

Vidya Vikas Mandal's
Shree Damodar College of Commerce & Economics, Margao-Goa
SY B.Voc.(ST) Semester-III, Semester End Examination, November 2022
Audio & Visual Media (STG302)

Duration: 2 Hours

Max Marks: 60

- Instructions:** 1) Start each question on a fresh page
2) Figures to the right indicate Full Marks.
3) All Questions are compulsory, however there are internal choices.

Q1) Answer any 5 of the following

(5 x 2 =10)

- a) State the Nyquist Sampling Theorem.
- b) What is Interframe compression? Give example.
- c) List any four types of audio filters.
- d) What is pulse code modulation?
- e) List any four multimedia file formats.
- f) What is DirectX? Why is it used?
- g) What is the full form of MIDI and WAV?

Q2) Answer any 5 of the following

(5 x 2 =10)

- a) What is the importance of using symbols in animation?
- b) Define the terms: Keyframes and Tweening.
- c) Write an example to show how to access values of a variable in Action Script.
- d) Recall the different operators in Action Script.
- e) Why is Onion Skinning useful?
- f) Which are the different methods of polygon modelling?
- g) Define 3D modelling. List its applications.

Q3) Answer the following

(2 x 5 =10)

- a) What is differential coding of audio? Encode and decode the following string of bytes using differential coding: 150 152 148 150 153 149 152

OR

(5)

- b) Calculate the bit rate and file sizes of the following audio files:

- i. A 5 minute audio file 1, sampled at a frequency of 40.1 kHz and bit depth of 16 bit
- ii. A 5 minute audio file 2 sampled at a frequency of 180 kHz and bit depth of 24 bit.
(Assumption: 2-channel stereo audio)

- c) Explain the basic elements of an audio system with a neat diagram.

(5)

- Q4) Answer the following** (2 x 5 =10)
- a) Explain the benefits of designing a Storyboard. (5)
- OR**
- b) Explain the concept of Chroma key with examples. (5)
 - c) Discuss any five features of any video editing software. (5)

- Q5) Answer the following** (2 x 5 =10)
- a) Explain the Cel Animation technique. (5)
- OR**
- b) Compare and contrast the difference between 2D & 3D animation. (5)
 - c) Explain any two principles of animation with examples (5)

- Q6) Answer the following** (2 x 5 =10)
- a) Cite any five uses of 3D Modelling. (5)
- OR**
- b) Explain the principles of 3D Modelling. (5)
 - c) Illustrate the concept of event handling in Action Script using functions. (5)
