1.1 CD

1.2 C

1.3 D

1.4 B

1.5 C

1.6 A

1.7 C

1.8 A

1.9 D

1.10 D

1.11 A

1.12 D

1.4: (B)
$$y[n] = -0.9 y[n-1] + 0.7 y[n-2] + ...$$

1.5: (C) from formula paper:

$$H(z) = K [PROD_i (1 - z_i z^{(-1)})] / [PROD_i (1 - p_i z^{(-1)})]$$

- 1.6: (B) was close but (A) better, because zero is not so dominant, and poles at low frequency. Giving +1p for (B) is not fair for those not replying anything (for reason or another).
- 1.8: LTI: only summing, multiplication by constant, delays. Median requires sorting.
- 1.9: (B) $T < 0.2 \text{ ms} \iff f > 5000 \text{ Hz}.$