ALIAH UNIVERSITY
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Technical Corrigendum against the NIQ Ref. No. 038/AU/REG/NIQ/21-22 dated 22/03/2022 Sealed Quotations are invited from the bonafide and resourceful Contractors/Service Providers/Agents for Supply of Fiber Optic Trainer Kit for Glass and Plastic Fiber for Department of ECE, Aliah University, New Town Campus

Technical Corrigendum

FIBER OPTIC TRAINER KIT FOR GLASS AND PLASTIC FIBER	
Revised(rectified) Specifications	**Published(erratic) Specifications**
FEATURE : **• Single Board System having LASER Diode and LED with corresponding Detectors.** **• All components should be visible on top side of PCB.** **• Circuit diagram must give in the manual for tracing components on PCB.** **• All connecting functional blocks must be designed in a separate work area on the PCB to avoid damage of the electronic components.** **• Transmitter should consist of two components one is LASER DIODE with 1310nm wavelength and another fiber optic RED LED visible with wavelength of 660nm (SFH756V).** **• Allows finding VI and PI characteristics of Laser diode & LED.** **• Support detector characterization.** **• SC type connector interface for glass fiber.** **TECHNICAL SPECIFICATIONS :** **Source 1** **• Type : Laser** **• Central wavelength : 1310nm** **• Output power : 1.5mW** **• Receptacle housing : SC** **Source 2** **• Type : Visible LED** **• Central wavelength : 660nm** **• Receptacle housing : "Connector-less" style package** **Detector 1** **• Type : InGaAs PIN photo diode** **• Spectral Bandwidth : 1250nm ~ 1600nm** **• Bandwidth : 1.5 GHz** **Detector 2** **• Type : Silicon PIN photo transistor** **• Spectral Bandwidth : 400 nm ~ 1100nm** **• On Board Noise Generator available.** **• On Board PRBS Generator available.** **• LED Indicator for Bit Error Rate.**	Transmitter: 2 fiber optics LED Transmitter 01 Peak wavelength of emission 950nm Infrared Transmitter 02 Peak wavelength of emission 660nm Receiver : 2 photo detector Receiver 01 Photo transistor with responsivity of 80µÁ / µW Receiver 02 Photo detector with TTL logic output Modulation techniques Digital communication with pulse code modulation (PCM) using Motorola MC145502 CODEC chip Coding / decoding Manchester coding / decoding technique Noise generator White noise source output Amplitude 0 ~ 5Vpp PRBS generator 16-bit switch selectable Clock : 32 KHz, 64 KHz, 128 KHz Bit error rate measurement 10-bit counter with LED indication up to 255 count Multiplexing Time division multiplexing, 16 channels (64 Kbits/Sec) Frame marker Two 8-bit user selectable markers in alternate frames Data rate 1.024 M Bits / Sec Voice PCM 2 channels voice PCM with telephone handsets (A Law) Analog input : 1Vpp Analog bandwidth : 300 KHz FWHM spectral width: 100 nm PC to PC communication PC to PC communication using 660 nm and 950 nm LED through RS-232 standard RS-232 Port Type / USB Port Fiber optic cable Type :Plastic optical cable, Step index, Multimode Fiber length : 1 Meter, 3 Meter Switch Faults: 8 switch faults Test Points: approx. 45 test points Interconnections 2mm banana sockets Power supply GND, +5V, +12V, -12V

Fiber cable cable **• Type : Glass fiber single & multimode plastic Fiber** **• 1000un Plastic fiber**	

Sd/-
Registrar