

MMS - IV
EVM - 04

Environment Management

Duration: 3 Hours
Maximum Marks: 60
Total Questions: 7
Print Pages: 4

Note: Answer any FOUR questions from Q1 to Q6 and Q7 is compulsory.

30-03-2013

1. a) List 5 tools and techniques that can be used for environmental management. (5M)
- b) Identify and describe the main issues to environment management that affect sustainable development. (5M)
2. Write short notes: (any two) (10M)
 - (a) Air (Prevention and Control of Pollution) Act 1981
 - (b) Water (Prevention and Control of Pollution) Act 1974
 - (c) Environment Protection Act 1986
 - (d) Wildlife Protection Act
3. a) What is a concept of ecosystem? How is it being applied in business and industry? (5M)
- b) Write a detailed note on Carbon Credit and Kyoto Protocol. (5M)
4. a) What is Biodiversity? Discuss its role in international trade. (5M)
- b) What is Environment Quality Management and highlight the role and responsibility of industries. (5M)
5. a) What is Environmental Auditing? Discuss the process of permissions for establishing industry. (5M)
- b) Discuss the role of dams in preventing the surroundings. (5M)
6. a) What is Total Quality Environmental Management. (5M)
- b) Write a detailed note on ISO 14000 EMS certification. (5M)

Compulsory Question

7. Read the following case and answer the questions below it. (4*5=20M)

Nestlé: Doing Better by the Environment

Introduction: The environment is a key subject that affects us all. Protection of the environment and the move towards sustainable development remains a responsibility that must be shared between the public, governments and the private sector. Following years of work on environmental issues dating back to the 30's, in 1996 the Nestlé Environmental Management System (NEMS) was introduced which consolidates all environmental measures taken by the Nestlé Group. NEMS is now used to ensure continuous improvement in Nestlé's environmental performance covering all its business activities.

This case study examines the background to sustainable development, the environment and its protection. It also looks at how Nestlé S.A., the world's leading food company, developed a policy and current business practices that reduce the company's effect on the environment.

Sustainable Development

The latter part of the twentieth century saw an increasing concern for the environment. The concept of sustainable development (as defined by the World Commission on Environment and Development in 1987) is: "*development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.*"

There are many views about the nature of sustainability. In its simplest form it is about ensuring a better quality of life for everyone, now and for future generations. To achieve this, sustainable development is concerned with achieving economic growth alongside the protection of the environment and also at the same time making sure that these economic and environmental benefits are available to everyone. These three aspects - economic, environmental and social form the basis of the sustainable development concept.

Rio And After

By the early 1990s there was considerable pressure for governments to create agreements concerning the environment and its protection. In 1992 the United Nations Conference on Environmental and Development (UNCED) was held in Rio de Janeiro. The main outcome of the conference was Agenda 21, which marked an important landmark in the sustainable development fight, and inter country co-operation.

Agenda 21 was the main document signed at the conference. It was over 800 pages long, and represented a new global commitment to sustainable development. It was not a legally binding document, but was devised as a working plan which countries would follow. The conference marked the start of global co-operation, which was needed to deal with the many issues, including concern for the environment.

The Sustainable Business

The concept and support for, sustainable development is growing. Many businesses have integrated a strategy of sustainability (taking into account its 3 main aspects - economic, environment, social). It makes good business sense for companies to be environmentally friendly as improved efficiency in manufacturing in turn leads to a more efficient use of natural resources. Operating efficiently translates to competitive advantage for business and supports the economic pillar of sustainability as well. Therefore, all aspects of sustainability are seen as complementary, and mutually interdependent.

Agenda 21 states that responsible businesses should play a major role in improving the efficiency of resource use. This can result in minimising waste and protecting human health and environmental quality. For a business to be environmentally sustainable, the company must start by becoming environmentally aware from the inside. The whole ethics and culture of the organisation must reflect those of sustainable development. This includes what the company does, how it treats its workers, how it deals with other organisations, how the managers act and what messages these actions send out. Sustainable Development is an integrated approach including economic, environmental and social aspects. Therefore all three are to be put at complementary levels of priority each considering effects of the other components.

Agenda 21 lays out a seven point plan for businesses to start changing values and perceptions. It states that they should:

- develop policies that support operations and products that have lower environmental impacts
- ensure responsible and ethical management of products and processes from the point of view of health, safety and the environment
- make environmentally sound technologies available to affiliates in developing countries without prohibitive charges
- encourage overseas affiliates to modify procedures in order to reflect local ecological conditions and share information with Governments
- create partnerships to help people in smaller companies learn business skills
- establish national councils for sustainable development, both in the formal business community and in the informal sector, which includes small scale businesses
- increase research and development of environmentally sound technologies and environmental management systems.

Nestle As A Sustainable Business

As the world's largest food company, Nestlé S.A. is dedicated to providing consumers with the best food throughout their lives. The primary role of the Company is the transformation of natural resources into finished products that meet consumers's expectations for safety, quality, convenience and value. Naturally, Nestlé is committed to sustainable development and environmentally sound business practices. The key drivers for Nestlé's worldwide environmental approach are:

- total compliance with all laws and regulations in all countries where it operates
- that Nestlé seeks to provide a leadership role - to establish the benchmark for good business practice

By committing resources, both human and financial, to secure environmental targets, including:

- employing new technologies and processes
- measuring the costs and benefits to the business of its activities
- ensuring employees are aware of best practice.

To be effective a programme of environmental improvement must be supported by practical management systems. Nestlé's worldwide approach, therefore, has been to:

- set targets for environmental improvements
- monitor progress
- audit results
- review targets.

Progress To Date - An Example From Nestle UK

In the UK a series of surveys at all Nestlé UK locations formed the basis for a programme of continuous improvement. Action plans were developed for each Nestlé UK site, including capital expenditure plans for environmental protection.

Nestlé's Environmental Management System

NEMS is an organisational tool at the heart of Nestlé's programme for the environment, and sets the framework for all measures applied.

The NEMS objectives include:

- To provide a systematic approach that ensures compliance with Nestlé's environmental policy, relevant laws and Nestlé's operational standards.
- To ensure the continuous improvement of Nestlé's environmental performance, e.g. through the conservation of natural resources and the minimisation of waste.
- To achieve compatibility with international voluntary standards on environmental management systems.
- To build mutual trust with consumers, governmental authorities and business partners.

NEMS is being implemented throughout Nestlé S.A.'s entire operation

Ways In Which Nestle Is Doing Better By The Environment

Nestlé UK's commitment to sustainable business practice is illustrated by two business examples of areas where improvements are being made:

Packaging

Packaging is essential to maintain the high quality of the products. Nestlé continuously reviews packaging and, where possible, reduces the amount used. This results in saving on materials such as glass and plastics. Nestlé is also playing its part in meeting national targets for the recovery and recycling of packaging waste. Nestlé has established a set of criteria for evaluating packaging. These are:

- Is the packaging appropriate for the product?
- Is the size of pack justified?
- Are there any unnecessary components within the pack?
- Could any of the components be reduced in weight or thickness?
- Could the manufacture and construction of the outer packaging be made simpler?
- Is the material re-usable or recyclable? Between 1991 and 2000 Nestlé UK has been able to reduce its consumption of materials by up to 10

Major achievements in this area included: