Training Course on Food Processing and Preservation Techniques

20-24 September, 2020

Course Completion Report



National Agriculture Training Academy (NATA)

Ministry of Agriculture

www.nata.gov.bd

Training Course on Food Processing and PreservationTechniques

20-24 September, 2020

Course Management

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Course at a glance

1. Introduction

Food processing and preservation is a set of physical, chemical and biological processes that are performed to prolong the shelf life of foods and at the same time retain the features that determine their quality, like colour, texture, flavor and especially nutritional value. Food preservation is achieved by destroying enzymes and microorganisms using heat (blanching, pasteurization), or preventing their action by: removal of water, or increasing acidity or using low temperatures.

2. Course objectives:

- 1. To improve participant's skills in designing and implementing food processing operations in their own jurisdiction.
- 2. To develop advanced knowledge and idea of participants to investigate various parameters involved in food processing and preservation with respect to their influence on final product quality and safety
- 3. To develop knowledge of personnel working in agricultureabout processing steps involved in a range of contemporary and novel manufacturing operations

Target population: Officers of different organizations under Ministry of Agriculture.

Duration of each session: 60 minutes.

3. Course Content

SL.No.	Topics	
1	National Food Policy, Rules & Regulation	
2	Food Processing & Preservation: Implications for assuring food security	
3	Concept on Safe and Nutritious Foods	
4	Principles and methods of Food Preservation	
5	Packaging and Transportation of Fresh fruits and Vegetables	
6	Food Processing and Preservation by Heat Treatments	
7	Principles and Methods of Osmotic Dehydration	
8	Overview on Minimal Processing of Fruits and Vegetables	
9	Good Agriculture Practice (GAP) and Standard Operating Procedure (SOP) for	
	preservation & Processing of Agricultural Products	
10	Food Preservation by increasing solids	
11	Causes of Food Spoilage and Remedies	
12	Preparation of Jam/Jelly/Marmalade	
13	Food Processing by Frying	
14	Preparation of fried products (Practical)	
15	Overview on Washing and Cooling of fresh produces	
16	Overview on Minimal Processing of Fruits and Vegetables (Practical)	
17	Fermentation as the methods of food processing and preservation	
18	Food Adulteration and Safety	
19	Use of food additives and preservatives	
20	Food Processing by Drying	

21	Food Poisoning and its remedies
22	Pickling (Practical)
23	Sustainable Development Goal (SDG)
24	National Integrity Strategy (NIS)

Participants of course..... (annexure-01)

"Food Processing and Preservation Techniques"

