Date :27 ${ }^{\text {st }}$ March, 2023

## NOTICE <br> B. COM (INVESTMENT MANAGEMENT)

ATKT Internal Examination Semester I April, 2023

## INSTRUCTIONS FOR THE STUDENTS HAVING ATKT IN INTERNALS:

1. Date of Submission of the Projects- $3^{\text {rd }}$ April, 2023 at $\mathbf{0 2 . 0 0} \mathbf{~ p m}$ in Classroom T3.
2. Project/ assignment has to be handwritten on A4 size paper or Foolscap paper. On top of every page student should write his name, Seat No. and Subject.
3. Student is expected to write the question followed by the answer.
4. On the date of submission there will be viva voce on the given questions. .If the student does not submit his/her assignment/project or does not give his viva voce then he will be declared as ABSENT.
5. Any submission after the above mentioned date and time will not be accepted and entertained under any circumstance.
6. Those students who had FILLED THE FORM \& PAID THE FEES and still have NOT been allocated questions in the following list, please send a mail along with attachment of fee receipt to bimsfcdept@dalmialionscollege.ac.in on or before $30^{\text {th }}$ March 202312.00 noon.

| Pavkoi. |  | Siaikar | *ancmel |
| :---: | :---: | :---: | :---: |
| Prof. Pankaj Jain | Prof. Durgesh Kenkre | Prof. Subhashini Naikar | Dr. Kiran Mane |
| (Coordinator) | (Exam convener) | (Vice- Principal, Degree SFC) | (I/c Principal) |

DI/R-IPS/EXAM/00

## Subject: Introduction Financial System

## Roll No. 144 KHAN FARID ZAHOOR

1. Write a note on Functions of a financial system
2. Write a note on Kinds of financial markets
3. Write a note on Kinds of financial institutions
4. Write a note on Meaning and features of financial regulators
5. Write a note on Evaluation of financial instruments

## Subject: Basics of Investment and Wealth Creation

## Roll No. 103 BHOSLE UNNATI GANESH

1. What is Investment? How it is different from savings and speculation?
2. What is investing and why it is necessary?
3. Mr. Sinha invested Rs $1,00,000$ in stock market. After 2 months he received a dividend amount of Rs 2,000 . He sold the shares after 8 months and received Rs $1,12,000$. What is the holding period return in this case?
4. Net Present Value vs Future Value.

## Roll No. 104 BILKHWAL DHARVI DILIP

1. Distinguish between Investments,Savings, Speculation?
2. Define Interest rate? Discuss the factors affecting the interest rate?
3. Mr. Sonu invested Rs $2,00,000$ in stock market. After 2 months he received a dividend amount of Rs 20,000 . He sold the shares after 8 months and received Rs $2,12,000$. What is the holding period return in this case?
4. Growing Annuities and Inflation adjusted Annuities

## Roll No. 111 GUPTA SONAL YOGESH

1. Explain the types of interest rate in detail with examples?
2. Explain SMART Goals or objectives in detailed manner?
3. Mr. Gupta (Age 59 years) received Rs $25,00,000$ as his retirement benefits. He invested this amount in Bank Fixed Deposit. He plans to withdraw the interest amount periodically. The interest rate offered is $9.5 \%$. The average inflation rate is $8 \%$. What is the Real rate of return?
4. Nominal Rate of Return vs Effective Rate of Return

## Roll No. 128 NISHAD KRITIKA JAINARAYAN

1. Financial assets VS Non- financial assets?
2. Debt management: Meaning, roles in investment and types .
3. Mr. Sumit (Age 49 years) received Rs $15,00,000$ as his retirement benefits. He invested this amount in Bank Fixed Deposit. He plans to withdraw the interest amount periodically. The interest rate offered is $9.5 \%$. The average inflation rate is $8 \%$. What is the Real rate of return?
4. Compounded Annual rate of Return (CAGR) vs Real Rate of Return after adjusting of Return

## Roll No. 132 SAYYED ARMAN ABDUL

1. Distinguish between short term vs long term debts, and mortgages .
2. Write short note on : In short answers pls try to cover all points.
3. Mr. Iyer invested Rs $1,00,000$ in a mutual fund scheme. After 4 years, he sold the mutual fund units and received Rs 1,35,000. Calculate Holding period return and CAGR?
4. Net worth and its components

