

**SECOND YEAR KGCE EXAMINATION IN ELECTRONICS & COMMUNICATION ENGINEERING
ELECTRONICS & COMMUNICATION ENGINEERING-II (TRADE THEORY)**

MODEL QUESTION PAPER SET-1

(Time : 3 hours)

(MaximumMarks:60)

PART-A

(There should be at least 3 questions from each module)

(Maximum Marks: 20x1 Marks = 20 Marks)

- I. Answer the following questions by choosing the correct answer from the options given below. Each question carries 1 mark.

Q No	Question	Module
1	The term DTH stands for? a) Dedicated to Home c) Digital to Home b) Dish to Home d) Direct to Home	M 1.1
2	The C band that is used in Satellite communication ranges from a) 4 GHz -8 GHz c) 18 GHz - 26 GHz b) 8 GHz -12 GHz d) 26 GHz - 40 GHz	M 1.1
3	In reference to the geostationary satellite the altitude of the satellite should be a) 500-1500 KM c) 12000 KM b) 8000 -15000 KM d) 35786 KM	M 1.1
4	The devices which used for better dish alignment is called a) Digital Satellite Finder c) Digital signal detector b) Digital meter d) Set top Box	M 1.1
5	The technology for delivering video content, such as movies and television shows, directly to individual customers for immediate viewing from a centralized server is called a) Video On Demand c) DTH- HD b) DTH -SD d) Direct to Home	M 1.1
6	The international telecommunications standard to provide high speed data to cable TV system over its existing hybrid fiber-coaxial (HFC) infrastructure is called a) Video On Demand c) DOCSIS b) FTTH d) Direct to Home	M2.1
7	The process of jointing optical fiber cable is popularly known as a) Cable jointing c) Fiber matching b) Splicing d) Signal Peaking	M2.1
8	Which of the following term best describes Telephone, video, and data communication services operate within a common network a) FTTH c) Triple play services b) Multiplay Services d) DOCSIS	M2.1

9	A device used to provide space and protection for fiber optic cables spliced together a) OF Closure c) Set Top Box	b) Optical Modem d) OTDR M2.1
10	The devices that connect to the television and convert cable, satellite, or digital signals, or internet data, to TV signals so video content can be viewed on the television a) OF Closure c) Set Top Box	b) Optical Modem d) OTDR M2.1
11	The term UPS stands for? a) Uninterrupted Power Service c) Uninterrupted Project Service	b) Uninterrupted Power Supply d) Universal Power Supply M 3.1
12	Define the term Inversion? a) AC to DC conversion c) Small DC to Large DC Conversion	b) Small AC to Large AC d) DC to AC conversion M 3.1
13	Select the types of UPS? a) Static only c) Static and Dynamic	b) Dynamic Only d) Static, Dynamic and Hybrid M 3.1
14	The function of Rectifier component in UPS is? a) AC to AC conversion c) AC to DC conversion	b) DC to DC conversion d) DC to AC conversion M 3.1
15	Working Principle of OFF-Line UPS? a) Directly from mains without active conversion b) Directly from mains with active conversion c) Indirectly from mains without active conversion d) Indirectly from mains with active conversion	M 3.1
16	Online UPS utilizes the technology called? a) Double or Delta Conversion Technology c) Total Internal Reflection	b) Optimization d) Linearisation M 3.1
17	Solar Cell is a ? a) Photovoltaic cell c) Type of LED	b) Optical Source d) 3 Layer 2 Junction device M4.1
18	Solar cell is a ? a) PNP device c) PIN device	b) PN Junction d) NPN device M4.1
19	95% of Solar modules are composed of ? a) Ge c) Si	b) Galium Arsenide d) None of these M4.1
20	A single solar cell can generate a voltage output? a) 1 to 1.2 V c) 0.6 to 0.7 V	b) 0.7 to 0.8V d) 0.5 to 0.6V M4.1

PART-B

(There should be at least 2 questions from each module)

(Maximum Marks: 8x5 Marks = 40 Marks)

II. Answer *any eight* questions from the following. Each question carries marks.5 Marks.

Q No	Question	Module
1	Briefly explain the process of signal peaking using Digital Satellite Finder with the help of a diagram	M 1.1
2	Write short notes on Satellite Communication	M 1.1
3	With help of a diagram explain the different DTH Components?	M 1.1
4	Shortly discuss the process of OF Cable Splicing	M 2.1
5	Write short notes on FTTH ?	M 2.1
6	What is optical fiber modem and explain its working	M 2.1
7	Draw the block diagram and explain briefly UPS.	M3.1
8	Differentiate the 3 types of UPS.	M3.1
9	Draw the block diagram and explain briefly Inverter.	M3.1
10	List any 3 applications of UPS and any 2 applications of Inverter	M3.1
11	Draw and Explain Solar cell VI characteristics.	M4.1
12	Explain the step-by-step working of a Solar panel.	M4.1