Question Paper Set of

F.Y.B.I.M. Sem-I

Regular Exam

University of Mumbai

December, 2017

C0821 / C0573 INTRODUCTION TO ACCOUNTING I

HIIIII7 FYBIM EXPA

1

Time: 2 1/2 Hours

O 1 A) Fill in the blank

QP CODE: 23781 Total Marks: 75

Note: All questions are compulsory.
Figures to right indicate marks.

	1. Salary expenses account is account. (Real, Nominal) 2. Cash account is account. (Real, Nominal)	(08)
	3. Small expenses of daily routine business are recorded ina/c. (Petty cash, Cash) 4 is the official body in India that issues accounting standard from time to time. (ICAI, ICSI) 5. Annual Maintenance Charges of machinery is expenditure. (Revenue, Capital) 6. Cash Price = Hira purphase price.	
	6. Cash Price = Hire purchase price (Interest, Balance amount of assets) 7 method of stock valuation is suitable for perishable goods, (FIFO, Weighted Average) 8. Patent Right is asset.(Intangible, Tangible) 9 means the amount invested in the concern by its owner (Capital, Investment)	
	10 method of stock valuation gives higher profit during inflation. (Weighted Average, FIFO)	
	B) Rewrite the following statement and state whether true or false. (Any 7 out of 10) 1. Cash received on sale of old delivery vehicle is capital receipt. 2. Capital expenditure gives long term benefit.	(07)
	 3. Credit transactions are entered in cash book. 4. Accounting standard -2 deals with valuation of inventories. 5. Accounting standard -1 deals with disclosure of accounting policies. 	
	6. ASB stands for Accounting Standard Board. 7. Manufacturing Account is nominal in nature.	
	8. If capital receipts are shown as revenue receipts Profit & Loss Account will show higher profit. 9. In hire purchase, depreciation on asset is charged by hire purchaser. 10. In hire purchase Hirer and Hire Vendor are one and same.	
	Q.2 A) Journalise the following transactions:	(15)
	March'2015	
	Shri Rajan invested in business Rs 20,000. Opened an account with the Bank of India by depositing cash Rs. 10,000.	
	Purchased goods for cash Rs 1,000. Purchased Machinery for cash Rs 2,000.	
	9 Total Sales amounted to Rs 15,000 of which cash sales is Rs 2,500.	
	12 Withdrawn cash for personal use Rs 500.	
(C)	Received cash on account from Mr. Raghu Rs 1,500. Paid cash to M/s Chikhle Bandhu Rs 2,000.	
	Rent paid Rs 500 and a cheque of Rs 2,000. Rent paid Rs 500 and a cheque of Rs 2,000 received for commission from Mr. Raj. Goods sent to Mr. Raghu for Rs. 1,500	
1	30 Office salaries paid through bank Mr. A Rs 1,000 Mr. B Rs 800. Mr. C Rs 500	

OR

- B) Prepare bank reconciliation statement from the following information as on March 31st 2015 of Mr. Kishor.
 - 1. Bank balance as per cash book as on March 31st 2015 Rs 12,500.
 - 2. Cheques amounting to Rs 5,050 deposited in the bank but collected Rs 3,500 only.
 - 3. Cheques amounting to Rs 3,250 issued to the creditors out of which Rs 2,250 only presented for payments.

(TURN OVER

4. A debtor deposited cash directly in the bank Rs 8,500.

- 5. Bank credited Rs 1,000 for interest, but not yet entered in the cash book.
- 6. As per instruction, bank collected a dividend of Rs 1,550 through ECS

7. An cheque drawn Rs 900 recorded twice in the cash book.

(15

Q.3 A) From the following information calculate value of closing stock as on 30th April 2015 as per FIFO Weighted Average Method. Stock as on 1st April'2015 1000 @ 3

Purchases (Qty)	Sales (Qty)
01/04/2015 3000 @	2000 TOOLS TOO O
04/04/2015 1500 @	5 05/04/2015 1000 @ 8
07/04/2015 5000 @	3 15/04/2015 1500 @ 7
22/04/2015 2,000 @	000000

B) Mr. Akshay purchased a Machine from Amit Traders on 1-1-2011 for a cash price of Rs. 5,60,000 hire Rs.1,50,000 paid on signing of agreement and thereafter Rs.1,50,000 annually on 31st December for Depreciation to be provided at 20% on WDV Method. Prepare following ledgers in the books of Akshay (1: Machinery A/c, Amit Traders A/c and Interest A/c

Q.4 A) Vijay Chemicals has the following ledger balances as on 31st March 201

ay Chemicals has the following Particulars	Dr. Rs	Particulars	Cr. Rs
Factory shed		Net sales	10,84,000
Machinery		Miscellaneous Income	20,000
Furniture	50,000	Bad debts reserve	5,000
nvestments	10,000	Capital	1,90,000
Purchase of Material	8,50,000	Bank Joan	2,69,000
Freight on Material	42,000	Creditors	1,32,000
actory powers	25,000		
Salaries and wages	10000		
Factory	1,30,000		
Office	85,000		
Repairs and renewals	2,500		
Rent ant taxes	6,500		
Insurance	1,300		
General expenses	15,100		4
Debtors	1,35,000		
Stock as on 1-4-2014	038888		
-Material	1,30,000		Sales in
-Work in progress	7,500		
-Finished goods	80,500		
Total	17,00,000	Total	17,00,000

The following additional information is available:

- 1. Closing stock; Material Rs 2,00,000; WIP Rs 12,000 and Finished goods Rs 2,08,000.
- 2. Depreciation to be provided at 5 ½ % on factory shed, 10% on Machinery and 15% on furniture.
- 3. Repairs and rent, taxes are to be allocated between factory and office in ratio 3:2.
- 4. Reserve for doubtful debt to be provided at 4% on debtors.
- 5. Insurance premium covers a period of one month in advance.

(TURN

QP CODE: 2378

You are required to prepare Manufacturing, Trading and Profit & Loss A/c and Balance Sheet for the year end on 31st March 2015.

OR

B) From the following Trial Balance Prepare Manufacturing A/c and Trading, Profit & Loss A/c and Balance Sheet for the year ended 31st March'2017.

Particulars	\$ 75 75 8 15 5 Car	Debit.	Cred
Opening Stocks	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18/38/35/35	
Raw Material		30,000	
Work In Progress	8 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	5,000	
Finished Goods あんりょう		16,000	
Capital Solution of the Control of t		5353	72,00
Purchase of Raw Material		1,50,000	
Sales Sales		10.00.00	3,00,00
Purchase of Finished Goods		8,000	
Carriage Inward		4,000	
Provision for Bad debts			8,00
Wages		50,000	
Salaries (75 % Factory)		26,000	
Commission		3,000	
Bad debts		2,000	
Insurance		4,000	
Rent, Rates and Taxes (50 % Factory)	76. 14 W. W. W. C. S. B.	12,000	
Postage and Telegrams		2,800	
Tea and Tiffin		1,600	
Travelling and Conveyance (25% Factory)	18, 18, 19, 19, 19, 19, 19, 19, 19, 19, 19, 19	8,000	
Carriage outward	\$ 18 8 B	2,600	
Machinery	876.0	40,000	
Furniture (40% Factory)		5,000	
Debtors State of the State of t	70 m	60,000	
Creditors	*		50,00
	Total	4,30,000	4,30,00

2. Closing stock of Raw material, Work-in-progress and Finished Goods were Rs.40,000; Rs.12,000 and 8,000 respectively.

3. Provide 5 % reserve for doubtful debt.

4. Salary outstanding Rs. 2,400 and insurance was prepaid by Rs. 600

(15)

Q. 5 (A) Explain the nature and types of cash book.

(B) What are advantages of double entry book keeping?

