



**THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED**

**Q.1. Answer the following short questions:**

**(6x5=30)**

- Define risk and elaborate its types
- What are types of financial markets
- Explain just in time (JIT) inventory management method
- Elaborate the process of capital budgeting process
- What are three parts/components of a cashflow statement?
- Managerial options in capital budgeting

**Answer the following questions.**

**(3x10=30)**

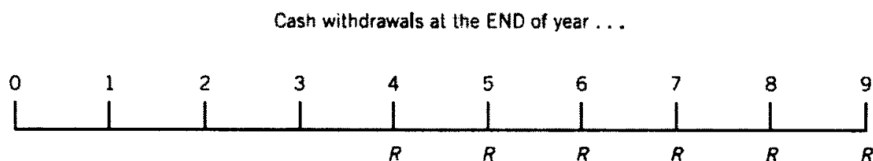
**Question 2:**

You plan to invest \$2,000 (onetime payment) in a pension fund account today at a nominal annual rate of 8%, which is expected to apply to all future years.

- How much will you have in the account at the end of 10 years if interest is compounded
  - annually?
  - Semi-annually?
- What is the effective annual rate, EAR, for both compounding period in part (a)? Interpret this.
- How much greater will your account balance be at the end of 10 years if interest is compounded semi-annually rather than annually?

**Question 03:**

Assume that you will be opening a savings account today by depositing \$100,000. The savings account pays 5 percent compound annual interest, and this rate is assumed to remain in effect for all future periods. Four years from today you will withdraw  $R$  dollars. You will continue to make additional annual withdrawals of  $R$  dollars for a while longer – making your last withdrawal at the end of year 9 – to achieve the following pattern of cash flows over time. (Note: Today is time period zero; one year from today is the end of time period 1; etc.)



How large must  $R$  be to leave you with exactly a zero balance after your final  $R$  withdrawal is made at the end of year 9?

**Question 04:**

BBA Company is considering the purchase of a new high speed widget grinder to replace the existing grinder. The existing grinder was purchased five years ago for \$60,000 and has been depreciated under 5-year property class of MACRS (Existing grinder don't have any book value). The new grinder costs \$105,000 and requires \$5,000 for insurance and carriage inward. The 5-Year MACRS depreciation system is applicable on the new grinder. The existing grinder can be sold for \$70,000 now without any other expense. The new grinder would provide before tax and before depreciation revenues of \$43,000 per year whereas working capital level will be increased by \$90,000. The salvage value of new machine is zero and corporate tax rate on company income and capital gains is 35%.

**Required:**

- Calculate after tax relevant initial, interim incremental and terminal cash flows.
- Depict on a time-line the relevant cash flows associated with the replacement project.
- Make a decision regarding the selection of the replacement project by using NPV and PI if discount rate is 12%