

# ASSIGNMENT BOOKLET

## Diploma in Production of Value Added Products from Cereals, Pulses and Oilseeds (DPVCPO)

### **\*Assignment for the Academic Year 2015**

**Note:** First of all read the assignment/questions and instructions carefully and identify the components of an assignment. You should read the relevant sections and sub sections of a unit while preparing your responses and write answers in your own words. Your responses should not be a verbatim reproduction of the textual materials/blocks provided for self-learning purposes. We also suggest that, you may read additional materials available in your study centre or in any other library before preparing your responses. But extra reading is not a must to answer these assignments.

**\*Please ignore the Assignment Booklet for 2008 enclosed with the programme guide.**



School of Agriculture  
Indira Gandhi National Open University  
New Delhi -110068  
2015

Dear student,

Welcome to the “Diploma in Production of Value Added Products from Cereals, Pulses and Oilseeds” (DPVCPO) programme. As you are aware that the weightage to the Term-End Examination (TEE) will be 80% and Continuous Assessment (Assignment) will be 20%. There is one assignment for each course with theory component, thus, a total of eight assignments for this programme. Each assignment will be of 50 marks which will be converted to have weightage of 20% of theory component. Each candidate will have to complete assignments as per the schedule in order to appear in TEE. Therefore, you are advised to take assignments seriously and submit them in time. Instructions to format your assignments are as follows:

### **Instructions to format your assignments**

Before attempting the assignments, please read the following instructions carefully:

1. On top of the first page of your answer sheet, please write the details exactly in the following format.

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	Enrollment no:.....
	Name:.....
	Address:.....
	.....
	.....
Programme Code:.....	Programme Title:.....
Course Code:.....	Course Title:.....
Study Centre:.....	Date:.....
(Name and Code)	

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**Please follow the above format strictly to facilitate evaluation and to avoid delay.**

2. Use foolscap size paper for writing your answer.
3. Leave 4 cm margin on the top, bottom and left of your answer sheet.
4. Students are advised to give the relevant points from the course material and elaborate their answers and explain in their own language instead of reproducing the language of the course materials.
4. Clearly indicate question no. and part of the question being solved while writing answers.
5. **The Assignments should be sent or submitted to the Programme In-charge (PIC) of the Study Centre allotted to you.**
6. **We strongly suggest that you should retain a copy of your assignment responses.**

Happy Learning! Wish you all good luck for successful completion of the programme.

**Note:** Minimum 50% marks in Continuous Assessment i.e., each assignment in each course is required for completion of a course for DPVCPO programme.

***Programme Coordinator***  
***School of Agriculture***  
*Indira Gandhi National Open University,*  
*Maidan Garhi, New Delhi-110068, India.*

**Course Code: BPVI-031**  
**Course Title: Food Fundamentals**

**Submission date: 31 October 2014**  
**Maximum Marks: 50**

**Note: All questions are compulsory and carry equal marks. Write your answer in about 400 words. 5 x 10=50**

1. Discuss the important factors controlling the cleaning and grading operation of grains? What important role temperature and moisture play in safe storage of food grains?
2. Differentiate between traditional and improved storage structures. List two each (traditional and improved) important storages structures used in the country.
3. What are the major nutrients found in cereals, pulses and oil seeds? Discuss major functions of carbohydrate, protein, fat, phosphorus and calcium.
4. Write a short note on packaging material. Discuss in detail the primary and ancillary packaging materials.
5. Describe the Indian food acts, laws and orders dealing with food adulteration?

**Course Code: BPVI-032**  
**Course Title: Food Microbiology**

**Submission date: 31 October 2014**  
**Maximum Marks: 50**

**Note: All questions are compulsory and carry equal marks. Write your answer in about 400 words. 5 x 10=50**

1. What do you understand by water activity? How water is made unavailable to microorganisms?
2. What is food preservation? Discuss in detail the techniques of food preservation.
3. What are the different food borne diseases explain with the help of neat flow diagram?
4. Define D-value and Z-value. How these terms are inter-related?
5. What are the different chemical and physical changes associated with food spoilage, discuss with suitable examples?