(08) (07)

(C) Answer the following (Any 3 out of 5)

(15)

1. What are the merits and demerits of Accounting standard?

2. Define Inventory. Which items are excluded in the term inventory?

3. What are the characteristics of capital expenditure?

4. Write a note on Sales Method of accounting in Hire Purchase.

5. Write a note on Manufacturing Account.



Q. P. Code: 23975

Duration: 2 Hours & 30 Minutes

Maximum Marks: 75

Note: 1) All questions are compulsory, Subject to internal choice.
2) Figures to the right indicate full marks.

$Q \perp A)$	Fill in the Blanks (Any 8)	0
1)	is chairman of central board of directors of RBI. (a) Governor (b)	23
	Finance Minister (c) President	12
2)	The BSE Sensex consists of a basket of stocks.	190
	(a) 100 (b) 50 (c) 30	50
3)	is a way of reducing your potential financial loss or hardship, (a) Insurance (b) Venture Capital (c) Factoring	
4)	RBI was Established in the year (a) 1970 (b) 1935 (c) 1980	3.8
5)	has the statutory powers to regulate and promote the Indian Capital market. (a) Merchant banks (b) SEBI (c) RBI	
6)	Whenever a company issues new shares or debentures, it is known as (a) IPO (b) FPO (c) shares	
7)	is a contract which derives its value from the underlying assets.	
.,.	(a) Debt (b) Derivative (c) shares	
8)	is a popular instrument for financing working capital requirements of companies.	
	(a) Debentures(b) Commercial Papers (c) Equity Shares	
(9)	based services are related to the funds transfer from one place to	
	another place and one person to another person (a) Fee (b) market (c) Fund	
10)	means a bank included in the second schedule of the reserve	
	bank of India Act, 1934. (a) Schedule (b) Non-schedule (c) Co-operative	
() 1 B)	State whether the statement is True or False (Any 7)	0'
1)	If the lessor and the lessee are domiciled in the same country and equipment is imported from another country, it is called Export lease.	U
2)	Issuing shares in primary market is mandatory before listing on stock exchange	
3)	IDBI was established in the year 1990 under an Act of parliament.	
4)	IRDA is an apex statutory body for regulation and development of Insurance Industry in India	
(5)	The first development financial institution in india that has got merged with a bank is ICICI.	
6)	CP is not sold at a discount and redeemed at par.	
7). ``	Capital market deals with short term claims with a maturity of less than one	
8)	Bank is an institution who is handed over securities by the securities owners for safe custody.	
9)	Development banks are those banks which perform all kinds of banking functions like accepting deposits, advancing loans, agency functions etc.	
10)	The market regulator of Indian Capital market is SEDI	

Q. P. Code: 23975

Q 2 A B)	Explain the role and importance of financial system in the economy. Briefly explain the constituents of Indian financial system.	08
C) D)	Explain the phases of evolution of Indian S	07
	Describe the functions of financial system.	07
Q 3 A) B)	What is financial market? Explain its types. Elaborate the role of capital market in economic development.	08
C)	Define Intermediaries and explain its functions to improve economic efficiency.	07
D)	Explain Money market in Indian financial system.	08
Q 4 A) B)		07 08
C)	Describe the functions of compression by the	07
D)	Elaborate various types of fee based financial services.	08
Q 5 A) B)	Explain the role and functions of PDI	07
13)	What are the various Capital market instruments?	08
(C)	Write Short Notes (Any 3)	07
1)	Money market Instruments	15
2)	Powers of SEBI	13
3)	Treasury Bills	
4)	PFRDA CASAS	
5)	Corporate Bonds	

Q. P. Code; 24639

(Time: 2 1/2 Hours)

(Total Marks: 75)

Please sheck that you have the Correct Question Paper N.B.: All questions are compulsory

