



# National Institute of Technology Goa

Programme Name: B.Tech.

End Semester Examinations, December 2022

Course Name: Management

Date: 09-12-2022 Duration: 3 Hours

Course Code: HS400 Time: 2.00-5.00 PM Max. Marks: 100

ANSWER ALL QUESTIONS

## SECTION A $(6 \times 5 = 30 \text{ Marks})$

- 1. Explain why managers are essential to organizations. Describe the factors that are reshaping and redefining the manager's job. why cush , all account different
- 2. Differentiate between a Cash book and a Ledger? Provide at least two examples for each
- 3. Explain in detail about accounting profit and economic profit. What are the key differences and importance?
- 4. Illustrate in detail the advantages and disadvantages of working capital.
- 5. Briefly describe on various stages of an accounting cycle. 8 ->
- 6. Distinguish between the sinking fund factor and the capital recovery factor

#### SECTION B (6 x 6=36 Marks)

- 7. Discuss activity ratios briefly. And with the given data, calculate the inventory turnover ratio and inventory holding days. [Cost of goods sold = 6, 80,400. Inventory at the start of period 2 = 23,000. Inventory at the end of period 3 = 33,000].
- Differentiate between permanent working capital and temporary working capital. Illustrate with the suitable figure under the following situations: a) Expanding Firm
  - 9. (a) A firm, ADG Pvt. Ltd., is about to employ capital equipment costing Rs. 500,000, and the salvage value is 50,000. The useful life of an asset is five years. Therefore, calculate the depreciation for capital equipment with the help of the double declining method.
    - (b) The machine cost is 6,80,000, and the salvage value is zero. The cash inflows or expected profit from the machine are 35000, 40000, 48000, 32000, 63000, and 65000 for the 1st to 6th year, respectively. Calculate ARR. = Average Annual profit est atime
  - 10. Consider the following two situations and alternatives and find out their choice.
    - a) Mr Sundaram is planning to retire this year. His company can pay him a lump sum retirement payment of Rs 2 00,000 or Rs 25,000 lifetime annuity, whichever he chooses. Mr Sundaram is in good health and is estimated to live for at least 20 more years. His required interest rate is 12%.
    - b) Mr Sundaram has a loan as well. He has been given a choice between incurring an immediate outlay of Rs 10,000 and paying Rs 2310 a year for five years (the first payment due one year from now) with a discount rate of 11%.

$$2310(1+0.11)^{5}$$
  
=  $2310(1.11)^{5} = 3892.48$ 

25,000 0.12

= 2,08,333.33

Docte	I tem	0	C	2/2	cash	25pos	25000
. 1/1	cash capital	100,000	060001	26/2	Cath Fee Evened	42,000	42 000
717	medovalpore .	35,000	35,800	3/3	Interest Roid Cash	6000	6000

11. Define 'Method Study. What are the objectives of the method study? Write down all the basic procedures involved in the Method study. SREDIM Soled, Record Examine

12. Enter the following business transaction of Mr Ahuia into a journ

Date	Description	amount	
1 <sup>st</sup> January 2021 7 <sup>th</sup> January 2021 25 <sup>th</sup> January 2021 2 <sup>nd</sup> February 2021 26 <sup>th</sup> February 2021 3 <sup>rd</sup> March 2021	Mr Ahuja Started the Business with cash Materials purchased from Mr Sahoo Goods sold for credit to Mrs Anitha Paid wages to their employees Cash Received from Mrs Anitha Paid interest	₹ 100,000 ₹ 35,000 ₹ 25,000 ₹ 42,000 ₹ 22,000 ₹ 6000	

Traditional
1) Pay bace
2) Post pay bace
3) ARR
13

) NPV 2) IRR

3) PI

# SECTION C (1x 10=-10 Makrs)

13. Differentiate between the traditional and modern methods of capital budgeting. For example, suppose a project costs 120,000 and is expected to generate cash inflow of 22000, 28000, 32000, 38000, and 42000 through 1 to 5 years, respectively. The discount rate is 12%. Then, calculate the project's viability using the NPV method and demonstrate if the project should be accepted or not.

## SECTION D (2x 12= 24 Marks)

- 14. Assume that today is the first day of 2020, and you need ₹ 2000 on the first day of 2024. A bank provides 7% compound interest on an annual basis.
  - a) How much do you have to deposit on the first day of the next year to have the balance above in your account as on the first day of 2024?
  - b) If you wanted to make equal instalments starting from the first day of 2021, how much do you have to deposit in each of the four years?
  - c) Suppose your father is decided to fulfil your dream by putting a choice in front of you. He can either pay a lump sum of ₹ 1400 on 1st January 2021, or he will make the payment which is calculated in part (b). Which one will be your choice here?
  - d) If you had only ₹ 1400 on January 2021, what interest should you have earned to have the minimum required amount in your account as on January 2024?
  - e) Now, instead of your father, your mother offers to give you ₹ 800 on the first day of next year. After that, you have to make six additional payments of equal amounts, and all of them are deposited in a bank which offers an 8% interest rate, compounded semi-annually. How much will the PMT be?

- 15. Christine Phillips plans and coordinates her company's sales management training program next spring. Christine has listed the following activity information for this project:
  - (a) Find all the paths and path lengths through this project network. Which of these paths is a critical path?
  - (b) Find the earliest times, latest times, and slack for each activity. Use this information to determine which of the paths critical paths are.
  - (c) It is now one week later, and Christine is ahead of schedule. She has already selected a location for the sales meeting, and all the other activities are on schedule. Will this shorten the length of the project? Why or why not?

Activity	Activity Description	Immediate Predecessors	Estimated duration
A	Select Location		2 Weeks 1 Week
B	Obtain keynote speaker	D	2 Weeks
	Obtain other speakers	B	2 Weeks
D	Make a travel plan for a keynote speaker	8	3 Weeks
E	Make a travel plan for other speakers	A	2 Weeks
F	Make food arrangements	A	1 Week
G	Negotiate hotel rates	C, G	1 Week
H	Prepare brochure		1 Week
I	Mail brochure	H DE JK	3 Weeks
J K	Take reservations Prepare handouts	C, F	4 Weeks

Jo Yaha nahi aa suha Vu End karuga.