CFA® SAMPLE QUESTION – LEVEL I

Fixed Income

Q: You are considering the purchase of a three-year annual coupon bond with a par value of $1,000 and a coupon rate of 5.5%. You have determined that the spot rate for year 1 is 5.2%, the spot rate for year two is 5.5%, and the spot rate for year three is 5.7%. What would you be willing to pay for the bond now?

CORRECT ANSWER:

Ⓒ **$995.06**

To solve for this typical bond cash flow question. You need to find the present value of each cash flow using the spot rate that coincides with each cash flow.
(since the spot rate are not the same for each period)
The present value of cash flow 1 is: FV = $55; PMT = 0; I/Y = 5.2%; N = 1; CPT → PV = -$52.28.
The present value of cash flow 2 is: FV = $55; PMT = 0; I/Y = 5.5%; N = 2; CPT → PV = –$49.42.
The present value of cash flow 3 is: FV = $1,055; PMT = 0; I/Y = 5.7%; N = 3; CPT → PV = –$893.36.
The most you pay for the bond is the sum of: $52.28 + $49.42 + $893.36 = $995.06.

CFA Society Hong Kong Candidate Services

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Date of issue: 1 Jan 2024