### Subject: Agri-Business Management Full Marks: 100

Course Code: MGMT 325 Time: 3 Hours

You are required to answer in your own words as far as applicable. Figures in the margins indicate full marks. **SECTION A: VERY SHORT ANSWER OUESTIONS (10X 1 = 10 MARKS)** 

Answer ALL questions.

- Q1. What is agriculture marketing?
- Q2. What are the sources of agriculture finance?
- Q3. What are quality parameters of agro- product?
- Q4. Give the meaning of tissue culture.
- Q5. Explain the meaning of floriculture?
- Q6. Clarify the meaning of bio-security.
- Q7. Enlist any four factors for crises management.
- Q8. List out three methods of cooling.
- Q9. Write down any four considering factors on packing.
- Q10. Give any two infrastructural constraints for fruit production development.

# SECTION B: SHORT ANSWER QUESTIONS (3 X 8 = 24 MARKS)

## Answer any THREE questions.

- Q11. Explain agri-business management problem in the context of Nepal.
- Q12. What is agricultural quality as well as productivity? Explain the measures for productivity increase quality product in agricultural industries.
- Q13. Give the meaning of ornamental plant. Explain its importance and scopes in Nepal
- Q14. Point out and elaborate the problems and prospects with respect to domestic and global marketing of fruits.
- Q15. Explain the post-harvest management factors on fruits production.

## SECTION C: LONG ANSWER QUESTIONS (2 X 13 = 26 MARKS)

Answer any TWO questions.

- Q16. What are the considering factors for management of fruit production technology for domestic and global market? Explain. Show the potentiality of fruit production development in Nepal.
- Q17. What are the management factors for growing and lying management of chicks? Also explain the crises and waste management with its components.
- Q18. Show the meaning of agri-business management. Write its problem in the context of Nepal as well as what the emerging trends in production, processing and marketing of agri-business product? Explain.

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Subject: Business Statistics - I Full Marks: 60

Course Code: MGMT 321 Time: 3 Hours

You are required to answer in your own words as far as applicable. Figures in the margins indicate full marks.

### SECTION A: VERY SHORT ANSWER QUESTIONS (10X1 = 10 MARKS)

### Answer ALL questions.

- Q1. List out the various methods of collecting primary data.
- Q2. What will be the value of median of a moderately asymmetrical distribution? If the mean and mode are 30 and 24 respectively.
- Q3. If n =10,  $\sum d = 10$  and  $\sum d^2 = 102$ , then find the standard deviation.
- Q4. If the correlation coefficient between X and Y is 0.6, the probable error of r is 0.0432, what will be the value of n?
- Q5. The regression coefficient of x on y is 0.32 and that of y on x is 0.73, find the correlation coefficient.
- Q6. Following are the marks in Statistics (X) and Account (Y) in an examination.

	Statistics	Account
Average Marks	50	65
Standard deviation	10	22

Correlation coefficient = 0.6

Find the marks in Statistics when marks in account is 80.

Q7. Evaluate the determinant.

- Q8. If  $A = \begin{pmatrix} 3 & 2 & 5 \\ 1 & -4 & -7 \end{pmatrix}$  and  $B = \begin{pmatrix} 1 & -5 & -3 \\ 4 & 2 & 6 \end{pmatrix}$ , find 2A+2B, if possible.
- Q9. Given:  $U = \{1,2,3,4,5,6,7,8,9,10\}, A = \{1,2,3,4\}, B = \{2,4,6,8\} and C = \{3,4,5,6\}, find (A B) \cap \overline{C}$
- Q10. A dice is thrown once; find the probability of getting a number less than 3.

### SECTION B: SHORT ANSWER QUESTIONS (3 X 8 = 24 MARKS)

Answer any SIX questions:

Q11. Calculate the lower and upper quartile, D<sub>5</sub>, P<sub>80</sub>.

