No : Answer **Name : Solution**
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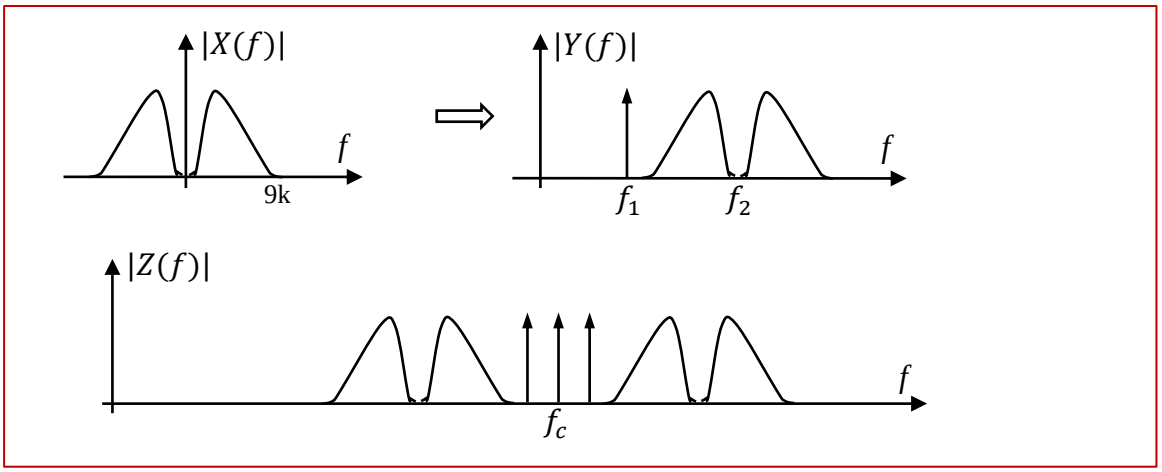
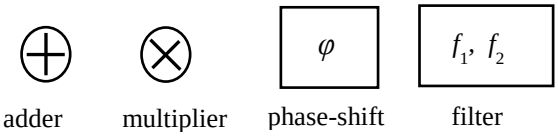
A baseband signal $x(t)$ is first frequency up-converted to f_2 using a carrier obtained by doubling f_1 where f_2=2f_1 and these two carriers are synchronous. f_1 carrier is added onto this up-converted signal. The resulting $y(t)$ signal is then used to DSB-AM modulate another carrier with frequency f_c to obtain $z(t)$ as shown in the figure (one sided spectrums are shown). **Note :** f_1= 10+d where d is the last digit in your student-id and $f_c \gg f_2$.



Draw the block diagram for conceptual **demodulation** of the final signal. Use only the blocks given below.



A solution: