

Type: DES

Q1. Explain a low frequency sound and give its application. (3)

Q2. Sound is a pressure wave – Justify this statement with a relevant example. (3)

Q3. It is required to send the electrical impulses to the brain. Which part of the ear does this? explain with sketch (4)

Q4. Mr. XYZ has recently joined RR studio, after completing his graduation. The studio owner had a big crisis post COVID-19 because he couldn't retain his experienced staff, since the studio had to be kept closed during the pandemic. Now training the manpower was a big challenge for the owner of the studio. To ensure optimal results after training, the owner used to give a task at the end of each session. In one of the session he asked 'if level of transformer and microphone interaction to be adjusted, how to do this? Give the solution for this task. (3)

Q5. The customer in a M/s RR studio makes a request for a microphone which can produce high-level audio signals from very low DC voltages. Which microphone is applicable in this case? Explain. (3)

Q6. M/s RR studio has given two task for Mr. XYZ, which are as follows.
A compatible specification that allows multiple hardware and software electronic instruments, performance controllers, computers and other related devices to communicate with each other
Explain the device which can be used for the above case. (4)

Q7. It is required to record the individual instruments and human voices separately. Which type of recording technique is applicable? Explain . (3)

Q8. Give the steps involved in making a Vinyl Record. (3)

Q9. How vinyl records are played? (4)

Q10. Digital audio is advantageous over analog audio - Justify. (3)

Q11. What is MSB and LSB? Give its application in digital audio. (3)

Q12. It is required to find the momentary value of an analogue signal many times a second. What is the technique adopted? Explain. (4)

Q13. In RR studio, after getting the rigorous training, Mr. XYZ is now ready for the stage performance. However, his boss was not very much confident on him, at the same time did not want to further lose money on training him. Hence he asked him how to evaluate of a mic for speech? Give the solution for this problem (3)

Q14. 'Choice of technique for miking vocals and speech depends on a number of factors'-Justify. (3)

Q15. In M/s RR studio, Mr. XYZ as very much successful in the initial task given by his boss. The next task given to him was to explain the miking technique ORTF. Give the solution or the same. (4)