Wages (Rs)	0-10	10-20	20-30	30-40	40-50	50-60
No. of	10	12	14	15	18	21
wor						
kers						

Q12. An analysis of monthly wages paid to workers in two firms A and B, belonging to the same industry, gives the following results: (8)

	Firm A	Firm B
No. of workers	500	600
Average Wage	1500	1550
Variance of distribution of wage	100	121

Find (i) Which firm pay larger wage bill? (ii) In which firm is there greater variability in individual wages? (iii) The average wage and variance of wage of all the workers of firm A and B taken together.

(4+4)

- Q13. Solve the following system of equations by using Cramer's rule. 3x - 4y = -30 and 4x - 3y = -5
- Q14. If  $A = \begin{bmatrix} 1 & 2 \\ 3 & 1 \end{bmatrix}$ , then verify that:  $A^2 2A 5I = 0$ , where 0 and I are 2×2 null matrix and Identity matrix. (8)
- Q15. Two fair dice is rolled at the same time. What is the probability that the faces turn up to show (i) a sum of 7 (ii) a sum of 8 or 9 (iii) a sum less than 6 (iv) face of 5 in the first die. (2+2+2+2)

### SECTION C: LONG ANSWER QUESTIONS (2 X 13 = 26 MARKS)

Answer any **TWO** questions.

Q16. A computer while calculating the correlation coefficient between two variables X and Y from 8 pairs of observations obtained the following results,  $\sum X = 562$ ,  $\sum X^2 = 39602$ ,  $\sum Y = 561$ ,

 $\sum Y^2 = 39815$ ,  $\sum XY = 39441$ .

It was however, later discovered at the time of checking that the computer had copied down two pairs as,

Х	Y	While the correct values were	Х	Y
76	56		67	65
76	86		67	68

- (i) Calculate the correct value of correlation coefficient
- (ii) Test whether the calculated correlation coefficient is significant or not.
- (iii) Find regression coefficient of X on Y.
- (iv) Find regression coefficient of Y on X.
- (v) Find regression line of Y on X.
- (vi) Estimate Y when X = 65.
- Q17. Define coefficient of variation. You are given the distribution of wages in two factories A and B.

Wages in Rs	50-100	100-150	150-200	200-250	250-300	300-350
No. of workers (A)	2	9	29	54	11	5
No. of workers (B)	6	11	18	32	27	11

State in which factory the wages are more variable?

(3+10=13)

(3)

(2)

(2)

(2)

(2)

(2)

(8)

Q18. A factory pays workers on piece rate basis and also a bonus to each worker on the basis of individual output in each quarter. The rate of bonus payable is as follows:

1 1	1,2
Output in units	Bonus in rupees
70-75	40
75-80	45
80-85	50
85-90	60
90-95	70
95-100	80
100-105	100

The individual output of a batch of 50 workers is given below:

	1								
94	89	87	84	85	83	97	88	97	83
78	92	88	80	75	72	75	81	84	76
	-						-	-	
88	92	95	93	83	98	101	86	80	86
93	85	99	82	77	87	82	81	83	80
91	98	87	89	71	80	72	90	103	82
-				-		-			-
	1								

Find:

i.Average bonus per worker for the quarter(3)ii.Total quarterly bonus paid to the whole batch(1)

ii. Total quarterly bonus paid to the whole batchiii. Average output per worker

iv. Median output

000

(3) (6)

## Subject: Computers in Management Full Marks: 60

Course Code: MGMT 324 Time: 3:00 Hours

You are required to answer in your own words as far as applicable. Figures in the margins indicate full marks. SECTION A: VERY SHORT ANSWER QUESTIONS (10X 1 = 10 MARKS)

### Answer ALL questions.

- Q1. Define computer.
- Q2. List out some hardware and software in a computer system.
- Q3. What do you mean by hardcopy and softcopy output?
- Q4. Define system software.
- Q5. What is TCP/IP?
- Q6. How does an email works?
- Q7. Define wave page.
- Q8. What is intranet?
- Q9. Explain the meaning of computer networking in brief.
- Q10. What is file management system?