SL.	Name	Designation, Posting place & Organization	Mobile	email
1.	ড. মোহাম্মদ আবদুহ অধ্যক্ষ	প্রধান কার্যালয়, বাঁরটান, ঢাকা।	০১৫৫২-৩৯১২২৯	mabduhu87@gmail.
2.	সাদ আহমদ প্রশিক্ষক	প্রধান কার্যালয়, বারটান, ঢাকা।	০১৭৫৯৬৭৬৮৫৯	razzak.official@ gmail.com
3.	মো: মারুফুর রহমান বৈজ্ঞানিক কর্মকর্তা	আঞ্চলিক কার্যালয়, বারটান, রংপুর	০১৭৮৩-২৮০৮৭৬	marufur233@gmail.
4.	প্রিন্স বিশ্বাস বৈজ্ঞানিক কর্মকর্তা	প্রধান কার্যালয়, বারটান, ঢাকা।	০১৭২৮-৩৩৫৯৩৩	princebiswas211@ gmail.com
5.	ড. মো. জিল্পুর রহমান উর্ধ্বতন বৈজ্ঞানিক কর্মকর্তা	ফল বিভাগ, উদ্যানতত্ত্ব গবেষণা কেন্দ্ৰ. বিএআরআই, গাজীপুর	০১৭১৫ ০৮২৫৫৫	jillur@bari.gov.bd
6.	প্রিয়াংকা রায় বৈজ্ঞানিক কর্মকর্তা	তৈলবীজ গবেষণা কেন্দ্র, বিএআরআই, গাজীপুর	০১৭২৫ ০১০৬৫৯	roypryanka@yahoo.c om
7.	মো. আব্দুর রব গাজী বৈজ্ঞানিক কর্মকর্তা	সবজি বিভাগ, উদ্যানতত্ত্ব গবেষণা কেন্দ্র. বিএআরআই, গাজীপুর	98888¢ 88P4°	gazibina@gmail.com
8.	তুহিনা হাসান বৈজ্ঞানিক কর্মকর্তা	কন্দাল ফসল গবেষণা কেন্দ্র, বিএআরআই, গাজীপুর	০১৭৩৯ ৯৫৪১০৪	tuhinahasan@gmail.c om
9.	সুমাইয়া হক অমি বৈজ্ঞানিক কর্মকর্তা	উদ্ভিদ প্রজনন বিভাগ, বিএআরআই, গাজীপুর	0222 666 666 666 666 666 666 666	saumi77@gmail.com
10.	মোহাম্মদ ফরহাদ আমীন বৈজ্ঞানিক কর্মকর্তা	আঞ্চলিক কেন্দ্র, বাগভূগই, জয়দেবপুর, গাজীপুর	০১৯১২-২৪৮৯৩৫	forhadbari@yahoo. com
11.	অর্পিতা সেন বৈজ্ঞানিক কর্মকর্তা	বিনা উপকেন্দ্ৰ, কুমিল্লা	০১৫৩৩-৯৩৮৪১৮	
12.	মোঃ আব্দুর রউফ বৈজ্ঞানিক কর্মকর্তা	উদ্যানতত্ত্ব বিভাগ, বিনা, ময়মনসিংহ।	০১৭১২-৩৮৪৩৬৬	rouf2497@gmail.com
13.	মোঃ আজগর আলী জেলা প্রশিক্ষণ কর্মকর্তা	ডিএই, খামারবাড়ী, মাদারীপুর	০১৭১২-০৫০৯৬৯	
14.	মোঃ সাখোয়াত হোসেন অতিরিক্ত উপপরিচালক (উদ্যান)	ডিএই, খামারবাড়ী, শেরপুর	০১৭১৮-৫২৮৪০৫	addhortsherpur@dae.g ov.bd
15.	সুমাইয়া আফরিন ঝুমা কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, মির্জাপুর, টাঙ্গাইল	০১৭১৭-২৫৪২০৩	aeo1mirzapur@dae.go v.bd
16.	শান্তা ইসলাম কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, সিংগাইর, মানিকগঞ্জ	o ১ ৬৮০-০৮ ৩ ২৪৭	aeo2singair@dae.gov.b
17.	সজীব সরকার কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, কানাইঘাট, সিলেট	o\$9o\$-\\\	aeo1kanaighat@dae. gov.bd
18.	বিজয় কুমার হালদার কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, নাঙ্গালকোট, কুমিল্লা	০১৭২৩-২৩০২০৭	aeo1nangalkot@dae.go v.bd
19.	শেখ মোঃ আব্দুল্লাহ ওয়াহেদ উপজেলা কৃষি অফিসার	উপজেলা কৃষি অফিস, হাটহাজারী, চট্টগ্রাম	০১৭৩১-৩০১৮৫৩	uaohathazari@dae. gov.bd
20.	মুহাম্মদ রিয়াজ উদ্দিন উপজেলা কৃষি অফিসার	উপজেলা কৃষি অফিস, ভোলা সদর, ভোলা	0398৯-২9২030	uaobholasadar@dae. gov.bd
21.	মোঃ শফিক আল সারাহ কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, ডুমুরিয়া, খুলনা	০১৭৩৭-০১৩১৮১	aeodumuria@dae.gov. bd

