



The University of Fiji



Department of Computer Science and Information Technology
Semester 2 Year 2016

FINAL EXAMINATION PAPER

ITC224: Virtualization and Animation

Important Instructions to Students:

1. Read the questions, instructions carefully and answer the questions.
2. You are allowed an **extra 10 minutes reading time** (during this time, you are not allowed to write with pen) and **180 minutes (3 Hours) to complete this paper**.
3. Silent, non-programmable calculators are allowed, but not supplied.
4. Write all your answers in the answer booklet provided. If you need extra sheets, please ask from the supervisor. Write your name, course code and student identification number in the answer booklet and in the attendance sheet.
5. This Final Course Examination Paper is worth 100 marks contributes 40% of the total course assessments.
6. This paper contains two (2) sections A and B. All questions are compulsory to answer.
7. Write all your answers legibly. The marker has the right to award zero for answers that are not legible.
8. This is a **Closed Book Examination**. The University views plagiarism, cheating and dishonest practice as serious offences and if found, offenders are penalized.

Examination Paper Content (Format):

<u>Section</u>	<u>Question</u>	<u>Content</u>	<u>Marks</u>	<u>Suggested Time</u>
A	1-10	Multiple Choice	10	18 mins
B	1-5	Short Answer Questions	90	162 mins
		TOTAL	100	180 mins

Section A. Multiple Choice Questions

[10 marks]

1. ____ is the step in production which is performed to add more details to your scene.
 - A. Improvement of Design
 - B. Action Scripting
 - C. Polishing
 - D. Create a storyboard
 2. ____ action allows you to save the object in the library panel for future use.
 - A. Importing
 - B. Exporting
 - C. Convert to text
 - D. Convert to symbol
 3. ____ are two ways to draw fills in a drawing.
 - A. Ink and pencil
 - B. Brush and spray
 - C. Oval and shape
 - D. Fill and autofill
 4. Double clicking on a stroke will ____.
 - A. Select the entire stroke
 - B. Select the entire object
 - C. Delete the entire object
 - D. Delete the entire stroke
 5. You are developing several different Adobe Flash projects for the same client. The true statement about websites, desktop applications, and mobile applications is ____.
 - A. You should create AIR applications because HTML5 is not supported on most mobile devices.
 - B. You should download and install the AIR Native Extension to debug mobile applications.
 - C. You should test the Adobe Flash content on all targeted browsers, devices, and platforms.
 - D. You should optimize content for the web, but you don't need to optimize application content.
 6. You are importing an Adobe Photoshop asset into Adobe Flash. There is an image on a layer and you want to ensure it is not compressed. The setting which you should choose is ____.
 - A. In the Bitmap Properties dialog box, choose Compression: Lossless.
 - B. In the Publish Settings dialog box, enable the option: Enable Deblocking.
 - C. In the Bitmap Properties dialog box, choose Compression: Photo.
 - D. In the Publish Settings dialog box, set the Compression option to LZMA.
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7. You are writing ActionScript 3.0 code and you want to declare a variable. The correct syntax to use is _____.

- A. declare:var.variableName = variableValue;
- B. import variable:variableName, variableValue;
- C. var variableName:dataType = variableValue;
- D. var = variableName; dataType.Value;

8. You are testing an Adobe Flash application and the Output panel displays the message 'Access of undefined property.' That means _____.

- A. More memory is required to compile the code on your system.
- B. The script is attempting to access an object that does not exist.
- C. A variable with the same name occurs more than once within the same scope.
- D. The script references object instances that are not contained within Stage bounds.

9. Jason is defining the target audience for an animation project. This is a component of _____ phase in the process of producing animation.

- A. Post-production
- B. Pre-production
- C. Animated Gif
- D. Production

10. _____ type of animation is best suited for creating a flipbook animation.

