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 **Roll No.**

**SHAMBHUNATH INSTITUTE OF ENGINEERING & TECHNOLOGY.**

**OPTICAL NETWORK REC-070**

**HOME ASSINMENT(2019-2020)**

**BRANCH: ELECTRONICS AND COMMUNICATION ENGINEERING**

 (a) Define fiberBragg grating.

(b) Define function of wavelength converter.

 (c) Explain the operation of 2x2 optical coupler with its transfer function.

(d) What is an optical network? Draw and explain the second generation of optical network.

.(e) Draw and explain the SONET/SDH frame structure with overheads .

 (f) Differentiate stimulated Raman scattering and stimulated Brillouin scattering.

(e) Draw and explain the functions of ATM model with its layers.

.(f)Differentiate WDM and FDM.

. (g) Explain the working of Acoustic tunable filter with its limitations.