### **SECTION B:** SHORT ANSWER QUESTIONS (3 X 8 = 24 MARKS)

### Answer any THREE questions.

- Q11. Explain the application of computer in management.
- Q12. What is the relationship between internet, intranet and extranet?
- Q13. Write the differences between e-commerce and e-business.
- Q14. Define operating system. List out its functions.
- Q15. What do you mean by file management? What are two concepts for file management?

### **SECTION C: LONG ANSWER QUESTIONS (2 X 13 = 26 MARKS)**

#### Answer any **TWO** questions.

- Q16. Describe first and second generation of computer with their features.
- Q17. What is LAN, MAN and WAN? Define each of them with their special features.
- Q18. Define Network Topology. Mention its types with suitable diagram.

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Subject: Introduction to Finance -I Full Marks: 60 Course Code: MGMT 323 Time: 3 Hours

You are required to answer in your own words as far as applicable. Figures in the margins indicate full marks.

### SECTION A: VERY SHORT ANSWER QUESTIONS (10X1 = 10 MARKS)

#### Answer ALL questions.

- Q1. What is agency relationship?
- Q2. Define the term annuity.
- Q3. Give the concept of cash conversation cycle.
- Q4. Find the present value of Rs. 400 per year for 5 years at 0% interest rate. (assuming ordinary annuity)
- Q5. Differentiate between compounding and discounting techniques.
- Q6. Write the formula of weighted average cost of capital.
- Q7. List out the types of assets management ratio.
- Q8. Rock Battery Corporation takes 24 days to convert raw materials into battery. The corporation allows its customers 40 days in which to pay for the batteries, and the corporation pays to its suppliers in 30 days. What is the cash conversion cycle of the corporation?
- Q9. If the annual requirement (A) is Rs. 338,000, purchase price per unit is Rs.6, carrying cost(c) is Rs. 20% of purchase price and ordering cost (o) is Rs.48, find the EOQ.
- Q10. What is safety stock?

### SECTION B: SHORT ANSWER QUESTIONS (3 X 8 = 24 MARKS)

#### Answer any SIX questions.

- Q11. Define financial management. Explain the nature and functions of financial management. (3+5)
- Q12. What is financial ratio? Explain the various limitations of financial ratios.
- Q13. The long term debt section of Surya Nepal Pvt. Ltd. Appears as follows:

9 <sup>1</sup> /4% Mortgage bonds	Rs. 2,500,000
$12\frac{3}{8}$ % Second mortgage bonds	Rs. 1,500,000
10 <sup>1</sup> /4% Debenture	Rs. 1.000.000

 $14\frac{1}{2}$ % Subordinate debenture Rs. 1.000.000

If the average earnings before interest and tax of the company is Rs. 1.5 million and all debt is long term debt, What is the overall interest coverage?

- Q14. If you have a choice of receiving Rs. 25,000 six years from now or Rs. 50,000 twelve from now. At what implied compound interest rate should you be indifferent between the two contracts? (8)
- Q15. a) Suppose the stock of Bheri Timber Corporation has beta of 0.75. The market risk (4+4) premium is 5% and the risk-free rate is 5%. Find the cost of equity.
  - b) Assume that Bheri's last dividend was Rs 1.50 per share, and the dividend is expected to grow at 8% indefinitely. The stock currently sells for Rs 40 per share. What is Bheri's cost of equity?

### SECTION C: LONG ANSWER QUESTIONS (2 X 13 = 26 MARKS)

Answer any **TWO** questions.

- Q16. Answer the following:
  - a) Explain the factors affecting the size of working capital.
  - b) State the motives of holding cash.

(2+6)

Q17. Western Electric Company's balance sheets for 1989 to 1988 are as follows. (in millions)

Assets	1989	1988	Liabilities & capital	1989	1988
Cash	Rs 21	Rs 45	Account payable	Rs 54	Rs 45
Marketable securities	0	33	Notes payable	9	45
Receivable	90	66	Accruals	45	21
Inventories	225	159	Total current liabilities	108	111
Total current assets	Rs 336	Rs 303	Long term debt	78	24
Gross fixed assets	450	225	Common stock	192	114
Less: accumulated	123	78	Retained earnings	285	201
Depreciation			Total long term capital	555	339
Net fixed assets	327	147			
Total	Rs 663	Rs 450	Total	Rs 663	Rs 450

Additionally, Western's 1989 income statement is as follow (in millions)

Sales	Rs 1365
Cost of goods sold	888
General expenses	300
EBIT	177
Interest	10
EBT	167
Taxes (40%)	67
Net income	Rs 100

Construct the statement of cash flow statement.