SL.	Name	Designation, Posting place & Organization	Mobile	email
22.	মোঃ আব্দুলালাহ আল মাসুদ তুষার কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, মিঠাপুকুর, রংপুর	০১৭৩৭-৭০৫২৫৯	aeo2mithapukur@dae. gov.bd
23.	সিবলী খন্দকার কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, গাবতলী, বগুড়া	০১৭১৭-৩৩০৭৬৮	aeo2gabtali@dae.gov.b
24.	লায়লা আরজুমান বেগম কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, পীরগঞ্জ, ঠাকুরগাঁও	০১৭০১-৯৭৫৫২২	aeo1pirganjthakurgaon @dae.gov.bd
25.	সাইফুল্লাহ আহম্মদ কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, তানোর, রাজশাহী	০১৫৫৬-৫৩৩০৬৯	aeo1tanore@dae.gov. bd
26.	মোঃ সানোয়ার হোসেন সহকারী পরিচালক (প্রশিক্ষণ)	কৃষি বিপণন অধিদপ্তর, আঞ্চলিক প্রশিক্ষণ কেন্দ্র, কুমিল্লা	০১৫১৫-২১৪৩৪৫	
27.	মোঃ আব্দুল্লাহ আল মামুন সহকারী পরিচালক (প্রশিক্ষণ)	কৃষি বিপণন অধিদপ্তর, আঞ্চলিক প্রশিক্ষণ কেন্দ্র, রংপুর	০১৭৫৭-৮৬৬০৩৬	
28.	মোঃ আব্দুর রউফ কৃষি সম্প্রসারণ অফিসার	উপজেলা কৃষি অফিস, গাংনী, মেহেরপুর	০১৩০৯-০০৫৫৪৬	aeo2gangni@dae.gov. bd
29.	মোঃ রফিকুল ইসলাম উপপরিচালক	জাতীয় কৃষি প্রশিক্ষণ একাডেমি, গাজীপুর	০১৭১৮-৯৭০০৪১	badal.rafiqul@gmail. com

Training Course: Food Processing and Preservation

List of Resource Speaker

SL No.	Name	Designation	Organization	e-mail and mobile No.
1	Dr. M. Burhan Uddin	Professor	Dept. of Food tech. & Rural Ind, BAU	01711-110509 burhan.ftri@bau.edu.bd/ burhan992003@yahoo.com
2	Dr. Mohammad Gulzarul Aziz	Professor	Dept. of Food tech. & Rural Ind, BAU	01631-748866 aziz_ftri@bau.edu.bd
3	Dr. Md. Abdullah Iqbal	Professor	Dept. of Food tech. & Rural Ind, BAU	iqbal21155@bau.edu.bd
4	Dr. Md. Monirul Islam	Director (Nutrition)	BARC, Dhaka	01777-686866 dmmislam@yahoo.com
5	Dr. MD. Miaruddin	CSO	Post-harvest Technology Division	01713-273806/ 01199-825632
	Dr. Md. Akhtaruzzaman	Director (Admin)	NATA	01711-884191 akhtar62bd@gmail.com
6	MD. Hafizul Haque Khan	SSO	Post-harvest Technology Division	01556-631691 hafiz_hkhan@yahoo.com
7	Dr. MD. Mayeen Uddin	DD	NATA	01711-969688
8	Dr. Md. Ayub Hossain	CSO	Farm Machinery Division, BARI	01716-979034 mahossain.fmpe@gamil.com
9	Amdadul Hoque	Associate Professor	Dept. Agroprocessing, BSMAU, Gazipur	01934-499867
10	Dr. Golam Ferdous Ahmed Chowdhury	SSO	Post-harvest Division, BARI	01712-271163
12	Dr. Mohammad Mainuddin Molla	SSO	PHTD, BARI	mainuddinmolla@yahoo .com 01712-231121
13	Maruf Ahmed	Head of Q/C	PRAN RFL	pblqc@pip.prangroup. com 01912-257201
14	Dr. Shahjahan Ali	Professor	German University, Gazipur	shah_phd@yahoo.com 01716-174288
15	Dr. Taslima Ayesha Akter Nasrin	SSO	Horticulture Division, BARI	01751-904470
16	Dr. Md. Jamal Uddin	Deputy Director	NATA	01712-272859
17	Md. Eskandar Hossain	Senior Assist. Director	NATA	01938-615225 eskandarhossain@ yahoo.com
18	Nilufa Akter	Senior Assist. Director	NATA	01719-174775 nilufaa@yahoo.com

(Annexure- III)

