

2nd Year (Sem-IV) BBA, University Examination, 2021
(1st/2nd Semester/Repeat/Supplementary/ Spl Supplementary/Old /Annual/Bi-Annual)

SUBJECT: STATISTICS FOR BUSINESS DECISIONS

Paper Code: MAN 401 (CBCS Syllabus)

Time: 2 hours

Full Marks: 100

Attempt all questions; each question carries equal marks.

IMPORTANT INSTRUCTIONS

Total time of exam is 3 hours, and this includes the submission of the answer script. Students will have to hand write the answers using plain A-4 paper and a blue/black pen. Student's Name, Class roll number (as mentioned in the list uploaded on the website) and Page numbers has to be mentioned on each page of the answer script.

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1.

a) Calculate the mean, median and mode for the following data

Monthly wages(in Rs thousand)	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
No of workers	1	4	10	22	30	35	10	7	1

b) Find out the missing frequencies for the following data, given that A.M. is 67.45 inches

Height (inches)	60-62	63-65	66-68	69-71	72-74	Total
No of students	5	18	f_3	f_4	8	100

c) Evaluate mode as a measure of central tendency.

d) State the relationship between mean, median & mode.

(10+4+4+2=20)

2.

a) Calculate the coefficient of correlation for X & Y for the following data.

X	65	66	67	67	68	69	70	72
Y	67	68	65	68	72	72	69	71

b) Calculate the regression lines for the following data and predict the value of Y when 'X' is 10.

X	1	2	3	4	5	6	7	8	9
Y	9	8	10	12	11	13	14	15	16

c) Calculate the Rank Correlation Coefficient for the following data

Candidates	A	B	C	D	E	F	G
Rank by Judge 1	2	1	4	5	3	7	6
Rank by Judge 2	3	4	2	5	1	6	7

(6+8+6=20)

3.

a) What is cost of living index number?

b) The data below show the percentage increases in price of a few selected food items and the weights attached to each of them. Calculate the Index number for the Food Group.

Food items	Rice	Wheat	Dal	Ghee	Oil	Spices	Milk	Fish	Vegetables	Refreshment
Weights	33	11	8	5	5	3	7	9	9	10
% increase in Price	180	202	115	212	175	517	260	426	332	279

Using the above Food Index and the information given below, calculate the cost of living index number.

Group	Food	Clothing	Fuel & Light	Rent & rates	Miscellaneous
Index		310	220	150	300
Weights	60	5	8	9	18

c) Discuss the different tests of Index number as suggested by Irving Fisher.

(1+14+5=20)

4.

a) Define the following term with simple examples – (i) Mutually exclusive events; (ii) Equally likely events; (iii) Exhaustive Events and (iv) Independent events

b) Three boxes of the same appearance have the following numbers of White and Black balls: BOX I contains 1 white and 2 black balls; BOX II contains 2 white and 1 black ball; BOX III contains 2 white and 2 black balls. One of the boxes is drawn at random and a ball is drawn randomly from it. The ball turns out to be white. What is the probability that BOX III was chosen?

c) Eight coins are thrown simultaneously. Show that the probability of obtaining at least 6 heads is $\frac{37}{256}$.

(8+6+6=20)

5.

a) Calculate the mean absolute deviation for the following

Weight (in Kgs)	60-62	63-65	66-68	69-71	72-74
frequency	5	18	42	27	8

b) Find the standard deviation from the following data

X_i	10	20	30	40	50	60
f_i	9	18	25	27	14	7

(Page 2 of 3)

- c) Define and discuss the different components of Time Series?
- d) A population consists of the four members 3,7,11 and 15. Consider all possible samples of size two which can be drawn with replacement from this population. Find the sampling distribution of sample means. Also find the mean of the sampling distribution.
(5+5+2+8=20)

2nd Year (Sem-IV) BBA, University Examination, 2021
(1st/2nd Semester/Repeat/Supplementary/ Spl Supplementary/Old /Annual/Bi-Annual)
SUBJECT: HUMAN RESOURCE MANAGEMENT
Paper Code: MAN 402 (CBCS Syllabus)

Time: 2 hours**Full Marks: 100****Attempt all questions; each question carries equal marks.**

IMPORTANT INSTRUCTIONS

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1.
 - a) "The challenge and the role of HR Department being what it is, it is strange that its status is not recognized and respected." Comment.
 - b) Can we say that 'without the right succession planning put to play in human resources, we build for the future without a future'?

