

POKHARA UNIVERSITY

Level: Bachelor
Semester: Fall
Programme: BBA-BI
Course: Financial Institutions and Markets

Year: 2021
Full Marks: 100
Pass Marks: 45
Time: 3 hrs.

Candidates are required to answer in their own words as far as practicable. The figures in the margin indicate full marks.

Section "A"

Very Short Answer Questions

Attempt all the questions. [10×2]

1. What are the functions of financial markets?
2. Why central bank is known as banker of the banks?
3. If the nominal interest rate for the given year is 14.5 percent and the rate of inflation is 6 percent. What was the real rate of interest?
4. What is initial public offering?
5. What is stop limit order?
6. What is money market?
7. What are the off-balance sheet activities of commercial banks?
8. List the major assets of commercial banks.
9. The BR Fund, a closed-end investment company, has a portfolio of assets of Rs 1500 million. It has liabilities of Rs 5 million. It also has 160 million shares outstanding. Find the NAV of this Fund.
10. What are mutual funds? Briefly explain.

Section "B"

Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. What are the types of financial institution? Explain its classification in the context of Nepal.
12. What are the major monetary tools used by the central bank to influence the economy? How recent liquidity crisis problem can be solved by central bank?
13. A 91-days Treasury Bill of Rs. 100,000 face value has been issued by Nepal Rastra Bank at 5% discount yield. You want to buy that T-bills.
 - a) At what price you can purchase the bill?
 - b) What is the 91 days holding period return?
 - c) What is the bond equivalent yield of the bill?
 - d) What is the effective annual yield of the bill?

14. Mr. X purchased a stock of ABC Company for Rs 50 under margin purchase and paid 50% of the price as initial margin. The brokerage firm charges 10% interest on the loan. At the end of year one, ABC Company paid Rs 2 as dividend and price of stock increased to Rs 60.

Required:

- Holding period return.
 - Calculate HPR of Mr. X, if he purchased the stock on cash basis.
 - Calculate the HPR under margin basis and cash basis if the stock price is decreased to Rs 40 after the purchase.
15. From the following forward rates, compute the one-, two-, three-, and four-years spot rates.

Forward time period	Forward rate
$f_{0,1}$	13%
$f_{1,2}$	14%
$f_{2,3}$	15.5%
$f_{3,4}$	18%

16. Suppose XYZ bank holds Rs. 56 million in interest rate sensitive assets and Rs. 135 million in interest rate sensitive deposits and other liabilities.
- If it's non-rate sensitive liabilities and equity capita total Rs 62 million. What is company's total volume of non-rate sensitive assets?
 - What is the size of the company's interest sensitive GAP?
 - Calculate the ratio of interest rate sensitive assets to interest rate sensitive liabilities for the saving institution.
 - If the market interest rates rise from 6% to 6.25%, how much net interest income will the company lose?
17. Suppose a Life Insurance Company has 800,000 policyholders. Each of the policyholder has 35 years of age Each policyholder has been paid by Rs 2 million for life insurance policy. The company has to set an annual premium rate to charge to these policyholders so that it will have sufficient cash to pay off the beneficiaries of any policyholders who die this year. Suppose the expected death rate for 35 years is 4 per thousand. The company's analysts estimated that it would earn an average of 7 percent return on its portfolio investment in coming year.
- Calculate the mortality rate of 35 years aged policyholders.
 - How much the insurance company pays for the claim for the expected death?
 - How much the company charge to policyholders at the beginning of the policy period?

- d) What would be present value of expected claims?
 e) What would be the gross premium if it costs Rs 18.69 million to service the insurance need of 800,000 policyholders?

Section "C"

Case Analysis

18. Following information about the price and number of shares in the stock exchange are given to you. [20]

Stock	Number of shares	Price on Jan 1, 2020	Price on Dec 31, 2021
P	2000	700	740
Q	1500	835	790
R	3000	1055	1120
S	3500	390	425
T	900	345	580

- a) Compute the Price Weighted Index on January, 2020 and December, 2020 and percentage price change in 2021.
 b) Compute the Value Weighted Index for the year 2021.
 c) Compute the Equally Weighted Index for the year 2021 taking base year index as 100.
 d) Why stock market indexes are constructed?
 e) Does the NEPSE index (presently available in Nepal Stock Exchange Ltd) provides sufficient information for investment decision? Give your opinion.