

2.1

$$h(0) = 2^0 = 1$$

$$h(2) = 2^2 = 4$$

$$h(1) = 2^1 = 2$$

$$h(3) = 2^3 = 8$$

$$\therefore H[10] = 1 + 2 + 4 + 8 + \dots + 2^9$$

$$= 1 + 2 + 4 + 8 + \dots + 2^9$$

$$= 2^{10} - 1$$

$$= 1023$$