[10+10=20]
2.
 - a) Do you agree that 'well managed diverse teams out perform homogeneous teams'? Give reasons for your answer. In this context explain the major reasons that have made diversity a challenge for today's organizations.
 - b) 'The value of a business is a function of how well the financial capital and intellectual capital are managed by human capital. You'd better get the human capital part right'. Discuss the management's role in helping HR professionals develop themselves to balance the competing demands made on them.

[12+8=20]
3.
 - a) Place yourself in the position of being the head of a service department. How can formally written job requirements help you manage your work unit?
 - b) Assuming you have to develop an HR plan for a new-generation private sector bank having branches in major Indian towns, prepare a blueprint for the plan.

[8+12=20]
4.
 - a) Peter Schutz said, 'Hire character. Train skill'. Discuss how effective training of the workforce helps the organization survive competition?
 - b) 'Hiring people is an art, not a science, and resumes can't tell you whether someone will fit into a company's culture'. Do you agree with the statement? Discuss.

[10+10=20]

- 5.
- a) 'The Trade Union Movement represents the organized economic power of the workers.....It is in reality the most potent and the most direct social insurance the workers can establish'. Do you agree? Justify your answer.
 - b) As the HR manager of your organization, what precautions would you take to make grievance handling process more effective?

[12+8=20]

2nd Year (Sem-IV) BBA, University Examination, 2021
 (1st/2nd Semester/Repeat/Supplementary/ Spl Supplementary/Old /Annual/Bi-Annual)
SUBJECT: FINANCIAL MANAGEMENT
Paper Code: MAN 403 (CBCS Syllabus)

Time: 2 hours**Full Marks: 100****Attempt all questions; each question carries equal marks.****IMPORTANT INSTRUCTIONS**

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1.
 - a) Calculate the Present Value of Rs.5200 deposited at the beginning of each year (i.e. annuity due), for 7 years at 9% interest, compounded annually.
 - b) Calculate the Future Value of Rs.6100 deposited at the end of each year (i.e. ordinary annuity), for 7 years at 9% interest, compounded annually.
 - c) If interest is paid at 12% per annum, calculate the effective annual rates if the interest is compounded semi-annually and quarterly.
 - d) A firm's capital structure and specific cost of capital (pre-tax) is given below. Compute the weighted average cost of capital, if its tax rate is 25%.

Debt	Rs.3,50,000	12%
Equity	Rs.4,00,000	15%

(5+5+5+5=20)

2.
 - a) A firm is considering the purchase of a machine which costs Rs.960,000 and has an estimated life of 10 years. The machine will generate additional sales of Rs.500,000 and incur increased operating expenses of Rs.275,000 per annum. Depreciation is on straight line basis, and salvage value at end of the 10th year will be zero. The firm's tax rate is 30%. Calculate the IRR of the machine.
 - b) An equipment costs Rs.15 lakhs and is expected to yield Rs.7.5 lakhs profit (PBDT) per annum for 10 years, after which its scrap value would be negligible. Working capital required at the end of the second year is Rs.3 lakhs, which would be fully released back to the company at the end of the eighth year. Assume straight line depreciation and a 25% tax rate. Calculate the NPV of the equipment if the cost of capital is 12%.

(10+10=20)

3.