**Course Code: BPVI-033**  
**Course Title: Milling of Wheat, Maize and Course Grains**

**Submission date: 29 November 2014**  
**Maximum Marks: 50**

**Note: All questions are compulsory and carry equal marks. Write your answer in about 400 words. 5 x 10=50**

1. What do you understand by separator, discuss in detail?
2. What do you mean by size reduction and discuss its objectives? Write a note about various arrangements of rolls in a roller mill.
3. Distinguish between first and second cleaning. Explain various operations performed during first cleaning of wheat with the help of flow diagram.
4. Describe the role of sieving in flour milling process. Write a note on the different materials used for sieves?
5. Describe briefly traditional maize milling method.

**Course Code: BPVI-034**  
**Course Title: Baking and Flour Confectionery**

**Submission date: 29 November 2014**  
**Maximum Marks: 50**

**Note: All questions are compulsory and carry equal marks. Write your answer in about 400 words. 5 x 10=50**

1. Discuss the different varieties of breads popularized in our country? Explain whole wheat bread in detail.
2. Explain Rheology of wheat flour dough.
3. Discuss physico-chemical characteristics of Durum wheat. Explain the quality evaluation of Pasta products.
4. Describe the different faults that can occur in biscuits and explain the reasons and the remedies for any of the two faults.
5. Discuss in detail the important steps involved in the preparation of cake.

**Course Code: BPVI-035**  
**Course Title: Paddy Processing**

**Submission date: 31 December 2014**  
**Maximum Marks: 50**

**Note: All questions are compulsory and carry equal marks. Write your answer in about 400 words. 5 x 10=50**

1. Define cleaning, shorting and grading. Discuss the working principle of colour sorter.
2. What do you understand by parboiling? Discuss the advantages and disadvantages of CFTRI method of parboiling?
3. Discuss in detail the commonly used drying methods for paddy.
4. What is dehusking of paddy? Explain the process of dehusking of paddy in centrifugal sheller.
5. What are potential use of rice bran oil explain with the help of neat flow diagram?

**Course Code: BPVI-036**  
**Course Title: Processing of Pulses and Oilseeds**

**Submission date: 31 December 2014**  
**Maximum Marks: 50**

**Note: All questions are compulsory and carry equal marks. Write your answer in about 400 words. 5 x 10=50**

1. Describe in your own words how the pulses play an important role in human diet?
2. List the different methods of pulse milling. Write the advantages and disadvantages of home scale method of milling?
3. What is TOFU? Briefly describe various soy based extruded products.
4. How pretreatments help in oil extraction? Explain these operations in brief.
5. What is by-product? Discuss different by-products of soy processing.

**Course Code: BPVI-037**  
**Course Title: Food Quality Testing and Evaluation**

**Submission date: 31 January 2015**  
**Maximum Marks: 50**

**Note: All questions are compulsory and carry equal marks. Write your answer in about 400 words. 5 x 10=50**

1. What is food quality? Discuss the important quality characteristics of food.
2. Describe different salient features of the PFA Act. What are requirements for GMP for food industry?
3. What do you mean by texture of a material? Explain the typical force deformation curve.
4. Define chromatography? List various components of a polarimeter and explain how it is used to determine the concentration of an optically active solute.
5. What is Rheology? Differentiate between Newtonian and non-Newtonian fluids.

**Course Code: BPVI-038**  
**Course Title: Entrepreneurship and Marketing**

**Submission date: 31 January 2015**  
**Maximum Marks: 50**

**Note: All questions are compulsory and carry equal marks. Write your answer in about 400 words. 5 x 10=50**

1. Write a short note on concept of entrepreneurial skills.
2. What are salient features for evaluation of a business idea describe?
3. Describe the points to be kept in mind for evaluating the strengths and weakness of the competitors.
4. Explain the common errors in formulation of business plan.
5. Discuss in detail the important considerations in procurement of material.