

Computer Applications in Music MIDI EXAM PREVIEW

- Write a concise definition of MIDI that contains five concepts discussed in class presentations. (1)
- What information do the binary numbers of MIDI represent? (2)
- What two attributes does MIDI have that keep it in general use even though better technologies could be used today? (2)
- Describe four aspects of the plug that MIDI calls for: (3)
- The Acronym for the type of plug
 - How many pins
 - The layout of the pins
 - How many pins are connected
- What type of *cable* does the MIDI spec call for? (3)
- Name and identify the function of the three IO ports called for by the MIDI spec. (4)
- Draw a diagram of a fully functional MIDI daisy chain configuration incorporating: (8)
- 1) a master synth,
 - 2) a slave synth,
 - 3) a computer with MIDI interface,
 - 4) a slave tone module.
- (Be sure to label the appropriate IO ports.)
- Draw a diagram of the MIDI setups used in our computer lab. ()
- What is the purpose of an opto-isolator in a MIDI device? (5)
- What does "local off" do? (8)
- MIDI calls for communication by sequential, single electrical pulses with no prior timing alignment required.
- What is the two word technical term for this? (9)
- What is the baud rate (bits per second) of MIDI? (9)
- If a typical MIDI message is two or three bytes long, approximately how many MIDI messages can be transmitted each second? (11)
- Does "1" mean current ON or current OFF in MIDI? (9)
- What technical term describes the above? (9)
- Describe the two types of bytes used in MIDI? (10)
- What is the general function of each byte described above? (10)
- What is the purpose of an LSB (LSByte) and MSB (MSByte) in some MIDI messages? (16)
- What is the function of "Running Status" in MIDI? (22)
- Arrange the following bit patterns into a meaningful MIDI message. Some may be used more than once. (11 - 31)
- (0 = data byte MSB) (1 = status byte MSB) (001 = note on) (0111100 = note 60)
(0000 = channel 0) (1111111 = velocity 127)
- List the two main general classes of MIDI messages and their appropriate sub-classes. Denote a typical example for each sub-class. (11 - 31)
- List 7 specific channel messages (11)
- List 3 types of system messages. (12 - 13)
- What is a MIDI clock and what is its purpose? (29)
- If you represent a MIDI event as happening 3 minutes, 7 seconds and 13 frames after the beginning of the song what type of timing are you using? (25 - 27)
- What type of timing relates to the placement of a MIDI event by measure, beat, and part of a beat rather than by real time divisions? (25 - 29)
- What would be a typical use of a manufacturer's SysEx message? (23)
- Is control change #7 (Volume) a switch controller or a continuous controller? (15 - 19)
- Is control change #64 (Sustain pedal) a switch or continuous controller? (15 - 19)
- What does the term General MIDI mean? (19 - 21)