

1. Introduction
In context of Nepal
 - 1.1. Basic principles and ancient practices of food preservation
 - 1.2. Technological development of food processing and practices.
 - 1.3. Technology for preservation of food stuffs.
 - 1.4. Aseptic techniques in food processing.
2. Agriculture Perspective Plan.
 - 2.1. Self-sufficiency, the major thrust in staple food production.
 - 2.2. Food production strategy.
 - 2.3. Importance of high value crops productions.
 - 2.4. Commercialization in agriculture and value addition.
 - 2.5. Agri-business.
3. Food Industries Development.
 - 3.1. Current industrial development policies.
 - 3.2. Food industries development in Nepal.
 - 3.3. Role of government sector in the food industry.
 - 3.4. Major food processing industries and its development.
 - 3.5. Quality management in food industries.
4. Quality control.
 - 4.1. Need & importance of quality control.
 - 4.2. Laboratory planning and management.
 - 4.3. Role of private sector in the laboratory services.
 - 4.4. Laboratory accreditation.
 - 4.5. Food quality assurance.
 - 4.6. ISO 9000 and ISO 14000.
 - 4.7. GMP, HACCP.
5. Food Technology.
 - 5.1. Research on development of food preservation and appropriate technology.
 - 5.2. Minimal processing for nutrients conservation.
 - 5.3. Latest development in food processing technology.
 - 5.4. Packaging technology.
6. Food and Nutrition.
 - 6.1. Food consumption and nutritional status survey.
 - 6.2. Current nutritional status of Nepal.
 - 6.3. Food nutrition policy, plans programmes and project formulation.
 - 6.4. Food nutritional problems.
 - 6.5. Balance diet, Food composition table.
 - 6.6. International convention on nutrition (ICN).
 - 6.7. World Food Summit.

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Model Questions

1. Food safety and quality are significant issue for public health and for export market to developing country like Nepal. Recently Nepalese food processors are also trying to adopt universal quality control tools like GMP and HACCP. Critically review the status on implementation of modern quality control system in Nepalese food industries focusing on prevailing constraints and opportunities.
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2. The extensive application of food technologies is vital in order to meet the demands of an increasing population and market. In this context, briefly review the recent trends in food processing technology to develop processed foods in response to changing market and consumer preferences.
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3. Malnutrition is associated with more than half of childhood death and eradicating malnutrition remains a major challenge to developing country like Nepal. Discuss on the different approaches adopted by Government of Nepal to overcome child malnutrition and critically review their success based on the nutritional status survey reports.
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4. “Tested once and accepted every where” is the main benefit of Laboratory Accreditation. Briefly discuss about the requirements of ISO 17925 and critically examine the constraints and opportunity of laboratory Accreditation in context of Nepal.
5. Underexploited tubers and marginalized grains could be a potential alternative for staple foods and can play an instrumental role in solving the worsening food security situation of the country, particularly in the hills and remote areas. Critically review the current strategy and institutional arrangement for such innovative research. Analyze the gaps in policy and recommend appropriate ways in utilizing these marginalized crops for ensuring local food security. What do you think needs to be done from a food technologist’s perspective?
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6. Food industries play an important role in the economic development of the Agri-Food sector. Implementation of good hygiene and sanitation are growing concern of international food trade. However, there is still lacking in hygiene and sanitation requirement and which creates problem in food safety and quality control. Discuss the role of the government and food industry in achieving this goal and recommend appropriate strategy for implementation of good practices focusing on the SPS provisions and international practices as well.
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