1. 'C' Of Communication	A. Facial Expressions	3)
2. Proxemics	B. Distance	
3. Kinesics	C.Courtesy	
4. Physical Barrier	D. Nearness	
5. General Agreement	E Language Barrier	5
6. Homonyms	F. Jargon	
7. Salutation	G. Sales Objective	
8. Persuasion	H. Outdoor Publicity	
9. Posters	L Dear Sir/Madam	
10. Technical Terminology	J: Consensus	
(B) State whether the following	statements are True or False (Any Seven): (7)	

- 2. Grapevine is a formal, primary channel of communication.
- 3. Oral communication is necessarily only face-to-face.
- 4. Silence is not a means of communication.
- 5. High morale boosts workplace performance.
- 6: When a Manager advises a subordinate it is Downward Communication.
- 7. Hearing Is by choice.
- 8. Sound files can be sent by SMS.
- 9 To motivate is to discourage a person.
- 10. The Inside Address is a compulsory part of a Business Letter.

II. (A) List the rules for effective Listening.	(7)
(B) Elaborate on the importance of Feedback in communication	(8)
Or	
(C) Elaborate on the importance of Body Language in communication.	(7)
(D) List and explain the advantages and disadvantages of Horizontal Communication in an organization.	(8)
III. (A) List and explain the advantages, disadvantages and common patterns of Grapevine Communication.	(15)
(B) Explain the term Business Ethics with special reference to Surrogate Advertising.	(15)
IV. (A) Draft a Letter of Application with Curriculum Vitae for the post of a Senior Clerk with Proconnect Productions Pvt. Ltd., Andheri West, Mumbai. Use the Full Block format.	(10)
(B) Ms. Mehvish Shah has been offered the post of a Senior Accountant with Synergy Productions Pvt. Ltd., Bandra West, Mumbai. Draft a Letter of Job Acceptance on her behalf. Use the Modified Block format.	(05)
Or -	
(C) Draft a Letter of Application with Curriculum Vitae for the post of Senior Manager at Sophya Films Pvt. Ltd., Lower Parel, Mumbai. Use the Complete Block format.	(10)
(D) Ms. Madhavi Singh has been working as Senior Accountant with Rajeshwari Industries, Nashik since the last seven years and would now like to resign from her post to seek a better career opportunity. Draft a Letter of Resignation on her behalf. Use the Semi Block layout.	(05)
V. Write Short Notes on the following (Any Three):	(15)
 Corporate Social Responsibility Socio-cultural Barriers to Communication 'You' Attitude The Advantages and Disadvantages of the Internet Personal Integrity as a Business Ethic 	

Page 2 of 2

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Q.P. Code:22472

B) State whether the following statements are true or false. (Any seven) The founder of Sikhism is Guru Govind Singh. ii) Eve teasing is a social violence against women iii) In India, the states are formed mostly on the basis of language. iv) Glaucoma can be detected during pregnancy. V) Communalism is opposed to secularism: vi) Regionalism can cause inter - state tension and confrontation. The Fundamental Duties in Indian Constitution are justiciable in nature. vii) The Indian constitution is the shortest written constitution of the world. viii) ix) The existence of political parties is not an essential requirement of a democratic country. X) The Constitution of India confess single citizenship. Explain the regional variation in India according to rural and urban characteristics. 15 Discuss various types of violence against women in Indian society. Define 'Communalism'. Discuss the features of communal conflict in India. What is Regionalism? What are the causes for growth of Regionalism? Discuss in brief salient features of the Indian constitution 15 Discuss the Fundamental Duties of Indian Crizes enshared in the Indian Constitution. What are the challenges to women's political participation in India? Suggest measures to overcome the challenges. Write short note on (Any three) 1) India as a multicultural society. ii) Inequalities against people with physical disabilities iii) Caste conflicts in India.

0.2

Q.3

0.5

iv)

V)

The Preamble to the Indian committee.

The Regional political parties in Incla.

[Time: 2:30Hours]

[Marks:75]

Please check whether you have got the right question paper.

N.B: 1. All questions are compulsory.

