

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

#### SECONDARY EDUCATION CERTIFICATE LEVEL 2020 SUPPLEMENTARY SESSION

SUBJECT:	Information Technology	
PAPER NUMBER:	Synoptic – Unit 2	
DATE:	4 <sup>th</sup> November 2019	
TIME:	10:00 a.m. to 12:05 p.m.	

# THIS PAPER SHOULD BE RETURNED TO THE INVIGILATOR AFTER THE EXAMINATION.

#### Scenario

- AngelCakes bakery has been open for the past few months.
- The bakery has been doing quite well but the owner thinks that advertising will help bring in a lot more people than they already have till now.
- You have been asked to help them with their different multimedia productions.

#### **Question 1**

#### (9 marks)

List **THREE** examples of file formats that could be used for the following tasks.

a) A short video advert for the bakery

i	(1)
ii	(1)
iii	(1)
b) A logo animation	
i	(1)
ii	(1)
iii	(1)
c) An image showing the bakery's best cake	
i	(1)
ii	(1)

#### **Question 2**

iii.\_\_\_\_\_

#### (12 marks)

(1)

Help the owner understand image file types by answering the questions below:

a) Provide **THREE** examples of Raster and **ONE** example of Vector image file formats. (8)

Raster	Vector

b)	List <b>TWO</b> examples of lossless image file formats.	
	i	(2)
	ii	(2)
Qı	uestion 3	(10 marks)
Yo	u want to create a number of composite images to enhance a bakery poster being	g created.
a)	Describe the following layer options involved in the making of composite images.	
	i. Softlight	
		(2)
	ii. Outer Glow	
		(2)
	iii. Bevel/Emboss	
		(2)
	iv. Drop shadow	
		(2)
b)	Which <b>ONE</b> of the terms described above is a blending option?	
c)	Which <b>ONE</b> of the terms described above is a layer effect?	(1)
-,		(1)

Please turn the page.

#### (5 marks)

The AngelCakes store owner would like to experiment with a number of effects for his new bakery poster. He liked the effects shown below. Help him identify the effects used by writing the name next to each image. A number of choices have been provided.

High contrast, brightness, gamma, hue, saturation, colour balance, sketch

Image	Effect	Effect Name
		(2.5)
		(2.5)

Source: https://pixabay.com/en/strawberries-cake-blueberries-2357171/

Question 5	(8 marks)
Define the following audio terminology:	
a) Loop	
b) Delay	
	(2)
c) Tempo	
d) Pitch	
	(2)
	(-/

#### (6 marks)

The owner would like to add some audio to an animation file which he has created. Help him understand audio formats by relating the different types of audio files to their characteristics. Fill in the table by providing **THREE** examples of lossy audio file formats and **THREE** lossless audio file formats.

Lossy	Lossless

Please turn the page.

#### (10 marks)

You are preparing the first video advert to be uploaded on social media.

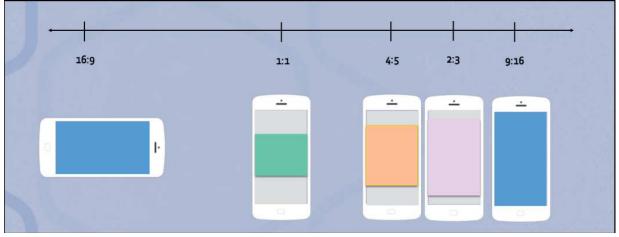


Figure 1: Facebook Video Requirements Source: https://www.facebook.com/business/m/one-sheeters/video-requirements

- a) Figure 1 is provided by Facebook to demonstrate how different aspect ratios will show on a specific mobile device.
  - i. Which aspect ratio of the above is the best to use for a landscape video?
  - ii. Which aspect ratio of the above is the best to use for a portrait video?
  - iii. Provide **ONE** reason for your answer in questions 7a (i) and 7a (ii).
  - \_\_\_\_\_(2)
- b) Provide **ONE** reason why you should always upload very high-quality videos to sites like Facebook or YouTube.
  - \_\_\_\_\_ (2)
- c) Explain why a video with 25 frames per second is preferable to one with 10 frames per second.

