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Sound & Location Exam

Fetac N32863

1) What is the frequency of the human ear?

A)   While it varies from person to person, and typically the range decreases as people get older... the typical range for a human is 20hts to 20,000 Khz

2) Name a suitable mic for out door use.

A) Depending on the scenario, there are couple of microphones that are suitable for outdoor use. For example, news crews would use a shotgun/boom mic for capturing all kinds of audio outside, from ambient sounds to dialogue.

Typically hand held mic , such as the Shure SM58 , are widely used by presenters for radio and TV.

Also wireless lavalier, can achieve excellent results, in varied conditions , and allow a lot more freedom for the 'speaker'

3) What type of polar pattern is used by a boom mic.

A) A shot gun microphone has an omni-directional polar pattern , meaning it is good a picking up sounds from all directions, although they are very good a picking up audio from directly in front.

4) Name the type of cable most commonly use with a professional mic.

A) XLR cable is most commonly used with a professional mic , for balanced sound.

5)What device is used to protect a mic in windy conditions

A) A wind shield is used to protect micrphones in windy conditions. These are fluffy covers that diffuse the wind, and remove wind sounds on the mic.

6) What is the standard sample rate and bit depth for CD quality audio?

A) A CD is sample rate 44.1 Khz at a bit rate of 16bit

7) Name the 3 most common types of studio microphones.

A) Recording studios mainly use , 'dynamic mics' , ' condenser mics ' and 'ribbon mics. '

8) Name the software multitrack sequencer used in professional recording studios?

A) Most recording studios , use ProTools software for multi – track professional recording.

9) What does AD/DA stand for .

A) This stands for Analogue to Digital / Digital to Analogue
When converting analogues audio signals to digital and back again

10) What is a pop shield use for.

A) In a recording studio , if people are standing close to a microphone, certain sounds they make are accompanied by a 'pop' of air , or what is know as 'plosive' sounds , which cause unwanted sounds on the microphone, and the shield it there to stop or reduce these sounds.

11) What does the term MIDI stand for.

A) MIDI stands for Musical Instrumental Digital Interface. It is the standard protocol that enables keyboards, drum machines, sequencers, samplers and other electronic instruments to interface with a computer and with each other.

12) What is the cable used when connecting the portable recorder to a computer file transfer?

A) A USB cable is used to connect a portable recorder to a computer file transfer.

Q.2 Explain in words the process of setting up the studio to record character dialogue?

Firstly you would set up a condenser microphone , on a stand, set to the correct height of the person to record the lines.
A pop shield would be attached to the mic, to prevent plosive sounds
The mic would be connected to the stage box, using an XLR cable.

Next make sure phantom power is sent to the microphone, so it is operational.

Next patch the microphone audio, onto the mixing console, so sound from the mic is being sent to the proper channel, and the recording levels are checked, with the appropriate check gain.

Sound should be sent back through the speaker, and the levels monitored.

Q.3 Explain in words how an engineer would edit dialogue for use in a video game?

A) Once the dialogue has been recorded to satisfaction, it should be imported into a sound editing piece of software, such as ProTools.

You should set up a new project, and save it , naming it appropriately.

The sound recordings should be trimmed , to remove everything , apart form the dialogue itself.
You should remove any unwanted sound , such has hums or rumbles, that can be caused by electrical equipment, typically around the 80-90khz region, by applying equalisation, in a process called shelving.

You should apply a 'de-S-er', to remove sibilant sounds. Once the audio has been cleaned up, you can consolidate the track, and export it as an uncompressed WAV file. This file can now be used as is , or compressed, for smaller file size, depending on where it is being used.