Training schedule on Food Processing and Preservation Techniques

Duration: 20 -24 September 2020

Ist Day: 20/09/2020

Time	Topics	Methods	Speaker
08:30-09.00	Registration	-	Lucky
09.00-09.30	Pre evaluation		CC/ ACC
09:30-10:15	Inaugural session	-	DG/Directors/Faculties
10:15-11:15	National Food Policy, Rules &	L&D	Prof. Dr. M. Burhan Uddin,
	Regulation		Dept. of Food tech. & Rural Ind, BAU
11:15-11:45	Tea Break		
11:45-12:45	Food Processing & Preservation:	L & D	Do
	Implications for assuring food		
	security		
12:45-02:15	Prayer and lunch break		
02:15-03:15	Concept on Safe and Nutritious Foods	L & D	Prof. Dr. Mohammad Gulzarul Aziz, Dept. of
			Food tech. & Rural Ind, BAU
03:15-04:15	Do	L&D	Do
04:15-04:30	Tea Break		
04:30-05:30	Principles and methods of Food	L&D	Do
	Preservation		

2nd Day: 21/09/2020

Time	Topics	Method	Resource person
09:15 - 10:15	Food Processing by Drying	L & D	Dr. Md. Ayub Hossain
			CSO, Farm Machinery Division, BARI
10:15-11:15	Food Processing by drying	L&D	Do
11:15-11:45	Tea Break		
11: 45-12:45	Traditional Food Processing and	L & D	Dr. Abdullah Iqbal,
	Preservation Techniques		Professor
			Dept. of Food tech. & Rural Ind, BAU
12:45-02:15	Prayer and lunch break		
02:15-03:15	Food Processing and Preservation by	L & D	Dr. Abdullah Iqbal,
	Heat Treatment		Professor
			Dept. of Food tech. & Rural Ind, BAU
03:15-03:30	Tea Break		
03:30-04:30	Overview on Washing and Cooling of	L & D	Dr. Golam Ferdous Ahmed Chowdhury,
	fresh produces		SSO, Post-harvest Division, BARI
04:30-05:30	Principles and Methods of osmotic	L&D	Dr. Mohammad Mainuddin Molla
	dehydration		SSO, PHTD, BARI

3rd Day: 22/09/2020

Time	Topics	Method	Resource person
09:15 - 10:15	Food Adulteration and Safety	L & D	Dr. Md. Monirul Islam
			Director (Nutrition), BARC, Dhaka
10:15 –11:15	Use of food additives and preservatives	L & D	Do
11:15-11:45	Tea Break		
11:45-12:45	Food Preservation by increasing solids	L & D	Dr. Golam Ferdous Ahmed Chowdhury,
			SSO, Post-harvest Division, BARI
12:45 - 02:15	Prayer and lunch break		
02:15-03:15	Food Processing by Frying	L & D	Do
03:15-03:45	Tea Break		
03:45-04:45	Overview on Minimal Processing of	L & D	Dr. Taslima Ayesha Akter Nasrin
	Fruits and Vegetables		SSO, Horticulture Division, BARI

4th Day: 23/09/2020

Time	Topics	Method	Resource person
09:15 - 10:15	Preparation of Jam/Jelly/Marmalade	Practical	Md. Hafizul Haque Khan, CSO, Post-
			harvest Technology Division, BARI
10:15 –11.15	Preparation of fried products	Practical	Dr. Mohammad Mainuddin Molla
			SSO, PHTD, BARI
11:15-11:45	Tea Break		
11:15-12:45	Overview on Minimal Processing of	Practical	Dr. Taslima Ayesha Akter Nasrin
	Fruits and Vegetables		SSO, Horticulture Division, BARI
12:45 - 02:15	Prayer and lunch break		
02:15-03:15	Good Agriculture Practice (GAP) and	L & D	MD. Mahmud Hasan
	Standard Operating Procedure (SOP)		DD (Hortculture), NATA
	for preservation & Processing of		
	Agricultural Products		
03:15-03:45	Tea Break		
03:45-04:45	Packaging and Transportation of Fresh	L & D	MD. Eskandar Hossain
	fruits and Vegetables		SAD, NATA
04:45 -05:45	National Integrity Strategy (NIS)		Dr. MD. Jamal Uddin
			DD (Plant Pathology), NATA