- a) A firm's expected EBIT is Rs.900,000. It has issued Rs.2,500,000 debentures at 11%.
- If the cost of equity is 16%, find the overall cost of capital and the value of the firm according to the net income approach.
 - If the overall cost of capital is 13.5%, determine the firm value and cost of equity as per the net operating income approach.
- b) A firm has a total capitalization of Rs.3,000,000 comprising equity capital (Rs.10 a share). It is planning to raise additional funds of Rs.1,000,000 to implement a project. It can either raise the entire quantum by issue of shares, or raise entire amount by 10% debt. Calculate the indifference point EBIT and EPS, if the firm's tax rate is 30%.
- c) A firm sold 750,000 units at Rs.18 per unit. Its variable cost stood at Rs.13 per unit, while its fixed cost was Rs.2,250,000. It raised debentures of Rs.5,000,000 at 14% interest. Calculate the firm's operating, financial, and combined leverages.

[(5+5)+5+5=20]

4.

- a) The EPS (earnings per share) of a company is Rs.7 and the cost of capital is 13%. The company has the option of adopting dividend payout ratios of 25% and 75%. Compute the market price of shares as per the Walter model, if it can earn a return on investment of 15%, 13%, and 11% on its retained earnings.
- b) The EPS of a company is Rs.6 and cost of capital is 14%. For retention ratios of 60% and 40%, calculate the market price of shares as per Gordon's model, if the returns on investment are 16%, 14% and 12%.

(10+10=20)

5.

- a) Sapphire Ltd has given the following data for the year 2021 (all in Rs lakh). Calculate the Operating Cycle and Cash Conversion Cycle.

Sales: 200,000
COGS: 175,000

	<u>Opening</u>	<u>Closing</u>
Inventory	17,000	20,700
Accounts Receivable	17,500	16,700
Accounts Payable	17,000	17,400

- b) Mr. Shreyansh Chandak plans to acquire a business and seeks your advice regarding the working capital requirements in the first year. From the following estimates calculate the net working capital, allowing 10% for contingencies.

Average amount locked with stocks:	Rupees
Stock of finished goods and WIP	36,000
Stock of stores and materials	27,000

Average credit period given to customers:	
Local sales (5 weeks)	315,000
Outside the states sales (7 weeks)	950,000

Time available for payment:	
Purchases (6 weeks)	275,000
Wages (4 weeks)	525,000

(10+10=20)

2nd Year (Sem-IV) BBA, University Examination, 2021
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SUBJECT: TAX PLANNING

Paper Code: MAN 404 (CBCS Syllabus)

Time: 2 hours

Full Marks: 100

Attempt all questions; each question carries equal marks.

IMPORTANT INSTRUCTIONS

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1.

- a) Following are the particulars of Salary income of Mr. Mitra, who is employed in ABC Industries Pvt. Ltd. at Kolkata for the Previous Year 2020-21.

Basic Salary Rs.30,000 per month.

Bonus 20% of Basic Salary.

Dearness Allowance 10% of Basic Salary.

Gratuity (in service for 20 years) Rs.4,00,000.

Commuted Pension received Rs.1,00,000.

House Rent Allowance Rs.10,000 per month (Rent paid for Kolkata house Rs.8,000 per month)

Hostel Allowance Rs.2,000 per month (Mr. Mitra has one son)

Free Refreshment worth Rs.5,000 per month received.

During the year he paid Rs.2,000 as Professional Tax.

Compute Taxable income of Mr. Mitra for the Assessment Year 2021-22

- b) Explain various deductions from Gross Salary Income available under Section 16 of the Income Tax Act.

(10+10=20)

2.

- a) Mr. Soni (Aged 55 Years) furnished the following details of his income for the Previous Year 2020-21. Compute his Total Taxable Income and Tax payable for the Assessment Year 2021-22.

Particulars	Amount (Rs.)
Income from Business and Profession	2,00,000
Gross Income from Salary	8,50,000
Income from TV Game show	1,00,000
Short Term Capital Gain (Tax 15%)	90,000
LIC Premium paid	60,000
Medical Insurance premium paid for Self	20,000
PPF deposited with SBI	90,000
NSC purchased from post office	80,000
Contribution made to Prime Ministers Relief Fund	1,00,000

- b) Under Schedule VI certain deductions are allowed under section 80C to 80U. Explain deductions that are available under section 80D and 80G.

