

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2021.

Programme Name: B. Tech (ECE)	Semester : VII
Course Name : Broadband Access Technology	Time : 03hrs
Course Code : ECEG 3005	Max. Marks : 100
Nos. of page(s) : 01	
Instructions: <u>All Questions are Compulsory.</u>	

SECTION A

S. No.		Marks	CO
Q 1	Describe in detail direct Broadcast services.	4	CO4
Q 2	Describe various types of DSL.	4	CO2
Q 3	Compare FTTH, FTTB, FTTC.	4	CO3
Q4	Compare telephone modem, cable modem and Wireless access modem.	4	CO1
Q5.	Describe various wireless standards.	4	CO1

SECTION –B

Q6	Draw the circuit diagram realization for generation of 34 Mb/s data from base rate (2Mb/s).	10	CO1
Q7	Explain in detail DSL transmission techniques.	10	CO2
Q8	Describe with neat sketch LMDS and MMDS.	10	CO4
Q9	Explain in detail DOCSIS MAC upstream and downstream transmission frame structure.	10	CO3

SECTION –C

Q10	Explain in detail DOCSIS TDMA downstream and SCDMA upstream transmission.	20	CO3
Q11	Explain various types of cross talks and how signal transmission can be improved in DSL technologies through filters. Compare FEC of DSL with that of DOCSIS.	20	CO2.