



FOURTH SEMESTER BTECH. (E & C) DEGREE END SEMESTER EXAMINATION
JUNE 2022

SUBJECT: CONSUMER ELECTRONICS (ECE - 4302)

TIME: 3 HOURS

MAX. MARKS: 50

Instructions to candidates

- Answer **ALL** questions.
- Missing data may be suitably assumed.

Q. No.	Questions	M*	C*	A*	B*
1A.	Show with block diagram data flow for a washing machine control.	4	CO5	C1	L2
1B.	Briefly explain the following terms (a) Interference (b) multiplex channels (c) microwave link (d) attenuation (e) scatter propagation.	3	CO3	C1	L2
1C.	Describe the primary difference between longitudinal and transverse waves.	3	CO2	C3	L2
2A.	Differentiate between linear scanning, Sequential Scanning and Interlaced scanning	4	CO2	C1	L2
2B.	What are the types of fibre based on refractive Index (RI)? Explain with diagram	3	CO4	C2	L2
2C.	What are primary colour, secondary colour and complementary colour?	3	CO4	C3	L2
3A.	Draw the block diagram of a microwave oven? Briefly explain each block.	4	CO5	C1	L2
3B.	How CCI and ACI generated in cellular communication? What are methods to remove it?	3	CO4	C3	L2
3C.	What is pager? Explain with block diagram.	3	CO3	C3	L2
4A.	What are the different types of loudspeaker? Explain the working of crystal loudspeaker with the help of a neat diagram.	4	CO2	C1	L2
4B.	Explain monochrome picture tube with diagram	3	CO4	C1	L2
4C.	What is Dispersion? Explain with example.	3	CO3	C3	L2

5A.	A microphone has an output of -50 dB and is connected to a 0.5 Mega ohm resistance input of a preamplifier. The preamplifier has a gain of +45 dB .The signal passes through an equalizer with an insertion loss of -20dB and through a main amplifier with a gain of +70 dB. If the output to the speaker is 7W.Find the total power gain of a system and also find the input voltage to the preamplifier.	4	CO1	C3	L3
5B.	Explain the working of a dynamic (moving coil) microphone with the help of neat diagram.	3	CO1	C1	L2
5C.	Describe with equation (a) Reflection coefficient and (b) Standing wave ratio	3	CO3	C3	L2

M*--Marks, C*--CLO, A*--AHEP LO, B* Blooms Taxonomy Level