## Roll No. 134 SINGH AMAN SANJEEV

1. What are financial statement analysis, discuss its use and types?
2. Discuss different types of business organisations with its advantages and limitations?
3. Mr. Gowda invests some amount in a bank fixed deposit. The interest rate offered is $9 \%$ pa, compounded quarterly. What is the effective annual rate in this case?
4. Total Assets - Net Worth and Financial Ratios

## Roll No. 137 YADAV RISHIKESH KAMLESH

1. Define Risk? Discuss all the types of market risks in detail?
2. Short term products vs long term products?
3. Mr Kuberan has total assets worth Rs 50 Lakh (including house property, gold, bonds, shares etc.,) and has an outstanding home loan amount of Rs 25 Lakh. He has taken a Term insurance life cover of Rs 30 Lakh. He earns an annual salary of Rs 5 Lakh. What is his Life insurance coverage ratio?
4. Debt to total assets vs savings Ratio

## Roll No. 143 VISHWAKARMA AMAN SHASHI

1. Investment and investment psychology?
2. Risk appetite and Risk tolerance.
3. The Balance Sheet of Punjab Auto Limited as on 31-12-2002 was as follows:

| Particular | Rs. | Particular | Rs. |
| :--- | ---: | :--- | :---: |
| Equity Share Capital | 40,000 | Plant and Machinery | 24,000 |
| Capital Reserve | 8,000 | Land and Buildings | 40,000 |
| 8\% Loan on Mortgage | 32,000 | Furniture \& Fixtures | 16,000 |
| Creditors | 16,000 | Stock | 12,000 |
| Bank overdraft | 4,000 | Debtors | 12,000 |
| Taxation: |  | Investments (Short-term) | 4,000 |
| Current | 4,000 | Cash in hand | 12,000 |
| Future | 4,000 |  |  |
| Profit and Loss A/c | 12,000 |  | $1,20,000$ |
|  | $1,20,000$ |  |  |
|  |  |  |  |

From the above, compute (a) the Current Ratio, (b) Quick Ratio, (c) Debt-Equity Ratio, and (d) Proprietary Ratio.
4. Debt to income Ratio v/s debt to financial assets

## Roll No. 144 KHAN FARID ZAHOOR

1. What is asset allocation. Discuss its types?
2. Explain all the types of asset allocation strategies with examples?
3. The Balance Sheet of Santa Auto Limited as on 31-12-2002 was as follows:

| Particular | Rs. | Particular | Rs. |
| :--- | ---: | :--- | ---: |
| Equity Share Capital | 40,000 | Plant and Machinery | 24,000 |
| Capital Reserve | 8,000 | Land and Buildings | 40,000 |
| 8\% Loan on Mortgage | 32,000 | Furniture \& Fixtures | 16,000 |
| Creditors | 16,000 | Stock | 12,000 |
| Bank overdraft | 4,000 | Debtors | 12,000 |
| Taxation: |  | Investments (Short-term) | 4,000 |
| Current | 4,000 | Cash in hand | 12,000 |
| Future | 4,000 |  |  |
| Profit and Loss A/c | 12,000 |  | $1,20,000$ |
|  | $1,20,000$ |  |  |
|  |  |  |  |

From the above, compute (a) the Current Ratio, (b) Quick Ratio, (c)
Debt-Equity Ratio, and (d) Proprietary Ratio.
4. Liquidity Ratios

## Roll No. 147 ANSARI MOHD AMAN ABDUL MALLIK

1. Wealth creation - its factors and principles.
2. Wealth protection and wealth erosion.
3. Mr Kuberan has total assets worth Rs 50 Lakh (including house property, gold, bonds, shares etc.,) and has an outstanding home loan amount of Rs 25 Lakh. He has taken a Term insurance life cover of Rs 30 Lakh. He earns an annual salary of Rs 5 Lakh. What is his Life insurance coverage ratio?
4. Annuities - Immediate and Deferred

