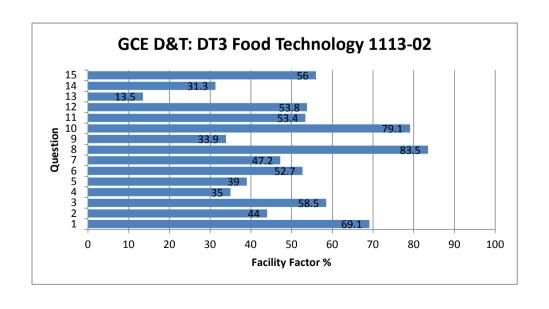


WJEC 2014 Online Exam Review

GCE D&T: DT3 Food Technology 1113-02

All Candidates' performance across questions

?	?	?	?	?	?	?	
Question Title	N	Mean	S D	Max Mark	F F	Attempt %	
1	55	5.5	1.5	8	69.1	98.2	
2	23	3.5	2.5	8	44	41.1	
3	44	4.7	2.2	8	58.5	78.6	
4	20	2.8	1.9	8	35	35.7	\leftarrow
5	25	3.1	1.5	8	39	44.6	
6	33	4.2	2	8	52.7	58.9	
7	31	3.8	1.9	8	47.2	55.4	
8	50	6.7	1.4	8	83.5	89.3	
9	7	2.7	1	8	33.9	12.5	\leftarrow
10	46	6.3	1.6	8	79.1	82.1	
11	36	13.9	5	26	53.4	64.3	
12	30	14	4.7	26	53.8	53.6	\leftarrow
13	2	3.5	0.7	26	13.5	3.6	
14	16	8.1	4.3	26	31.3	28.6	
15	27	14.6	3.8	26	56	48.2	



SECTION A

Answer three questions from this section.

This section is designed to demonstrate your breadth of knowledge in Food Technology.

Each question carries 8 marks.

4. Describe what you understand by the term 'technology push' and identify **two** such food products and their innovative 'technology push' features. [8]

Of Technology push in where a manufactorer will produce an innovative product and launch a product life cycle for it where they think there was gap in the market for it. An example of this is aerated chocolate (nero chocolate). The manufactures wanted to create such a chocolate that would produce a light and pubbly texture in the mouth, something which had yet to be existed. Another example of this is cereal.

Manufactures are constantly producing new cereals with different characteristics because there is forevergoing to he a gap in that market as it is something, we, as the consumers consume everyday. The characteristics that are always being developed could be the flavour, the shape (perkids) eg. precisipershapes) the

Question

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Ou nutritional content because of the awareness of the latest health scares

04.	Technology push in where a manufactorer will produce an innovative
	product and launch a product life cycle for it where they think there sua
	gap in the market for it. An example of this is a crated chocolate (Acro
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	that market as it is something, we as the consumers consume
	everyday. The characteristics that are always being developed
	could be the flavour, the shape (forkids, eg. receispiershapes) + the

uestior umber		Leave Blank
Ou	nutritional content because of the awareness of the latest healthscares	1

Turnoer	
	Technology push is the use of technology to create a new product for there target market egg an example would be quarn meat. Quarn meat was created by technology such an example of this would
	a food product which is made taste like chicken but with neat afternitives.
	mother example would be modified starches which are foods like of noddles which you Tust add water and your food product is nade.
	rechnology push has helped create rese food products because they lave had to test different ways f making and creating these I bods as they are not natraulike pormal unchen air noddles

	Technology push in the food inclusiony repos to the use of
2	new and innovative techniques in food products which are only
	available desplos due to the increase in technology advances
	available despto due to the increase in technology advences that are be used the fluit and products (Such as
	Smart Goods)
	An example of a product inpluenced by the technology
	Push is Knot of Aero Chocolate. The Eteo Chocolate itself has
	a bubbly texture which is the adviced by pumping CO2
	though the chosolate to create air pockets much the same
	way as popping candy but with less pop.
	Another example of a product with technology push features
	is textired vegetable protein (TVP) which is produced by authorities
W.F	Certain backerin and then forming the Tup into a certain fibrons
<u> </u>	Order which it wise or and the absorbs and
	pattern which gives the illusion of near. Tup also absorbs any
	Amour that it comes in anteact with as it is very porous making
	this product ideal for dishes with a lot of & flavour
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4	- 1 and in this find industry record to the use
₩,	Technology push in the food inclusing refers to the use of
	new and innovative techniques in food products which are only
	available de to lue to lue increase in technology advenced.
	This term was refers to techniques it and products (Such as
	Smart (roots)
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	way as popping Cardy but with less pop.
	Another example of a product with technology push features
Lancette Tri	is rextired vegetable protein (TUP) which is produced by additioning
	Certain backerin and then forming the Tup into a Certain fibrous
	faltern which gives the illusion of meat. TUP also absorbs any
	Alware that it comes in amtack with as it is very parous making
	this product ideal for dishes with a lot of & flavour
•	· · · · · · · · · · · · · · · · · · ·
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SECTION B

Answer three questions from this section.

