

RTDC - Ch.3 - Grupo Mañana

[Volver a la Lista de Exámenes](#)

Parte 1 de 3 - Preguntas de 2 puntos **6.0 / 6.0 Puntos**

Preguntas 1 de 8	2.0
2.0 Puntos	

[Pulse para ver instrucciones adicionales](#)
The required value of the Optical Signal to Noise Ratio for Duobinary at 20 Gb/s after crossing 10 OADMs is 11.2 dB

Preguntas 2 de 8	2.0
2.0 Puntos	

For a WDM system carrying 10 Gb/s per channel, a channel separation of 100 GHz and a dispersion parameter of 17 psec/Km.nm the dominant source of nonlinearity is:

☐ A. XPM

☐ B. IFWM

☒ C. SPM

☐ D. FWM

Preguntas 3 de 8	2.0
2.0 Puntos	

IXPM at 40 Gb/s is responsible for:

☐ A. IXPM does not have effects above 10 Gb/s

☒ B. Timing jitter

☐ C. Pulse broadening

☐ D. Ghost pulses

Parte 2 de 3 - **3.0 / 3.0 Puntos**

Preguntas 4 de 8	1.0
1.0 Puntos	

Select all the following optical modulation technologies that always have chirp:

☐ A. Phase modulator

☐ B. Mach-Zehnder modulator

☐ C. Electro-absorption modulator

☒ D. Directly modulated laser

Preguntas 5 de 8	1.0
1.0 Puntos	

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DB after 5 OADMs (0.8 b/s/Hz) and a CD of 152 ps/nm and DGD of 6 ps requires and OSNR for BER 10⁻³ (40 Gb/s+7% FEC=42.7Gb/s) of 21.4 dB.

Preguntas 6 de 8	1.0
1.0 Puntos	

[Pulse para ver instrucciones adicionales](#)
NRZ-OOK after 10 OADMs and a CD of 52 ps/nm requires and OSNR for BER 10⁻³ (40 Gb/s+7% FEC=42.7Gb/s) of 20.2 dB.

Parte 3 de 3 - Preguntas de 0.5 puntos **1.0 / 1.0 Puntos**

Preguntas 7 de 8	0.5
0.5 Puntos	

To generate Duobinary we need to bias a Mach Zehnder Modulator at the quadrature point.

☐ Verdadero

☒ Falso

Preguntas 8 de 8	0.5
0.5 Puntos	

Signal-residual beat noise in WDM optical communications does cancel for adjacent channels, provided they are co-polarized with the channel under analysis.

☐ Verdadero

☒ Falso