5th Day: 24/09/2020

Time	Topics	Method	Resource person
09:15 - 10:15	Fermentation as the methods of food	L & D	Dr. Md. Shahjahan
	processing and preservation		Professor, Zarman University, Gazipur
10:15 –11.15	Pickling (Practical)	Practical	Do
11:15-11:45	Tea break		
11:45-12:45	Do	Practical	Do
12:45 - 02:15	Lunch and prayer		
02:15-03:15	Sustainable Development Goal (SDG)		Dr. MD. Akhtaruzzaman
			Director (Admin), NATA
03:15-04:15	Causes of Food Spoilage and	L & D	Nilufa Akter
	Remedies		SAD, NATA
04:15-05:00	Closing session		DG/Directors/Faculties

Course Evaluation by the Participants(annexure IV)

Best Training Methods choose by the participants

- 1. Practical class
- 2. Group discussion
- 3. Video clip

The issues that are disliked by the participants

- 1. More theory class
- 2. Many information in a topic
- 3. Less Practical class
- 4. Minimum honorarium
- 5. Shortage of field trip food manufacturing company

The others associated issues they liked

- 1. Topic wise expert resource persons were selected very prudently.
- 2. Management of dining by mess committee
- 3. Time management
- 4. Discipline & management
- 5. Expert resource persons
- 6. Wi-fi facilities
- 7. Cooperation of NATA Authority
- 8. Single room for single officer
- 9. Cooperation of Course Coordinator and Asst. Course Coordinator very remarkable.

Conclusion and recommendation by the Course Management Team:

- 1. Uninterrupted internet and electricity supply should be provided
- 2. Training duration should be increased.
- 3. Arrangement of food manufacturing company visit.eg PRAN or Square food processing company.
- 4. Provide more time for practical class
- 5. Refresher's course should be arranged
- 6. Selection resource speaker on the basis of speaker evaluation score by the participants
- 7. Sports facilities should be available.
- 8. Incorporate quality food export related class in training schedule
- 9. Incorporate Govt. policy & BSTI standard and BSTI representative class in traing schedule
- 10. Food Technology & Rural Indudries faculty of BAU Visit should be arranged
- 11. Incorporate postharvest disease & insects pests management class in training schedule

(Annexure - V)

Speaker Evaluation by Trainees

Grade range: 1-6 (Higher marks represent the higher grade)

Speaker name and address	Subject	Criteria	Obtained grade (Average)	Comments
Prof. Dr. M. Burhan Uddin, Dept. of Food tech. & Rural Ind, BAU	National Food Policy, Rules & Regulation	Knowledge Over subject Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to Handle Q/A Control over class Time management	4.6	
	Food Processing & Preservation: Implications for assuring food security	Knowledge Over subject Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to Handle Q/A Control over class Time management	5.0	
Prof. Dr. Mohammad Gulzarul Aziz, Dept. of Food tech. & Rural Ind, BAU	Concept on Safe and Nutritious Foods	Knowledge Over subject Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to Handle Q/A Control over class Time management	5.4	Good Speaker
	Principles and methods of Food Preservation	Knowledge Over subject Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to Handle Q/A Control over class Time management	5.2	
Dr. Mohammad Mainuddin Molla SSO, PHTD, BARI	Principles and Methods of osmotic dehydration	Knowledge Over subject Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to Handle Q/A Control over class Time management	5.0	

Speaker name and address	Subject	Criteria	Obtained grade (Average)	Comments
MD. Mahmud	Good Agriculture	Knowledge Over subject	5.3	
Hasan DD (Hortculture),	Practice (GAP) and	Ability to present ideas clearly/relevantly		
NATA	Standard Operating	Ability to make the		
147171	Procedure (SOP) for	class/session participatory		
	preservation &	Ability to Handle Q/A		
	Processing of	Control over class	_	
	Agricultural Products	Time management	1	
MD. Eskandar	Packaging and	Knowledge Over subject	5.0	
Hossain		Ability to present ideas	3.0	
	Transportation of Fresh	clearly/relevantly		
Senior Assistant	fruits and Vegetables	Ability to make the	_	
Director, NATA		class/session participatory		
		Ability to Handle Q/A		
		Control over class	_	
		Time management		
Dr. Abdullah	Traditional Food	Knowledge Over subject	5.5	
Iqbal,	Processing and	Ability to present ideas		
Professor	Preservation	clearly/relevantly		
Dept. of Food	Techniques	Ability to make the		
tech. & Rural Ind,	reciniques	class/session participatory		
BAU		Ability to Handle Q/A		
		Control over class		
		Time management		
	Food Processing and	Knowledge Over subject	5.4	
	Preservation by Heat	Ability to present ideas		
	Treatment	clearly/relevantly		
		Ability to make the		
		class/session participatory		
		Ability to Handle Q/A		
		Control over class		
Md. Hafizul	Preparation of	Time management Knowledge Over subject	5.3	
	^	Ability to present ideas		
Haque Khan	Jam/Jelly/Marmalade	clearly/relevantly		
CSO, Post-		Ability to make the	_	
harvest		class/session participatory		
Technology		Ability to Handle Q/A	1	
Division, BARI		Control over class		
		Time management		
Dr. Taslima	Overview on Minimal	Knowledge Over subject	4.9	
Ayesha Akter	Processing of Fruits	Ability to present ideas		
Nasrin, SSO,	and Vegetables	clearly/relevantly		
, ,	<i>y</i>	Ability to make the		
		class/session participatory	_	
		Ability to Handle Q/A		