2. Figures to the right indicate full marks.

U.1 /	A) Choo	se the correct alternative. (any eight)
	i)	is the holy book of the Christians.
		a) Bible b)Quran c)Toran
	ii)	Indian society isin nature
		a) a)Tribal b) Urban c)Pluralistic
	iii)	The traditional Hindu society was divided into varnas.
		a) Three b) Four c) Six
100	iv)	Dowry harassment is a type of violence against women
		a) Social b) Sexual c) Domestic
	v)	is a serious form of conjunctivitis.
	6	a) Astigmation b)Glaucoma c)Trachoma
	vî) 🦠	Anti Hindi agitations took place in India.
		a) Northern b)Southern c)Western
	(vii)	arises out of religious fundamentalism.
		a) Communalism b) Casteism c) Secularism
	vili)	The word envisages the goal of a welfare state.
		a) Sovereign b)Seculer c)Socialist.
	(xlx)	Indian constitution has adopted Democracy. a) Parliamentary (b) Presidential c) Direct
	(x)	is the head of the Gram panchayat.
	CO SCIEN	(a) President c)Mayor c)Sarpanch

Page 1 of 5

Q.P. Code:00568

[Time: 2 Hours]

[Total Marks:75]

Please check whether you have got the right question paper.

N.B:

- 1. All Questions are Compulsory.
- 2. Figures to right indicate full marks.
- 3. Draw diagram wherever necessary.

Q.1 A) State whether the following statements are True or False. (Any Eight)

(08)

- 1) Micro economics deals with the analysis of national income.
- 2) Change in a non- price determinant of demand is shown by movements along the demand curve.
- 3) Cross elasticity of demand for substitutes is positive.
- 4) Choice of method is an important factor in demand forecasting.
- 5) An iso-quants never intersect each other
- 6) Internal economies of scale are advantages of large scale production.
- 7) In the long run a firm must cover all the cost.
- 8) In a monopolistic market a product has no close substitute.
- 9) Public enterprises may charge a price equal to their MC.
- 10) Pricing of a product should cover cost alone.

B) Match the following. (Any Seven)

Group 'A'

- i) Graphs
- ii) Business Economics
- iii) Inferior goods
- Relatively elastic demand
- Negative marginal return V) (
- vi) Explicit cost
- vii) MC = AC
- viii) Break-even point
- ix) Oligopoly
- Different price in different markets. x)

Group 'B'

- Positive sloped demand curve a)
- 6) EP<1
- 6) Declines as production increases
- d) Accounting cost
- Relative abundance of variables e)
- f) < Geometrical tool to study functions
- Third degree price discrimination g)
- h) High barriers to entry
- i)
- j) Application of economic theory and quantitative techniques.
- k) EP > 1
- First degree price discrimination 1)

