No.
Date :

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1. a. $s(t) = (m(t).k_a + 1)\, c(t)$
$= (1 + k_a.m(t))\, 10 \cos(2\pi 600.10^3 t)$
$= (1 + k_a m(t))\, 10 \cos(2\pi 600.10^3 t)$

Termasuk jenis modulasi AM-DSB-FC

b. $P_m = \frac{(\frac{1}{2}mA_c)^2}{2R} = \frac{(mA_c)^2}{8R} = \frac{(k_a.m(t).A_c)^2}{8R}$

$P_s = \frac{(k_a.m(t).A_c)^2}{8R} + \frac{A_c^2}{2R} + \frac{(k_a.m(t).A_c)^2}{8R}$

$P_s = 2P_m + \frac{A_c^2}{2R}$

$P_s = 2P_m + \frac{10^2}{2.R} = 2P_m + 50$ Watt/Ω

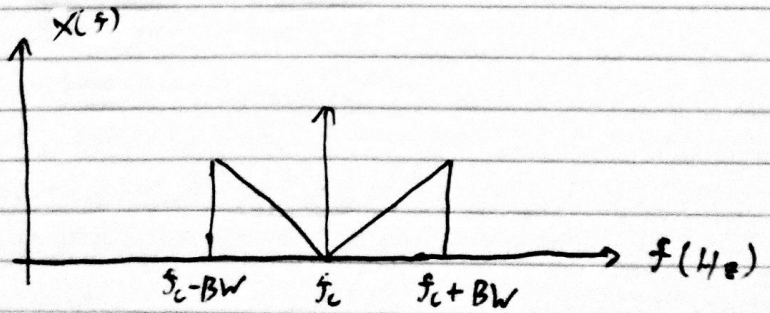
c. ~~$f_c - f_m = 300$ Hz~~
~~$600\times10^3 - f_m = 300$ Hz~~
~~$599,7$ kHz $= f_m$~~

c. $BW = 2.f_m = 3000 - 300 = 2700$ Hz

$f_m = 1350$ Hz

$f_b = 600.10^3 - 1350 = 598.650$ Hz
$f_a = 600.10^3 + 1350 = 601.350$ Hz

d.



$f_c = 600.10^3$ Hz
$BW = 2700$ Hz