## Subject: Introduction to Accounting - I

## Roll No. 102 BENDKE VEDAN VINOD

1. From the following data prepare a valued stock card for material ICE for the month of April, 2013 and value the closing stock by FIFO method:

| $01 / 04 / 2008$ | Opening Stock 100 units @ Rs. 15 per unit |
| :--- | :--- |
| $04 / 04 / 2008$ | Received 90 units @ Rs. 16 per unit |
| $07 / 04 / 2008$ | Issued 80 units |
| $11 / 04 / 2008$ | Received 200 units @ Rs 17 per unit |
| $14 / 04 / 2008$ | Issued 150 units |
| $21 / 04 / 2008$ | Received 20 units @ Rs. 25 per unit |
| $25 / 04 / 2008$ | Issued 100 units |
| $27 / 04 / 2008$ | Received 50 units @ Rs 16 per unit |

2. The Car mart company purchases a motor car from Autoriders company on a hire purchase agreement on January 1,2001 , paying cash Rs. 10,000 and agreement to pay further three instalments of Rs. 10,000 each on 31st December each year. The cash price of the car is Rs.37, 250 and the Autoriders company charges interest @ $5 \%$ p.a. The Car mart company writes off $10 \%$ depreciation on the reducing instalments system. You are required to prepare necessary ledger accounts.
3. Branches of accounting
4. Objectives of accounting

## Roll No. 117 KALYANKAR RUSHABH SANTOSH

1. Prepare bank reconciliation statement in the books of Ranbir Textiles as $31^{\text {st }}$ March, 2014.
2. Ranbir textiles cash book shows a bank balance of RS. 10,500.
3. A cheque of Rs. 540 issued to Alia has not been presented for payment.
4. A cheque of Rs. 1,200 sent to bank has not been collected.
5. A cheque of Rs. 400 deposited in the bank has been dishonoured
6. Bank paid Rs. 50 for fire insurance payment for which no entry was passed in the cash book of Ranbir textiles.
7. The bank had charged Rs. 10 as bank charges and Rs. 25 as interest.
8. The bank received dividend of Rs. 500 for which no entry was passed in the cash book of Ranbir textiles.
9. The Loksewa Transport Ltd. Purchased trucks from the Hindustan Motors Ltd., on Hire Purchase Basis. The cash price of the trucks was Rs.3,20,000. The amounts were payable as under

Rs. $1,00,000$ on the date of purchase i.e 1st January, 2001.
Rs. 80,000 on 31st December,2001
Rs. 80,000 on 31st December, 2002.
Rs. 80,000 on 31st December, 2003.
The Hindustan Motors Ltd. Charged interest @ 5\% p.a. on the unpaid amount. The purchasing company decided to write off as depreciation $20 \%$ on the diminishing balance each year. You are required to prepare necessary accounts in the books of Loksewa Transport Ltd.
3. Procedures for Issue of Accounting Standards
4. Accounting concepts \& conventions

## Roll No. 132 SAYYED ARMAN ABDUL

1. AS - 1: Disclosure of Accounting Policies-(a) Purpose (b) Areas of Policies
2. AS - 2: Valuation of Inventories (Stock)- (a) Meaning, Definition (b) Applicability
3. Enter the following transactions in the journal of Mr. Anand and prepare the ledger account of Ramesh and Rajesh.

2019
Aug. 1 Mr . Anand brought cash Rs. 50,000 and machinery worth Rs. 60,000 in the business.

Aug 5 Purchased goods from Rajesh on credit Rs. 5200.
Aug 6 He purchased office furniture Rs. 2000.
Aug 7 Bought stationery Rs. 400.
Aug 8 Sold goods to Ramesh for cash RS. 1500.
Aug 9 Received cash from Ramesh Rs. 600
Aug 13 He paid rent for the month of September Rs. 1300
Aug 15 He exchanged furniture for goods worth Rs. 700
Aug 16 Received from Rajesh Rs. 5000 in full in final settlement.
4. Explain any 4 Principles of Accounting.

## Roll No. 143 VISHWAKARMA AMAN SHASHI

1. What are the difference between Hire purchases and Instalments method
2. AS - 9: Revenue Recognition- (a) Meaning and Scope (b) Transactions Excluded
3. Accounting Transactions: Accounting Cycle
4. From the following particulars, calculate the quantity and value of stock on hand on $31^{\text {st }}$ Jan 2012 under FIFO method.

