans (e.g., for the site and neighboring areas), assembly points, reduction and cleanup methods. • Reporting – Specify who has responsibilities for reporting emergencies internally within the facility and organization, and externally to the community, government, and the news media. • Incident investigation – Describe a procedure for investigating the emergency response team soon after the emergency is over, investigating the root causes of the incident, and recommending actions to correct and prevent the same type of incident happening again.(0.5 درجة للشرح) • **Emergency response drilling**– (0.5 درجة) ISO 14001 requires emergency plans to be tested when practical. A schedule of drills covering the various kinds of foreseeable emergencies and locations should be drawn up and implemented. The effectiveness of each drill should be assessed and procedures amended if necessary, or more training done to bring performance in line with requirements.(0.5 درجة للشرح)

Emergency Response Plans Include:

(درجة لكل تعداد)

1. A list of key personnel 2. Provisions for safe evacuation, assembly and accounting of personnel details of emergency services (e.g., fire department, ambulance services, spill clean-up services, etc.) 3. Internal and external communication plans 4. Actions taken in the event of different types of emergencies 5. Information on hazardous materials (COSHH & MSDS) that include each materials potential impact on the environment 6. Measures to be taken in the event of accidental release 7. Training plans 8. Procedures to test the plan's effectiveness

Some examples of the potential emergencies in different organizations: fires, explosions, medical emergencies, hazardous material spills, natural disasters, and workplace violence

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7. Translate the following texts clearly and correctly: **(18 degrees)**

- We are committed to protecting the environment, the health and safety of our employees, and the community in which we conduct our business. It is our policy to seek continual improvement throughout our business operations to lessen our impact on the local and global environment by conserving energy, water and other natural resources; reducing waste generation; recycling and; reducing our use of toxic materials. We are committed to environmental excellence and pollution prevention, meeting or exceeding all environmental regulatory requirements, and to purchasing products which have greater recycled content with lower toxicity and packaging, that reduce the use of natural resources.

نحن ملتزمون بحماية البيئة، وصحة وسلامة موظفينا، والمجتمع الذي نمارس فيه أعمالنا. سياستنا هي السعي الدائم للتحسين في جميع عملياتنا التجارية لتقليل تأثيرنا على البيئة المحلية والعالمية من خلال الحفاظ على الطاقة والمياه والموارد الطبيعية الأخرى، والحد من توليد النفايات، وإعادة التدوير، وتقليل استخدامنا للمواد السامة. نحن ملتزمون بالتميز البيئي ومنع التلوث، ونلبي جميع المتطلبات التنظيمية البيئية أو نتجاوزها، ونشتري منتجات تحتوي على نسبة أعلى من المواد المعاد تدويرها، مع سمية وتغليف أقل، مما يقلل من استخدام الموارد الطبيعية. (6 درجات)

- An internal audit can be carried out by the organization as a self-audit, and can be conducted onsite or remotely. External audits are conducted by third-party auditors to assess an organization's ISO compliance.

يمكن للمؤسسة إجراء تدقيق داخلي ذاتي، ويمكن إجراؤه في الموقع أو عن بعد. أما عمليات التدقيق الخارجية، فيجريها مدققون خارجيون لتقييم امتثال المؤسسة لمعايير ISO. (6 درجات).

- سيكون لكل شركة مخاوفها الخاصة التي يجب معالجتها، حتى لو كانت بسيطة، مثل إزالة النفايات أو استخدام المياه. Every company will have its own concerns that need to be addressed, even if they are simple, such as waste removal or water use (6 درجات).

انتهت الأسئلة