Q.P. Code:00568

				Q.P. Cod	à :00568	
Q.2 A)	What is	s business economics? D	Discuss its scope.			(08)
B)	Explain the different types of cross elasticity of demand.					(0.7)
	OR OR					
C)	Given demand equation for apple as Qa= 200 - 10pa and price of apple is given in the below table					
			Price of Apple (in Rs.)	Quantity Demand		
			3 5 5 3	15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6
			5 8 8 8 9	18 27 6 6 C B B	23 6 8 8 8 8 8 8	
			75 5 5 5 5	0.0000000000000000000000000000000000000		
			29 6 1 O 3 N	9.8888 P. P. C.S.		
			1. 18 18 18 18 18 18 18 18 18 18 18 18 18	3.4.6.0.0.6.4.0.0		
:1	Questio					
i)		te quantity of demand f			83,000	(04)
ii)		emand curve for given p				(02)
iii)	Calcula	te price elasticity of den	nand between price Rs.5 and	IRS. 7	2000	(02)
D)	Explain	the survey methods of	demand forecasting,		Mike managaman	(07)
		(De le		College Sold State Sold	Commentaries resulting	
Q.3 A)	Explain	the concept of Iso-quar	nt. What are the types of Iso	quant?		(08)
B)	How th	e firm can maximize pro	ofit by choosing the least cos	t combination of facto	ors?	(07)
			ORCO	B. D. C. B. B. B. B. B.		
C)	A firm o	operating under perfect	competition is faced with fo	llowing cost schedule		
		Output	Price	Total cost	Toggi and all the	
		2221082	80 8 8 5 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	10	Zhopaudhams (Luli-)	
		100 0 20 0 C ST		5 6 12	BEEVE DESTRUCTION	
	. 50	08 0 83 6 8 V	888888888888	§ 15	price by the gold, in the land	
	67	820046008	\$1500 (0.505) \$160 (S.50	19		
		18 88 8 03 08 08 08 08 08 08 08 08 08 08 08 08 08	83000000000	24		1
· ·	20,000	800000000000000000000000000000000000000	18 18 18 18 18 18 18 18 18 18 18 18 18 1		4.50	
i) s		te TR, MR and MC with				(02)
S ill		the profit maximizing le				(02)
(iii)	Fixed co	ost is Rs.5. Find the TVC	schedule;			(04)
1000	(9) 47 (4)					
D)	Explain	in details break-even ar	nalysis.			(07)
0.4 A)	Fxplain	the distinguish between	n perfect competition and m	onopoly	CONTRACT RESPONDE	(08)
B)		•	m of a firm under monopoli			(07)
-/			OR	1.26.26.69.60		
C)	Explain	in detail kinked demand	d curve situation in oligopoly			(08)
D)			ertisement in monopolistic o		S. 26 Cold Cold Cold Cold Cold Cold Cold Cold	(07)
			C. F.			
Q.5 A)	Explain	the equilibrium of price	discriminating monopolist.			
B)	Define	'transfer pricing' and ex	plain how it affects a firm's	profits. 🔾 🔾 🛇 🔾 🔾		(07)
			OR SECOND			
Q.5		Short Notes. (Any Three		3 4 6 6 6 6 6 6 6 6	13 1 1 6 8 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	(15)
a)		ninants of demand	9,50,50,50,50,50,50,50,50,50,50,50,50,50,	120 25 8 8 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1		
b)		tional elasticity of dema	nd State Salar			
c)		nomies of scale	STOP RESIDENCE	939 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	26. 41. 62. C.	
d)		eadership		1, 2, 4, 4, 4, 8, 8, 0, 0, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,	6.50	
e)	Full cos	st pricing	JOS 4 18 8 18 18 18 18 18 18 18 18 18 18 18 1	C. C	1,50,50	
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The state of the s	(1) Y	

Quantitative Tech. BIM.

Q.P. Code:19966

[Time: 2 1/2 Hours]

[Marks:75]

Please check whether you have got the right question paper.

N.B:

- 1. All questions are compulsory carrying 15 marks each.
- 2. Figures to the right indicate marks of sub-questions.
- 3. Use of simple calculator is allowed

Q.1

- A) Fill in the blanks by choosing appropriate option. (any eight)
 - 1) Supply function gives the relation between supply and -
 - a) Price
 - b) Demand
 - c) Cost
 - d) None of these
 - 2) If the highest value in a group of observation is 90 and the lowest value is 50 then range is ---

 - b) 50
 - c) 60
 - d) None of these
 - 3) Median of 7, 8, 3, 4, 6 is ----
 - a) 6
 - b) 5
 - c) 5.6
 - d) None of these
 - 4) f(x) = 6 + 3x is ------ function.
 - a) Linear
 - b) Constant
 - c) Logarithmic
 - d) None of these
 - 5) In years Rs. 8,000 will amount to Rs. 8,840 at 3.5 % p.a. simple interest.
 - a) 2
 - b) 3
 - c) 4
 - d) None of these