\_\_\_\_\_ (2)

(2)

(2)

#### (10 marks)

AngelCakes owner is ready to start working on their first video production. He has been taking some videos and has given you a list of all available resources. The owner has asked for help to produce the video.

a) List, in order, the **THREE** stages required to complete an audio/visual production.

i	i	(2)
i	II	(2)
i	iii	(2)
b)	Mention <b>TWO</b> things that happen during the first stage of an audio/visual production.	
i	i	(0.5)
i	ii	_ (0.5)
c)	Define the following terms:	
i	i. Aspect Ratio	
i	ii. Frame Rate	
d) <sup>.</sup>	The terms defined in question 8c, belong to which stage of audio/video production?	
		(1)

Please turn the page.

### (10 marks)

One of the employees at AngelCakes has taken an interest in HTML and has asked you to explain parts of the code below:

```
1 <!DOCTYPE html>
2 ▼ <html lang="en-UK">
3
        <head>
4 🔻
            <title> AngelCakes</title>
5
            k href="Style.css" rel="stylesheet">
 6
7
       </head>
8
9 .
       <body>
10
           <h1>AngelCakes Bakery</h1>
11 .
            <div class="gallery">
                <img class ="cheesecake" src="images/FruitandCream.jpg" width="400px">
12
                <img class ="chocolate" src="images/Chocolate.jpg" width="400px">
13
14
                <img class ="berry" src="images/Strawberry.jpg" width="400px">
                <img class ="pops" src="images/cake%20pops.jpg" width="400px">
15
                <a class ="link ch" href="www.angelcakes.com/cheese"> Cheesecakes</a>
16
                <a class ="link choco" href="www.angelcakes.com/choco"> Chocolate Cakes</a>
17
                <a class ="link b" href="www.angelcakes.com/berry"> Berry Cakes</a>
18
19
                <a class ="link p" href="www.angelcakes.com/pops"> Cake Pops</a>
            </div>
20
21
           <hr>>
22
       </body>
23 </html>
```

#### Figure 2: HTML Code

a) What is the purpose of the  $\langle a \rangle$  tag in lines 16 to 19?

		(2)
b)	Which attribute is being used to identify different elements?	(2)
c)	What is the purpose of the src attribute in lines 12 to 15?	(2)
		(2)
d)	What is the purpose of the <div> tag in line 11?</div>	
		(2)
e)	What is the purpose of the $$ tag in line 21?	
		(2)

#### (20 marks)

You are requested to help create the bakery's Home page. On completion, the page should look like Figure 3 shown below:

# AngelCakes

Cakes of the Day!



#### See all our other cakes

#### **Opening Hours**

- Monday: 8:00 till 14:00
- Tuesday and Wednesday: 7:30 till 16:00
- Thursday and Friday: 8:00 till 15:00
- Saturday: 9:00 till 13:00
- Sunday closed

Figure 3: Home page screenshot Source: https://pixabay.com

On the next pages, write the **HTML** code needed to create the website as shown above. Some additional notes have been provided with the necessary design details.

#### Additional Notes:

- Page title: AngelCake Bakery
- There are 3 sections:
  - one for the title;
  - one for cakes of the day, images and link;
  - $\circ$  one for the opening hours.
- 'AngelCakes' is a header.
- 'Cakes of the day' and 'Opening Hours' are paragraphs.
- The text 'See all our other cakes' is a hyperlink which links to www.angelcakes.com/cakesoftheday
- The three images are set in a table having one row and three columns.
- Image names in the same order shown above are: bundtcake.jpg, cinnamon.jpg and orange.jpg (The images are found in a folder called **images**).
- Images should have descriptive alternative text.
- The bulleted text is an unordered list.

HTML Code


 (20)