



Qualifications

Diploma in Distilling

Module 1

Examination Syllabus 2019

Unit 1: Cereals

Topic	Candidates should understand and be able to demonstrate using detailed examples:
Cereals	<ul style="list-style-type: none">• Barley• Malting process• Other cereals

Unit 2: Other Sources of Extract

Topic	Candidates should understand and be able to demonstrate using detailed examples:
Other sources of extract	<ul style="list-style-type: none">• Molasses• Grapes• Agave

Unit 3: Water

Topic	Candidates should understand and be able to demonstrate using detailed examples:
Water	<ul style="list-style-type: none">• Basic quality requirements of water• Production requirements of water in distilleries• Water sourcing• Nutrients supplied by water

Unit 4: Materials Handling

Topic	Candidates should understand and be able to demonstrate using detailed examples:
Cereal intake, handling, storage, and processing	<ul style="list-style-type: none"> • Malt performance – requirements of good quality malt • Key malt analytical parameters and their measurement • Malt delivery and handling • Milling
Non-cereals intake, handling, storage, and processing	<ul style="list-style-type: none"> • Molasses intake and processing

Unit 5: Cereal Wort Production

Topic	Candidates should understand and be able to demonstrate using detailed examples:
Principles and purpose of mashing	<ul style="list-style-type: none"> • Mashing procedures for all-malt mash • Cereal cooking • Enzymes for GNS and whiskey production • Wort Properties
Principles and purpose of wort separation	<ul style="list-style-type: none"> • Wort separation theory and methods • Production and handling of co-products
Wort cooling and oxygenation	<ul style="list-style-type: none"> • Wort cooling and oxygenation

Unit 6: Non-Cereal Wort Production

Topic	Candidates should understand and be able to demonstrate using detailed examples:
Molasses wort production	<ul style="list-style-type: none">• Composition of molasses• Principles of mashing/pre-treatment• Concerns for molasses wort production
Grape must production	<ul style="list-style-type: none">• Pressing and destemming• Pre-fermentation treatment• Typical must composition
Agave mosto production	<ul style="list-style-type: none">• Treatment of agave and preparation of mosto• Composition of mosto

Unit 7: Yeast Biochemistry

Topic	Candidates should understand and be able to demonstrate using detailed examples:
Properties of yeast and bacteria	<ul style="list-style-type: none">• Properties of yeast• Yeast reproduction• Yeast classification
Yeast metabolism	<ul style="list-style-type: none">• Carbohydrate metabolism by yeast• Metabolic pathways• Production of flavour compounds

Unit 8: Fermentation

Topic	Candidates should understand and be able to demonstrate using detailed examples:
Yeast handling	<ul style="list-style-type: none">• Yeast handling in the distillery

Principle fermentation variables	<ul style="list-style-type: none">• Progress fermentation• Alcohol sensitivity of yeast
Fermentation technology	<ul style="list-style-type: none">• Fermentation vessel types and design
Non-cultured fermentation	<ul style="list-style-type: none">• Microbial spoilage organisms in molasses• Brandy fermentations• Agave mosto fermentations