16U417 (Pages:2) Name: …….

Reg.No……

FOURTH SEMESTER BCS/BCA DEGREE EXAMINATION, APRIL 2018

(Regular/Supplementary/Improvement)

(CUCBCSS-UG)

CC15U GN4 A14 (1) – BASICS OF AUDIO & VIDEO MEDIA

(Common Course)

(2015 Admission onwards)

Time: Three Hours Maximum: 80 Marks

PART I

Answer ***all*** questions. Each question carries 1 mark.

1. In oceans, with increase in depth, the speed of sound _____.
2. AAC stands for _____.
3. Horn type loudspeaker is also called _____.
4. The first machine to capture sound was _____.
5. Change in the direction of sound propagation when it passes from one medium to another medium is _____.
6. A single input signal is separated according to the different frequency range of different speakers using _____.
7. _____ causes reverberation.
8. Absorption coefficient of open window is _____.
9. Dynamic range of sound in a concert hall is _____.
10. A transducer that converts sound signals to electrical signals is _____.

(10 x 1 = 10 Marks)

PART II

Answer any ***five*** questions. Each question carries 2 marks.

11. What is the difference between voiced and non voiced sounds?
12. Define transducer. Give examples.
13. Differentiate noise and distortion.
14. Define absorption noise.
15. What is meant by dynamic range of music?
16. Give a short note in turntable.
17. Briefly explain the working principle of piezoelectric loudspeaker.

(5 x 2 = 10 Marks)

PART III

Answer any ***six*** questions. Each question carries 5 marks.

18. Compare AC and DC biasing.
19. Discuss crossover networks.
20. Explain the concept of MIDI.
21. Explain how sound waves are refracted in atmosphere and enclosed spaces.
22. Explain any two video compression standards.
23. Give short note on the acoustics of auditorium.
24. Describe digital audio recording.
25. Explain noise reduction techniques.

(6 x 5 = 30 Marks)

PART IV

Answer any ***two*** questions. Each question carries 15 marks.

26. Explain with a neat diagram magnetic tape recording and playback.
27. Discuss the hearing mechanism of human ear.
28. Explain the working principle of carbon microphone and capacitor microphone.
29. Describe VCD and DVD

(2 x 15 = 30 Marks)

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