

16U421

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Name.....

Reg. No.....

FOURTH SEMESTER BCS/BCA DEGREE EXAMINATION, APRIL 2019

(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. A transducer that converts sound waves to electrical signals is called _____
2. The audible range of frequencies is between 20Hz to _____ Hz.
3. Name the nerve that carry signals from ear to brain _____
4. Reverberation is caused by _____ of sound waves.
5. Which microphone need an external dc voltage?
6. What is the highest usable frequency of a tape if the speed is S and the gap width is G?
7. In _____ equaliser each band has an individual slider control which can boost or cut the signals in respective band.
8. What is amplitude?
9. _____ effect helps us the brain to focus on the desired sound ignoring the unwanted noise.
10. _____ is the sound pressure level at which threshold of pain is felt.

(10 x 1 = 10 Marks)

PART II

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

11. What is the effect of gap width in tape recording?
12. What is mini?
13. Describe the mechanism of hearing of human ear.
14. Explain DA conversion.
15. Define directivity of a microphone.
16. What is the use of crossover network?
17. Explain the principle of analog video recording.

(5 x 2 = 10 Marks)

PART III

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

18. Explain ribbon microphone.
19. Distinguish MPEG 1, 2 and 4.
20. Discuss electrodynamic loudspeaker.
21. Explain stereophony.
22. Differentiate reflection, refraction and diffraction.
23. Explain the following filters:
 - a) High pass
 - b) Low pass
 - c) Band pass
 - d) Notch
24. Differentiate woofer and tweeter.
25. Explain the principle on which magnetic recording works.

(6 x 5 = 30 Marks)

PART IV

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

26. What are the requirements for a good auditorium for pleasant listening? Give salient features of acoustical design for an auditorium.
27. Explain VCD, DVD and blue ray disc recording and playing.
28. Explain the construction and working of a moving coil microphone.
29. Write a note on Horn type loudspeaker. Why is it called as indirect radiating type?

(2 x 15 = 30 Marks)