## Purchases

| Date | Quantity | Rate per unit |
| :--- | ---: | ---: |
| $04-01-12$ | 40 | 30 |
| $17-01-12$ | 60 | 28 |
| $22-01-12$ | 80 | 29 |
| $30-01-12$ | 100 | 26 |

Sales

| Date | Quantity | Rate per unit |
| :--- | ---: | ---: |
| $20-01-12$ | 50 | 35 |
| $25-01-12$ | 80 | 33 |
| $28-01-12$ | 20 | 34 |

The stock of material on hand on $1^{\text {st }}$ Jan 2012 was 50 units@ Rs. 25 each.

## Roll No. 144 KHAN FARID ZAHOOR

1. The Car mart company purchases a motor car from Autoriders company on a hire purchase agreement on January 1,2001 , paying cash Rs. 10,000 and agreement to pay further three instalments of Rs.10,000 each on 31st December each year. The cash price of the car is Rs.37, 250 and the Autoriders company charges interest @5\% p.a. The Car mart company writes off $10 \%$ depreciation on the reducing instalments system. You are required to prepare necessary ledger accounts.
2. International accounting standards
3. Accounting standards in India
4. Accounting Transactions: Accounting Cycle

## Roll No. 145 (OLD) TIWARI SHIVAMKUMAR SANTOSH

1. AS - 2: Valuation of Inventories (Stock)- (a) Meaning, Definition (b) Applicability
2. International accounting standards
3. The Car mart company purchases a motor car from Autoriders company on a hire purchase agreement on January 1,2001 , paying cash Rs. 10,000 and agreement to pay further three instalments of Rs.10,000 each on 31st December each year. The cash price of the car is Rs.37, 250 and the Autoriders company charges interest $@ 5 \%$ p.a. The Car mart company writes off $10 \%$ depreciation on the reducing instalments system. You are required to prepare necessary ledger accounts.
4. Procedures for Issue of Accounting Standards

## Roll No. 147 ANSARI MOHD AMAN ABDUL MALLIK

1. Prepare bank reconciliation statement in the books of Ranbir Textiles as $31^{\text {st }}$ March, 2014.
2. Ranbir textiles cash book shows a bank balance of RS. 10,500.
3. A cheque of Rs. 540 issued to Alia has not been presented for payment.
4. A cheque of Rs. 1,200 sent to bank has not been collected.
5. A cheque of Rs. 400 deposited in the bank has been dishonoured
6. Bank paid Rs. 50 for fire insurance payment for which no entry was passed in the cash book of Ranbir textiles.
7. The bank had charged Rs. 10 as bank charges and Rs. 25 as interest.
8. The bank received dividend of Rs. 500 for which no entry was passed in the cash book of Ranbir textiles.
9. The Loksewa Transport Ltd. Purchased trucks from the Hindustan Motors Ltd., on Hire Purchase Basis. The cash price of the trucks was Rs.3,20,000. The amounts were payable as under

Rs. 1,00,000 on the date of purchase i.e 1st January, 2001.
Rs. 80,000 on 31st December, 2001
Rs. 80,000 on 31st December, 2002.
Rs. 80,000 on 31st December, 2003.
The Hindustan Motors Ltd. Charged interest @ 5\% p.a. on the unpaid amount. The purchasing company decided to write off as depreciation $20 \%$ on the diminishing balance each year. You are required to prepare necessary accounts in the books of Loksewa Transport Ltd.
3. Objectives of accounting
4. Write a note on Bank Reconciliation Statement

## Subject: Business Communication - I

## Roll No. 144 KHAN FARID ZAHOOR

1. Impact of technological advancements on Communication
2. Explain Computers and E- communication Video and Satellite Conferencing
3. Explain Corporate Social Responsibility
4. Draft a Letter of Resignation
5. Explain Commercial Terms used in Business Communication

## Subject: Foundation Course - I

## Roll No. 143 VISHWAKARMA AMAN SHASHI

1. Explain population distribution according to religion, caste, and gender.
2. Explain concept of disparity and female foeticide.
3. Write a note on Fundamental Duties of the Indian Citizen
4. What are the Basic features of the Constitution
5. Write a note on Role and significance of women in politics

## Roll No. 157 (OLD) YADAV ANNU RAKESHKUMAR

1. Write a note on Local self-government in urban and rural areas.
2. Explain Main Body and Schedules of Constitution.
3. Examine the causes and effects of conflicts arising out of regionalism and linguistic Differences.
4. Write a note on inequalities faced by people with disabilities.
5. Write a note on multi-cultural diversity of Indian society.

