Reg. No.



Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)



V SEMESTER B.TECH (PRINT AND MEDIA TECHNOLOGY) MAKE-UP EXAMINATIONS, DEC 2015 – JAN 2016

SUBJECT: SOUND ENGINEERING [PME 319]

REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ✤ Answer ANY FIVE FULL questions.
- Missing data may be suitable assumed.

1A.	Compare the advantages	and	disadvantages	of	Omnidirectional	and	03
	unidirectional microphones.						
1B.	Explain the guidelines to be f	ollowe	d when miking a p	berso	on for radio.		03
1C.	With neat diagram explain 4	With neat diagram explain 4 stereo mic placement techniques.					04
2A.	Explain the working of a com	pact di	SC.				03
2B.	How sound is divided based on frequency range?						03
2C.	Explain the following :	Explain the following :					
	a) Different types of reco	rding s	tudios				
	b) Different areas in a re	cording	studio				
3A.	With a help of a diagram exp	lain the	working of tape	reco	rder heads.		03
3B.	Explain the different ways to	Explain the different ways to acoustically treat a room.					03
3C.	Explain the characteristics of	a micr	ophone.				04
4A.	With the help of a diagram	show	the construction	ofa	a moving coil spe	eaker	03
	driver.						
4B.	What is anti-aliasing? Explain	n the di	fferent methods u	used	for anti-aliasing.		03
4C.	Explain the causes of tape D	Explain the causes of tape Deterioration.					04

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04

5A. With the help of a diagram explain the guidelines to be followed in the 03 construction of framed walls that have high transmission losses.

- **5B.** What are the equipment's required to record with MIDI? **03**
- **5C.** Explain the different properties of a sound wave.
- 6A. What is cochlea? What are the different parts of Cochlea?
 6B. What is Dolby noise reduction? How does it work?
 03
- **6C.** With the help of a diagram explain the construction of a compact disc. **04**