Dr. Golam Food Processing solids Control over class Time management	Speaker name and address	Subject	Criteria	Obtained grade (Average)	Comments
Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Frying Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Frying Frying Frying Dr. Golam Frying Frying Frying Frying Dr. Golam Frying Frying Dr. Golam Frying Frying Dr. Golam Frying Frying Dr. Golam Frying Frying Frying Ability to present ideas clearly/relevantly Ability to present ideas clearly/relevantly Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to make the class/session partici	Horticulture		Control over class		
Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Md. Shahjahan professor, German University, Gazipur Dr. Md. Shaljiahan professor, German University, Gazipur Pickling Fermentation as the methods of food processing and preservation Pickling Knowledge Over subject Ability to present ideas clearly/relevantly Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to Mandle Q/A Control over class Time management Time management Time Time Time Time Time	Division, BARI				
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Dost-harvest Division, BARI Dost		increasing solids	Ability to present ideas		
Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Golam Ferdous Ahmed Chowdhury, SSO, Post-harvest Division, BARI Dr. Md. Shahjahan professor, German University, Gazipur Pickling Pickling Pickling Dr. Kowledge Over subject Knowledge Over subject Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to Handle Q/A Control over class Time management Knowledge Over subject Ability to present ideas clearly/relevantly Ability to present ideas Clearly/relvantly Ability to make the class/session participatory Ability to present ideas clearly/relevantly Ability to make the class/session participatory Ability to make the class/session participatory Ability to present ideas clearly/relevantly Ability to present ideas clearly/relevantly Ability to make the class/session participatory				5.3	
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11700ma 1 mior 1 100000mg 01 1 mm 1 moment 100mb					
clearly/relevantly	Trycona Artor	1 rocessing or rruits			

Speaker name and address	Subject	Criteria	Obtained grade (Average)	Comments
Nasrin, SSO,	and Vegetables	Ability to make the		
Horticulture	(Practical)	class/session participatory		
Division, BARI	(Tractical)	Ability to Handle Q/A	_	
Division, DAKI		Control over class	_	
		Time management	_	
Dr. Md. Ayub	Food Processing by	Knowledge Over subject	4.4	
Hossain	Drying	Ability to present ideas		
CSO, Farm	78	clearly/relevantly		
Machinery		Ability to make the		
Division, BARI		class/session participatory		
,		Ability to Handle Q/A		
		Control over class		
		Time management		
Dr. MD.	Sustainable	Knowledge Over subject	5.5	
Akhtaruzzaman	Development Goal	Ability to present ideas	- 3.3	
Director (Admin),	•	clearly/relevantly		
NATA	(SDG)	Ability to make the		
11111		class/session participatory		
		Ability to Handle Q/A	_	
		Control over class		
		Time management	_	
Nilufa Akter	Causes of Food	Knowledge Over subject	4.8	
SAD, NATA		Ability to present ideas	4.0	
SAD, NATA	Spoilage and its	clearly/relevantly		
	remedies	Ability to make the		
		class/session participatory		
		Ability to Handle Q/A		
		Control over class		
		Time management		
Dr Md. Monirul	Food Adulteration and	Knowledge Over subject	5.5	Best
		Ability to present ideas		
Islam, Director	Safety	clearly/relevantly		Speaker
(Nutrition)		Ability to make the		
BARC, Dhaka		class/session participatory		
		Ability to Handle Q/A		
		Control over class		
		Time management		
	Use of food additives		6.0	Best
		Knowledge Over subject Ability to present ideas	- 0.0	
	and preservatives	clearly/relevantly		Speaker
		Ability to make the	_	
		class/session participatory		
			-	
		Ability to Handle Q/A Control over class	_	
			_	
		Time management		1