## Subject: Business Economics - I

## Roll No. 128 NISHAD KRITIKA JAINARAYAN

1. Explain the concept of circular flow of income and expenditure in a three sector economy?
2. Explain the concept of circular flow of national income in a 2 sector economy with the role of savings.
3. Explain the concept of circular flow of national income in a 2 sector economy without the role of savings.
4. Discuss the psychological law of consumption.
5. What is meant by effective demand? Explain factors affecting Effective Demand.

## Roll No. 132 SAYYED ARMAN ABDUL

1. Elaborate factors affecting aggregate demand and aggregate supply.
2. Explain in detail the working of money multiplier.
3. Discuss the various factors affecting consumption function?
4. Explain the concept of multiplier and bring out various leakages of the multiplier?
5. Explain the Keynesian approach to demand for money?

## Roll No. 137 YADAV RISHIKESH KAMLESH

1. Explain effects of inflation?
2. Explain the objectives of monetary policy?
3. Explain the principle of sound finances?
4. Explain the burden of internal public debt?
5. Discuss the limitation of the FRBM act 2003?

## Roll No. 140 SHARMA HARIOM RAMESH

1. Evaluate Ricardian theory of comparative cost?
2. Explain Hecksher Ohlin theory of trade.
3. Explain Wiseman Peacock hypothesis of public expenditure.
4. Which are arguments in favour of protectionism?
5. Explain disadvantages of free trade.

## Roll No. 143 VISHWAKARMA AMAN SHASHI

1. Evaluate disadvantages of protectionism.
2. Explain Liquidity preference theory of Keynes.
3. Discuss the arguments of free trade?
4. Explain the measures to control deficit in the balance of payments?
5. Explain national income and its various concepts.

## Roll No. 144 KHAN FARID ZAHOOR

1. Discuss money supply and its constituents?
2. What is public expenditure explain in details?
3. What is public debt? Explain types of public debt.
4. What is monetary policy? Explain its instruments.
5. Define fiscal policy. What are its objectives?

## Roll No. 147 ANSARI MOHD AMAN ABDUL MALLIK

1. What is fiscal policy? Explains its instruments.
2. Explain various functions of money.
3. What is quota? Explain its types
4. Explain the concept of circular flow of income and expenditure in an open economy?
5. Explain the phases of trade cycle?

## Roll No. 145 SOLANKI TUSHAR SHANTILAL

1. What is monetary policy? Discuss its objectives in detail.
2. Explain the theory of multiplier?
3. Explain the Fishers equation of exchange?
4. Explain Cambridge equation of exchange.
5. Explain different types of foreign direct investments?

## Subject: Quantitative Techniques

## Roll No. 103 BHOSLE UNNATI GANESH

1. Write a note on Arithmetic and geometric mean
2. Find the present value of ₹ $40,00,000$ required 4 yrs. from now if the CI rate is $5 \%$.
3. Calculate arithmetic mean of the following data

| $\mathbf{X}$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 5 | 8 | 10 | 12 | 5 |

4. Find the regression equation ( x on y ) from the following data

| $\mathbf{X}$ | 12 | 15 | 20 | 23 | 23 | 25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{Y}$ | 5 | 6 | 8 | 9 | 10 | 13 |

## Roll No. 104 BILKHWAL DHARVI DILIP

1. Write a note on Frequency curve and frequency polygon
2. Find the amount for the ordinary annuity with periodic payment as $₹ 2000$ at the rate of interest $12 \%$ per annum, for 2 years compounded yearly. Also, state the capital invested.
3. Find the present value of ₹ $40,00,000$ required 4 yrs. from now if the CI rate is $5 \%$
4. Differentiate the function $y=x^{3} \log x-10 x e^{x}$, w.r.t. $x$.