This section is designed to demonstrate your breadth of knowledge in Food Technology.

Each question carries 8 marks.

9. Outline how the main features of Registered Design, as prescribed by the Intellectual Property Office, benefit the creator of the design. [8]

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09.	Registered design means that other manufacturers cannot use the
	techniques used to package south their product if those designs are
	already associated with another product matalvesoy exists, for
	example, cadburys chocolate, everybody associates cadbury with the
	colour priple cadbury tried to trademark the colour purple but didn't
-	sucreed. Another example is the shape of Toblerone. Registered design
	can include the shape, colour, texture, origin or how the product is made.
	However, it cannot include basic text as it is too common, neither can it
	include from the mathe basic idea behind the product. When we refer to
	terive it does not necessarily mean how the product itself feels, e.g.
	chocalate, it refers more to home a products usp - e.g. Acrochocolate -
	The idea of intellectual property is sorthat products can easily be
	recognised to the consumer if they are familiar to the trademark mat the

Question number Leave Blank

09	consumer hauper on it. people can get into a lut of trouble and will face
	huge that if they take a registered design that belong , to an existing
	manufactorer without permission. They must ask before new can use itt
	sometimes have to pay.
	THE RESIDENCE OF THE PARTY OF T
	The state of the s

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	The idea of intellectual property is so that products can easily be
	recognised to the consumer if they are familiar to the trademark that The

nber		Blank
09	huge first if they take a registered design that belongs to an existing manufacturer without permission. They must ask before they can use itt sometimes have to pay.	
		- (3

SECTION C

Answer two questions from this section.

Your answers should be substantial and show the depth of your knowledge in Food Technology.

Each question carries 26 marks.

12. Describe in detail the properties and characteristics of **two** specific food materials used in any named food product of your choice and explain the benefits of using **each** of these materials within the food product. [26]

END OF PAPER

12. Strong white bread glove is used in ment
12. Strong white bread flour is used in many
products such as loafs of bread, bread
rolls, partry and pasta. It is made from
Canadian wheat grains which have avery
nigh gluten content. When this gluten is
stratched and kneaded it holds pockets of
stratched and kneaded it holds pockets of air to give the product volume. The kneading
of glutch also helps to give products,
particularly bread, a fibrous texture.
provides the main but of the product
provides the main bulk of the product
and it also helps it to set. This place
is very thin and usually white in colour
due to it coming from the canadian grain.
The benefit of using this is the
high gluten convent given revolute to
products in pasty this is vital as it
creates many sibres which help to
hold the development there
hold the abugh together.
This strong plows can also help to
add many nutritional values to the
5797.0

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number	
12,	product. It acts as a main source of
	carbonydrate and this is because of the
	Starch molecules and gluten. This material is
	also very flexible when stretched so it can
	be beneficial when making bread rolls into
	Shopes such as a plait.
	Another specific food material which is
3	used in many products is eggs. These eggs
	provide a source of protein fat and in some
	fortified products they can also provide
	omega 3. The egg york is a very good
	source of protein which can be used in a
	moin meal such as an omlette. It sets
0.0	when it is heated through coaquidation and
	So gives a pourous textere and it is
	aesthetically pleasing as it is yellow in
	colour. On Top of this, egg yolk can be well
	ces en encusifies in may on aise in order
	to help bind ingredients. Eggs also help to
	bind dry ingredients such as Alour and
	Sugar in a cake mixture.
	The egg white can also be very
	beneficial particularly when key to
	aèrate a product. For example when
:	

mixed with some sugar. Where it is whisted,
air is combined into the mixture. The ead
white has the ability to hold these docker
of air in a foaming consistancy, in minute
air bubbles. This is beneficial to the
miranque as it gives it a light and
crispy bexture due to the air held in the
egg white.
Eggs can also be used when glazing
products such as bread and biscuits.
If the egg is brushed over these products
it creates a seated layer when these
products are then cooked, the glaze
begins 10 harden a crate a shiny and
golden brown finish to the products.
This is beneficial as it is more
desthetically pleasing to the eye and so
11- con cettract more consumers!
The egg can also be used to seal products
Such as pasta or pastry. While dry, the
egg is applied between two sheets of
dougho On Cooking these products the egg
helps to bind the two together and so
prevent it falling apart or the filling
from escaping but Egg wash can also tok
used on the pastry to give a golden

12. Strong white bread flour is used in many
products such as loafs of bread, bread
TOUS DOLLES and DOLLES mande Conce
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This strong Hours can also hold to
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