- A. SWF
- B. Frames per second
- C. Animation
- D. Frame based animation

Open Ended Questions**[90 marks]****Question 1****[20 marks]**

A. Write the steps which can be used to carry out the following scenarios.

- i. Organize the document so that the Circle is in front of the Square. **[1 mark]**
- ii. Position the rectangle so that the X position is 0 and the Y position is 260. **[1 mark]**
- iii. Extend the timeline so that the rectangle stays on the screen for 25 frames rather than 20. **[1 mark]**
- iv. Set the stage color to black (#000000). **[1 mark]**
- v. Import the sound BadChicken.mp3 to the library. **[1 mark]**
- vi. Give object instance name. **[1 mark]**
- vii. Insert and rename a scene. **[1 mark]**
- viii. Change the FPS. **[0.5 mark]**
- ix. Insert blur to an object on stage. **[1.5 marks]**
- x. Create and edit a movie clip. **[1 mark]**
- xi. Create an animated button with movie clip. **[2 marks]**

B. Explain three ways using which we can delete layers from the timeline. **[1.5 marks]**

C. What is the difference between changes made to symbols and changes made to instances? **[1 mark]**

D. When are the following events triggered:

- i. ActionScript attached to a frame. **[0.5 mark]**
- ii. ActionScript attached to an object. **[0.5 mark]**

E. ActionScript's are used to change the properties of objects in flash. Write the syntax for changing the object property. Write the codes to change four different properties of any object.

[4.5 marks]

Question 2**[20 marks]**

- A. There are several tasks which should be completed before an animation can be published or presented. Explain the tasks involved in detail. **[2 marks]**
- B. What are properties? Provide four examples of properties which can be used while scripting. **[2 marks]**
- C. What is the syntax to access the properties in flash? Give one example. **[1 mark]**
- D. Discuss the difference between bitmap and vector images. **[1 mark]**
- E. Differentiate between transformation and registration point. **[1 mark]**
- F. Discuss the three different types of tweening and explain with example where these can be used. **[4.5 marks]**
- G. Animation fails because of a number of reasons, elaborate in a paragraph format at least five reasons why it fails. **[5 marks]**
- H. Audio and Video are the most important elements of multimedia. Discuss how are these two used currently? **[2.5 marks]**
- I. Explain what you understand by blue drop zone. Also state what single blue line and rectangle with blue border indicate. **[1 mark]**

Question 3**[10 marks]**

- A. How do you apply shape tweening to text? **[0.5 mark]**
- B. Layers are used on a timeline as a way to organize objects. Discuss five types of layers. **[2.5 marks]**
- C. Explain the three types of symbols. Explain two ways to create a symbol. **[2.5 marks]**
- D. In flash, buttons have four states. Explain the four button states. **[2 marks]**
- E. While coding in Flash, exact syntax are essential. Explain four syntax rules which need to be followed while writing Action Script in Flash. **[2.5 marks]**

Question 4**[10 marks]**

- A. It is important that you provide the audience with as much information or idea as you can at a time. Elaborate on the statement. **[1 mark]**
- B. Explain four rules which have to be followed while giving instance name. **[2 marks]**

- C. Users can apply a solid colour, gradient, or bitmap (JPEG, .TIFF, .GIF) to a shapes fill. Discuss the process of applying a bitmap fill to a shape. [1 mark]
- D. Gradient fill is a multicolour fill in which a colour gradually changes into another colour. Differentiate between the two types of gradient which can be applied to a shape. [1 mark]
- E. Write the steps used in guide animation. [1 mark]
- F. Write ActionScript 3.0 code (syntax) that will allow us to identify a specific event and then tell Flash to respond only after that event occurs? [2 marks]
- G. Write ActionScript 3.0 code that will allow two web pages to be linked. The names of the scenes are 'home' and 'contact_us' and you can define your own name for the eventsource. [2 marks]

Question 5

[30 marks]

- A. Discuss 5 things which can be determined after studying a timeline of a movie in flash. [2 marks]
- B. It is very important to consider the tips provided by the experts from the animation field. Explain at least six animation tips and techniques. [6 marks]
- C. Planning is one of the most essential tools in your entire animation toolbox. Discuss at least seven points which need to be considered when planning an animation. [4 marks]
- D. Animation was borne out of different reasons. Write an essay explaining at least 6 areas where animation are and can be used. Also state its advantages and disadvantages with examples. Discuss your opinion on using animation locally and its impact on our economy. [8 marks]
- E. The main purpose of the principles of Animation was to produce an illusion of characters adhering to the basic laws of physics, but they also dealt with more abstract issues, such as emotional timing and character appeal. Discuss the twelve Principles of animation with examples. [10 marks]

End of Exam