## Roll No. 107 CHAVAN KOMAL DEEPAK

1. Write a note on Annuity Immediate
2. Divide 50 into two parts such that their product is a maximum.
3. If the total cost function is $C=4+3 x+x^{2}$. Find the cost when $x$ is 10 units. Also, find average cost when $x$ is 4 units.
4. Draw a frequency curve for the following data

| Height in cms (x) | $150-154$ | $154-158$ | $158-162$ | $162-166$ | $166-170$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. of children (y) | 10 | 12 | 20 | 10 | 8 |

## Roll No. 111 GUPTA SONAL YOGESH

1. Write a note on EMI
2. Find $\frac{d^{2} y}{d x^{2}}$, if $y=2 e^{x}-\log x+4^{x}$.
3. Find the value of $a$ and c using the following function:
i) If $f(x)=a x+6$ and $f(1)=11$. Find $a$.
ii) If $f(x)=a x^{2}+2 x+c, f(0)=-3, f(-1)=-4$. Find $a$ and $c$.
4. Calculate the mean deviation from median for the following raw data (individual series)

| Daily wages in $₹(\mathbf{x})$ | 60 | 70 | 85 | 95 | 110 | 120 | 135 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Roll No. 112 IDRISI MOHD SHOEB AKHTAR ALI

1. Write a note on Elasticity $(\eta)$.
2. The demand function for a commodity is given by $p=7-D$ and supply is given by $p=3+3 D$. Find the equilibrium price and the quantity.
3. Examine for maxima and minima of the function $f(x)=x^{3}-9 x^{2}+24 x+7$.
4. Find $\frac{d^{2} y}{d x^{2}}$, if $y=4 e^{x}+2 \log x-3^{x}$.

## Roll No. 113 JAIN JIYA JAGDISH

1. Write a note on Median, quartiles and deciles
2. A ball is rolled down in a hallway and its position is recorded at five different times. Use the data given in the table shown below to predict the location of the ball at 12 seconds (y on x ).

| Time (seconds) | 1 | 2 | 4 | 6 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Position (meters) | 9 | 12 | 17 | 21 | 26 |

3. A person borrowed ₹ 10000 at $12 \%$ interest per annum if he is supposed to return the money within 2 years find his EMI using Flat Interest Rate method.
4. Find the future value of $₹ 20$ lakh after 3 years if the rate is $8 \%$.

## Roll No. 117 KALYANKAR RUSHABH SANTOSH

1. Write a note on Present value and future value
2. Subodh received ₹ 12682.5 on maturity of his monthly recurring deposit kept with a bank at $12 \%$ interest per annum for 1 year. Using the ordinary monthly annuity, find the size of his monthly payments to the bank.
3. Calculate the standard deviation for marks of the students (individual series)

| Marks | 4 | 5 | 7 | 7 | 8 | 8 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4. Find the Karl Pearson's coefficient of correlation for the following data

| $\mathbf{X}$ | 10 | 30 | 20 | 40 | 50 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{Y}$ | 8 | 6 | 4 | 2 | 10 |

## Roll No. 127 NELAPUDI SHRIDHAR VENKATRAMAN

1. Write a note on Annuity and its types
2. Calculate the median height of a group of children.

| Height in cms | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of children | 7 | 9 | 12 | 20 | 25 | 15 | 7 | 4 |

3. Draw a less than ogive curve for the following data

| Weekly wages in ₹ $(\mathbf{x})$ | $40-45$ | $45-50$ | $50-55$ | $55-60$ | $60-65$ | $65-70$ | $70-75$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of workers (y) | 5 | 9 | 15 | 13 | 11 | 12 | 5 |

4. Find the future value of ₹ 30 lakh after 3 years if the rate is $10 \%$.

## Roll No. 132 SAYYED ARMAN ABDUL

1. Write a note on Regression analysis
2. Differentiate the function $y=\left(x^{3}-\sqrt{x}+\log x\right)\left(2 e^{x}+4^{x}\right)$, w.r.t. $x$.
3. If the demand function is $p=10-2 D$, find total revenue when $D$ is 3 units.
4. Draw a frequency polygon for the following data

| Height in cms (x) | $150-154$ | $154-158$ | $158-162$ | $162-166$ | $166-170$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. of children (y) | 10 | 12 | 20 | 10 | 8 |