Participants Evaluation..... (Annexure-vi)

"Food Processing and PreservationTechniques"

Full Marks: 50

SL.	Name	Designation, Posting place &	Pre-	Post
SL.	Name	Organization	evaluation	evaluation
1.	Dr. Mohammad Abduhu	Pricipal, BIRTAN HQ, Dhaka	27	41
2.	Prince Biswas	Scientific Officer, BIRTAN HQ, Dhaka	17	32
3.	Md. Abdur Rouf	Scientific Officer, BINA, Mymensingh	18	25
4.	Mohammad Forhad	Scientific Officer, R.S, BWMRI,	08	26
''	Amin	Gazipur		20
5.	Bijoy Kumer Halder	AEO, DAE, Nangalkot, Cumilla	19	40
6.	Sajib Sarker	AEO, DAE, Kanaighat, Sylhet	11	27
7.	Sumaya Haque Omy	Scientific Officer, Plant Breeding	19	33
		Division, BARI, Gazipur		
8.	Md. Safiq Al Sarah	AEO, DAE, Dumuria, Khulna	09	25
9.	Md. Sanowar Hossain	Assistant Director (Training) , DAM, Cumilla	23	38
10.	Saad Ahmmed	Instructor, BIRTAN HQ, Dhaka	24	39
11.	Saifullah Ahmmad	AEO, DAE, Tanore, Rajshahi	07	32
12.	Muhammad Riazuddin	UAO, DAE, Bhola Sadar, Bhola	08	30
13.	Md. Jillur Rahman	SSO, HRC, BARI, Gazipur0	01	25
14.	Md. Abdur Rab Gazi	Scientific Officer, HRC, BARI, Gazipur	06	25
15.	MD. Asgar Ali	DTO, DAE, Madaripur District	14	25
16.	Mohammad Shakhaut	ADD (Horticulture), DAE, Sherpur	07	26
	Hossain			
17.	Arpita Sen	Scientific Officer, BINA, Cumilla	27	37
18.	SK. Abdullah Wahed	UAO, Hathazari, Chattogram	10	25
19.	Sumaya Afrin Jhuma	AEO, DAE, Mirzapur, Tangail	28	41
20.	Laila Arjuman Begum	AEO, DAE, Pirganj, Thakurgaon	27	44
21.	Md. Marufur Rahman	Scientific Officer, BIRTAN, Rangpur	19	
22.	Md. Abdullah Al Mashud Tusher	AEO, DAE, Mithapukur, Rangpur	20	27
23.	Md. Abdur Rauf	AEO, DAE, Gangni, Meherpur	17	31
24.	Shanta Islam	AEO, DAE, Singair, Manikgonj	17	42
25.	Pryanka Roy	Scientific Officer, ORC, BARI, Gazipur	15	29
26.	Tuhina Hasan	Scientific Officer, TCRC, BARI, Gazipur	23	35
27.	Most. Shibly Khandoker	AEO, DAE, Gabtali, Bogura	26	41
28.	Md. Abdullah Al Mamun	Assistant Director (Training), DAM, Rangpur	10	26
29.	Md. Rafiqul Islam	Deputy Director (Agril. Machinery & Irrigation), NATA, Gazipur	25	31

Training on Food Processing and Preservation Techniques Pre Evaluation

Value of each questions are equal

Full Marks- 50 Times: 30 minutes

Name:

- 1. Define food and food processing.
- 2. What is food preservation?
- 3. State objectives food processing .Write common methods of food processing?
- 4. Write down the causes of food spoilage.
- 5. What are the factors which affects food technology?
- 6. Explain opportunities and challenges of food processing in Bangladesh?
- 7. Write down the function of food.
- 8. Method of food processing
- 9. Define pasteurization.
- 10. Define jam, jelly and marmalade.