- 6) An annuity in which the number of payments is fixed, is called
 - b) Fixed annuity
 - c) Limited annuity
 - d) Immediate annuity
- 7) At maxima, the second order derivative is a) Less than zero

 - b) Greater than zero
 - c) Zero
 - d) None of these
- 8) If $y = (x^2 4x + 3)$ then $\frac{dy}{dx}$ is
 - a) 2x 4
 - b) $x^3 4$
 - c) 4x + 3
 - d) None of these
- 9) If the nominal rate of interest is 9% per annum compounded quarterly, then the effective rate of b) Less than

 - c) Greater than
 - d) The 4th root of
- 10) For two regression lines x + 2y = 5 and 2x + 3y = 8, the mean value of x & y is
 - c) (1, 1)
 - d) None of these
- B) State whether true or false (any seven)
 - 1) If elasticity is between zero and one, the demand is inelastic.

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- 2) The coefficient of correlation 'r' always lies between -1 and +1.
- 3) Another name for quartile deviation is semi-inter quartile range.
- 4) An annuity is a sequence of payments made at successive time periods. 5) The present value is always more than future value.
- 6) Sample survey is less expensive
- 7) A statistical measure calculated for all units in the sample is called parameter. 8) Arithmetic mean is a positional average.
- 9) EMI stands for Equated Monthly Installments.
- 10) If $f(x) = e^x + 10x$ then f(0) = 11

Page 2 of 4

AD55F62224318ABD441CFBD76728A106

Q.2

Q.P. Code :19966

Find the standard deviation for the following data: 1.2

1 357		78% N	APAY S	. 08
8. C. C. C.	3 X C 3	10 O 10 1		
120.1/	10 14	10-160		

a)	Find the standard		80-100	100-120 120-140 140-160			
	Life in hours	60-80	80-100	80 30 10	S. C. S. C		
	C. Lac	20	60	00 0 0 1 1 2 50 A N 90' 00' 00' 00' 0	1330		
b)	No. of tubes	on coefficie	nt for the follow	19 22			

b)	Find the correlation coefficient			for the roll	110 22 2	
	T W	15	18	20	19 3 3 3 6	
	X	10	111	13	12	
	Y	10	11		600000000000000000000000000000000000000	

OR Find the regression of X and Y for the following data. 20

40 14 9 14 10 8 3

Find the rank correlation coefficient for the following data. 5 Rank 1

4 Rank 2 a) Find the derivative of yw.r.t x.

Find the derivative of
$$y = (x^4 + x^2 - 4) (\log x + e^x)$$

i) $y = \frac{x^4}{5^x + 3x^2}$

Q.3

ind the mode for the following data.	1200 400	400-500	500-600
Income in Rs. 100-200 200-300	300-400	220	80
No. of Persons 120 200	170	3	

OR

p) If the total cost (C) and total revenue (R) of a company are given by C = 20 + 4x and $R = 30 \times - x^2$. where x is output, find the output at which the profit is maximum. What is the maximum profit?

Find the median for the following data 180-200 160-180 140-160 120-140 100-120 Earning in Rs. 40 50 60 35 15

- No. of shops a) A TV is purchased for Rs. 5,000 cash down and Rs. 10,000 at the end of each month, for 4 months. Find the cash price of the TV if the payments include interest payments at 12% p.a compounded Q.4
 - monthly.
 - Find the maturity amount of a two year fixed deposit of Rs. 2,00,000 at 5% p.a. if the interest is compounded semi-annually.
 - p) Find the EMI using reducing balance method if a loan of Rs. 60,000 is to be returned is 3 equal monthly installment, the rate of interest being 12% p.a.

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	47	C= 3, $00,000 + 70x$. Find the break – even point.
Q.5	a) b)	Discuss the functions of statistics. Define correlation and types of correlation.
		Write short notes on any three of the following. 1) Merits and demerits of mode 2) Scatter diagram 3) Define annuity and its types 4) Methods of collecting primary data 5) Merits and demerits of standard deviation