(6+3+4)

Q18. Suppose you are the manager of a company and you need to recommend management about investment in two mutually exclusive projects A and B. Both projects have equal initial investment of Rs 225,000 but differ in annual cash flow over five years of life. Assume that both projects are equally risky and required rate of return applicable is 12 percent. Following are the cash flows associated with the two projects.

Year	Project A	Project B
0	(Rs. 225,000)	(Rs. 225,000)
1	75,000	95,000
2	75,000	75,000
3	75,000	55,000
4	75,000	75,000
5	75,000	75,000

Calculate PBP, NPV and IRR for each project.

(3+5+5)

v	ct: Macro Economics Iarks: 60	Course Code: MGMT 322 Time: 3 Hours
You a	re required to answer in your own words as far as applicable. Figures in the margin	ns indicate full marks.
	SECTION A: VERY SHORT ANSWER QUESTIONS (10X 1 = 10	MARKS)
Answe	er ALL questions.	
Q1.	What is the meaning of macroeconomics?	
Q2.	Find the equilibrium wage in labour market with the help of following equations; $DL = 1000 - 50w$ and $SL = 200 + 100w$	
Q3.	Define seasonal unemployment in single sentence.	
Q4.	Write any two basic assumptions of classical theory of employment.	
Q5.	Compute the equilibrium level of income and consumption from the following equilibrium function $C = 500 + 0.8Y$ and autonomous investment (I) = 600	luations;
Q6.	Calculate the investment multiplier when mpc is 0.3.	
Q7.	Show the graphical sketch of flow of income and expenditure in two sector econo	
Q8.	Which type of the inflation is appropriate for economic progress of an economy?	
Q9.	Diagrammatically, represent the money market and product market equilibrium.	
Q10.	Enlist any two importance of budget.	
	<b>SECTION B:</b> SHORT ANSWER QUESTIONS ( $6 \times 3 = 24 \text{ M}$ )	ARKS)
	er any <b>Three</b> questions.	
Q11.	Explain the different types of macroeconomics with the help of figures	[8]
Q12.	Analyze and illustrate the circular flow of income and expenditure in three sector	economy. [8]
Q13.	Explain the Keynesian psychological law of consumptions	
Q14.	The saving function of an economy is estimated to be $S = -200+0.4Y$ where income are measured in billion. Autonomous investment in the economy is 1000 billion.	-
	a) Find the equilibrium level of income, consumption and saving.	[4]
	b) If saving increased by 50 billion, what is the new level of equilibrium income,	consumption and saving?[4]
Q15.	Discuss the role of central bank for economic regulation of an economy.	[8]
	SECTION C: LONG ANSWER QUESTIONS (2 X 13 = 26 MA	ARKS)
Answe	er any <b>TWO</b> questions.	
016	Define national income Calculate the gross domestic product (CDP) gross national p	maduat (CND) mat mational

Q16. Define national income. Calculate the gross domestic product(GDP), gross national product (GNP), net national income (NNP), national income (NI), personal income (PI) and disposable income from the following data: [2+2+2+2+2+1]

S.N	Items	Amount (Rs in Crore)
1	Wage and Salaries	1000
2	Mixed income	500
3	Rental income	200
4	Interest income	250
5	Profit	100
6	Net Indirect tax	450
7	Depreciation	50
8	Net factor income from abroad	800
9	Undistributed corporate profit	200
10	Corporate income tax	150
11	Transfer payment	120
12	Social security contribution	50
13	Personal tax	350

- Q17. Analyze the Hicks and Hansen model of income determination in two sector economy.
- Q18. What is inflation? Describe the various effects of inflation in the economy of Nepal.