## Roll No. 140 SHARMA HARIOM RAMESH

1. Write a note on Break-even point and equilibrium point
2. Find Mean, Median and Mode of the following distributions.

| Income in <br> Rs.. | $0-200$ | $200-400$ | $400-600$ | $600-800$ | $800-1000$ | $1000-1200$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of | 65 | 90 | 100 | 75 | 50 | 30 |

## workers

3. If RS. 12000 is invested $9 \%$ p.a. for 5 years and interest is compounded half yearly.

Find amount of Compound interest.
4. Find Q3, P13, D7, of the following distribution.

| Income in <br> Rs.. | $0-200$ | $200-400$ | $400-600$ | $600-800$ | $800-1000$ | $1000-1200$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> workers | 65 | 90 | 100 | 75 | 50 | 30 |

## Roll No. 143 VISHWAKARMA AMAN SHASHI

1. Write a note on Scatter plot
2. Find Quartile Deviation, and Coefficient of Quartile Deviation

| Sales | 10 | 12 | 14 | 16 | 18 | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> shops | 5 | 8 | 12 | 9 | 6 | 5 |

3. Find Mean, Median and Mode of the following data.

34,32,48,38,24,30,32,34,35,38,38
4. Find Q2, P25, D6, of the following distribution.

| Income in <br> Rs.. | $0-200$ | $200-400$ | $400-600$ | $600-800$ | $800-1000$ | $1000-1200$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> workers | 65 | 90 | 100 | 75 | 50 | 30 |

## Roll No. 144 KHAN FARID ZAHOOR

1. Write a note on Ogives and its types
2. Find Q1, P30, D5, of the following distribution.

| Income in <br> Rs.. | $0-200$ | $200-400$ | $400-600$ | $600-800$ | $800-1000$ | $1000-1200$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> workers | 65 | 90 | 100 | 75 | 50 | 30 |

3. Find Mean Deviation from Mean, Median, and Mode and also find Coefficient of mean Deviation.

| Marks in <br> Maths | $0-100$ | $100-200$ | $200-300$ | $300-400$ | $400-500$ | $500-600$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> students | 15 | 30 | 25 | 10 | 15 | 5 |

4. Find Quartile Deviation, and Coefficient of Quartile Deviation.

| Height (in Cms.) | 152 | 153 | 154 | 155 | 156 | 157 | 158 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. of Students. | 10 | 16 | 20 | 28 | 18 | 14 | 14 |

## Roll No. 147 ANSARI MOHD AMAN ABDUL MALLIK

1. Write a note on Sinking Fund
2. Find Q2, P12, D4, of the following distribution.

| Income in <br> Rs.. | $0-200$ | $200-400$ | $400-600$ | $600-800$ | $800-1000$ | $1000-1200$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> workers | 65 | 90 | 100 | 75 | 50 | 30 |

3. The Median of the Observation $8,9,11,14, \mathrm{X}+5, \mathrm{X}+7,18,20,22,25$ is 16 . Find the Value of X.
4. Find Mean, Median and Mode of the following distributions.

| Weight (kg) | 10 | 15 | 20 | 25 | 30 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of <br> patients | 5 | 15 | 35 | 30 | 15 |

## Roll No. 145 SOLANKI TUSHAR SHANTILAL

1. Write a note on Simple and Compound Interest.
2. Find Q4, P35, D2, of the following distribution.

| Income in <br> Rs.. | $0-200$ | $200-400$ | $400-600$ | $600-800$ | $800-1000$ | $1000-1200$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> workers | 65 | 90 | 100 | 75 | 50 | 30 |

3. A sum of money amounts to Rs. 9280 in 2 years and Rs. 10560 in 4 Years. Find the rate of interest and the principal Amount.
4. Find Quartile Deviation, and Coefficient of Quartile Deviation.

| Sales | 10 | 12 | 14 | 16 | 18 | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> shops | 5 | 8 | 12 | 9 | 6 | 5 |


| Pavkoi. |  | Sraikar | (anneme |
| :---: | :---: | :---: | :---: |
| Prof. Pankaj Jain | Prof. Durgesh Kenkre | Prof. Subhashini Naikar | Dr. Kiran Mane |
| (Coordinator) | (Exam convener) | (Vice- Principal, SFC) | (I/c Principal) |

## DI/R-IPS/EXAM/00

