BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT OF BANKING AND FINANCE

PROJECT MANAGEMENT (BS 407)

DURATION: 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Answer **TWO** questions from each section
2. All questions carry equal marks.
3. Start each question on a fresh page.
4. Use of scientific calculator allowed.
5. No cell phones in the examination room.

SECTION A

QUESTION ONE

Discuss the risks associated with delays in completing projects. **[25 marks]**

QUESTION TWO

The Critical Path Analysis/Method (CPM), the Programme Evaluation and Review Technique (PERT) and Gantt Charts are all scheduling techniques. They are all complementary rather than competitive scheduling techniques. Discuss. **[25 marks]**

QUESTION THREE

Evaluate the strategic role that projects play in an organization. **[25 marks]**

SECTION B

QUESTION FOUR

A project manager has been given the information Table 1 about a project;

Table 1: ACTIVITY PRECEDENCE

Activity	Duration (weeks)	Predecessors	Staff
A	3	--	2
B	2	--	3
C	5	A	3
D	4	B	4
E	3	B,C	4
F	2	D	3
G	8	E,F	2
H	1	G	3

Required:

a) Determine the Critical Path. (7)

b) Determine the slack time associated with each activity. (8)

c) The project has had a resource limit imposed. No more than four staff may be assigned during any period. What is the impact that this constraint has on the overall project duration and on the schedule showing when each activity starts and is completed. (10)

[25 marks]

QUESTION FIVE

Company ABC has $300 000 committed for projects and has to select from the projects identified in the table 2 below. You are also given that the cost of capital is 15%

Table 2: PROJECTS UNDER CONSIDERATION

PROJECT	INVESTMENT($)	IRR	DISCOUNTED CASH FLOWS ($) AT 15 %.
1	50 000	20%	116 000
2	120 000	18%	183 000
3	110 000	16%	147 000
4	130 000	15%	171 000
5	90 000	12%	103 000
6	180 000	11%	202 000

7	80 000	8%	66 000

Required:

a) Advise the company on the feasible investment combination. (15)
b) Assuming you are not given the cost of capital, what are the practical ways you can use to estimate it? (5)
c) Why is using the IRR not always the best approach? (5)

[25 marks]

QUESTION SIX

With the aid of practical examples, discuss the reasons why certain projects fail.

[25 marks

END OF PAPER