(10+10=20)

3.
a) One of the important features of GST is Input Tax Credit. Explain it with the help of supply chain showing GST applicable at different stages.

- b) "Calculating depreciation as per Income Tax Act is different from Accounting depreciation". Examine the statement highlighting any two-key feature of calculating depreciation as per Income tax act with the help of examples.

(10+10=20)

4.
a) Z, a foreign citizen came in India for the first time in India on 24 July, 2012. From 24 July, 2012 to 25 December, 2015, he was in India. On 25 December, 2015 he left for Japan. Again, he came to India on 5 May, 2017 and left India on 25 November, 2017 for USA. He again came back to India on 21 January, 2019 and continued to stay in India permanently. Determine his residential status for the Assessment Year 2019-20. During the year 2018-19, X earned income from business in USA controlled from India. Is the income taxable in India for the Assessment year 2019-20 and the reason behind it?

- b) "Tax planning is a legal way to reduce tax liability when compared to Tax evasion". Examine the statement with help of examples.

(10+10=20)

5.
a) "Tax Incidence in case of long-term capital gains is lower when compared to short term capital gains." Critically examine the statement with the help of examples.

- b) Y owns a residential house which is partly self-occupied and partly let out. It has 2 units: Unit 1 and Unit 2. While Unit 1 (covering 40% of the floor area) is self-occupied and Unit 2 (covering 60% of the floor area) is let out (rent being Rs 7000 per month, rent of 2 months could not be recovered). Municipal value of the property is Rs 130000, Standard Rent is Rs 125000 and fair Rent is Rs 140000. Municipal taxes is levied @ 14% which is paid by Y. Other expenses during the previous year 2018-19 being repair Rs 250 and interest on capital for constructing the property is RS 63000 (capital is borrowed before 1/4/1999). Calculate the income of Y for the assessment year 2019-20 on the assumption that the income from other sources is Rs 600000. Calculate the income tax payable if the deduction under section 80C is Rs 20000.

(10+10=20)

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SUBJECT: E-COMMERCE

Paper Code: MAN 405 (CBCS Syllabus)

Time: 2 hours

Full Marks: 100

Attempt all questions; each question carries equal marks.

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1.

ABCD International School wants to prepare grade card for all students. Marks in three different subjects need to be entered to the system for calculating grade. The following conditions are applied for generating grade.

Percentage	Grade
More than 90%	S
≥ 70 and ≤ 90	A
≥ 60 and < 70	B
≥ 40 and < 60	C
< 40	F

Write HTML code to do the following:

- a) Webpage for entering marks in three subjects.
- b) Java Script functions for calculating grade.
- c) Explain the working of the java script function.

(5+10+5=20)

2.

- a) Why is layered architecture important in data communication? Explain the functions of each layer of the OSI model.
- b) Critically analyze the difference between OSI model and TCP/IP model.

[(5+10)+5=20]

3.

- a) Explain the E-Commerce security environment with diagram. What are the features of the Internet that support E-Commerce transactions?
- b) Why are privacy and availability not ensured by encryption technique? Explain a transaction done on the Amazon platform with respect to the six key dimensions of E-Commerce security.

[(4+4)+(4+8)=20]

- 4.
- a) What are the vulnerable points in an E-Commerce transaction? How can they be secured? Differentiate between digital envelope and digital certificate.
 - b) How are SKE and PKE different? Name some renowned certification authorities. How is SSL helpful in credit card transactions?

[(2+3+4)+(4+3+4)=20]

- 5.
- a) Discuss the B2B business models with examples showing how they operate. How has EDI revolutionized the whole B2B supply chain? Give example.
 - b) Compare and contrast the traditional business and E-commerce in a garment business.
 - c) Define the key technologies for B2B E-Commerce.

[(6+4)+5+5=20]