SUBJECT : ECONOMICS [SET-II]

Time : 3 hrs.   M.M. : 90

General Instructions :

(i) All questions in all the three sections are compulsory.

(ii) Marks for questions are indicated against each.

(iii) Question numbers 1-2 and 12-14 are multiple choice questions. Each question is followed by four options. Choose the correct option and write it in your answer sheet.

(iv) Question numbers 3-6 and 15-19 are short answer type questions carrying 3 marks each. Answer to them should not normally exceed 60 words each.

(v) Question numbers 7-8 and 20 are also short answer questions carrying 4 marks each. Answer to them should not normally exceed 70 words each.

(vi) Question numbers 9-11 and 21-23 are long answer questions carrying 6 marks each. Answer to them should not normally exceed 100 words each.

(vii) Section-C consists of questions based on OTBA.

(viii) Answer should be brief and to the point and the above word limit should be adhered to as far as possible.

SECTION-A (Statistics for Economics)

Q1. If arithmetic mean of a distribution is 50 and variance is 25, then the value of coefficient of variation is : (Choose the correct alternative)   (1)

(a) 50%   (b) 10%

(c) 200%   (d) 100%

Q2. Draw a scatter diagram showing high degree of negative correlation. (1)

Q3. Represent the following data by percentage bar diagram: (3)

Items of expenditure	Family A (Expenditure in ₹)	Family B (₹) (Expenditure in ₹)
Food	50	10
Clothing	100	20
Housing	30	15
Fuel	20	5

OR

In the year 2014, out of a total of 2000 students in a college, 1400 were for graduation and the rest for post-graduation. Out of 1400 graduate students, 100 were girls. However, in all there were 600 girls in the college.

In the year 2015, number of graduate students increased to 1700, out of which 250 were girls, but the number of post graduate students fell to 500, of which only 50 were boys. Represent the above data in a tabular form.

(3)

Q4. Define 'Consumer Price Index'. State any two uses of consumer price index. (3)

Q5. Calculate mode from the following data : (3)

Less than	5	10	15	20	25	30	35	40
Cumulative frequency	7	16	27	55	85	107	114	119

Q6. (a) Calculate weighted arithmetic average from the following data :

X (variable)	10	20	30	40	50
W (weights)	2	3	4	6	5

(b) State any one property of arithmetic mean. (2+1=3)

(2)

Q7. Calculate spearman's coefficient of rank correlation from the following data : (4)

X	12	12	13	11	12	14	18	15
Y	23	28	26	28	27	29	30	20

OR

Calculate the coefficient of correlation by Karl Pearson's method. (Take A = 15 in X series and A = 30 in Y series) (4)

X	5	10	15	20	25
Y	40	35	30	25	20

Q8. Locate median graphically from the following data : (4)

Marks :	0-10	10-20	20-30	30-40	40-50	50-60
No. of students :	10	15	25	30	10	10

Q9. (a) Distinguish between 'primary data' and 'secondary data'.

(b) Describe in brief, three main characteristics of statistics in plural sense. (3+3=6)

OR

(a) What is 'direct personal interview method'? State its merits and limitations.

(b) Distinguish between random and non-random sampling. (3+3=6)

Q10. Calculate Arithmetic Mean and Standard Deviation of the given series : (Take A = 50) (6)

C.I. :	0-20	20-40	40-60	60-80	80-100
Frequency :	2	4	7	4	3

Q11. (a) Calculate mean deviation from median for the following data :

(3)

X (Variable)	2	6	4	8	14
f (frequency)	3	2	1	3	1

(b)　Calculate quartile deviation for the following data:

X (Variable)	75	125	175	· 225	275	325
f (frequency)	2	10	10	4	4	19

(3+3=6)

SECTION-B (Indian Economic Development)

Q12. It implies interaction of the economy relating to production, trading and financial transactions with other countries of the world : (choose the correct alternative)- (1)

    (a)　Liberalisation   (b)　Privatisation

    (c)　Globalisation   (d)　Disinvestment

Q13. State any two objectives of land reforms introduced in India after independence. (1)

Q14. List any two benefits of green revolution to farmers. (1)

Q15. How does RBI use bank rate and open market operations to correct the situation of inflation in India? (3)

Q16. Critically analyse the growth oriented approach adopted by government for alleviating poverty in India. (3)

Q17. 'British rule adversely affected the industrial sector in India'. Do you agree? Give reasons for your answer. (3)

OR

Were there any positive contributions made by the British in India? Discuss. (3)

Q18. How does investment in human capital contribute to economic growth? (3)

Q19. Distinguish between formal sector and informal sector establishments. (3)

(4)

Q20. Explain the need for state intervention in agricultural marketing. (4)

OR

What is meant by agricultural diversification? Discuss the need for promoting agricultural diversification in rural India. (4)

Q21. (a) Explain in brief, the strategies for sustainable development.

(b) Discuss the main drawbacks of health care system in India. (3+3=6)

Q22. (a) Write a short note on 'Agricultural Subsidy Policy' introduced in India after independence.

(b) Why was public sector given a leading role in industrial development during the planning period? (3+3=6)

Q23. (a) Explain the external sector reforms introduced in India since 1991.

(b) Give a brief account of fiscal reforms introduced in India since 1991. (3+3=6)

OR

(a) Why has the industrial sector performed poorly in the reform period?

(b) Why were reforms introduced in India after 1991? (3+3=6)

SECTION-C (OTBA)

Q24. Discuss some valid economic arguments in favour of 'One Child Policy' adopted by China in year 1978. (5)

Q25. The revoking of one child policy of China in 2015 will have a positive impact on the socio-economic growth of China'. Do you agree? Give reasons in support of your answer. (5)

TERM II EXAMINATION
CLASS- XI
INFORMATICS PRACTICES

TIME: 3HOURS   MM: 70
GENERAL INSTRUCTIONS:
- All the questions are compulsory.
- Answer the questions after carefully reading the text.
- Programming language – JAVA
- Relational Database - MySQL

Q1   : (a) Explain any two input devices?   [2]
(b) Define CPU and its parts. Draw CPU diagram.   [2]
(c) What is a Trojan Horse? How can it affect a computer system?   [2]
(d) What do you mean by BIOS?   [2]
(e) Differentiate between Compiler and Interpreter.   [2]

Q2.   a. Jennie is not clear about the difference between the following two statements: [1]
i. SELECT (9+5) * 5;
ii. SELECT (9+5) *5 FROM CUST;
Help her to understand the difference between these two statements.

b. What is the purpose of "order by" clause in MYSQL?   [2]
c. Rishu has created table with 12 rows and 9 columns. After testing he added 3 rows
   and deleted 4 columns. What is the degree and cardinality of the table.   [2]
d. Write the output of the following queries: [2]
    (i) SELECT ROUND(6666.666,-1);
    (ii) SELECT MONTHOFYEAR ("2016-03-01");

    (iii) SELECT POW(10,2)+ SQRT (16) ;
    (iv) SELECT INSTR ('RED SCHOOL JHABAR', 'A') ;
e. What is the purpose of column alias? Explain with an example.   [2]
f. Write MySQL command to create a new database "CPU"?   [1]

Q3:   a. While working with Netbeans, Mohan included a Listbox control which
contains student subject. Which method is used to get selected subject.   [1]
b. What is the use of if statement in JAVA.
c. Name two data types of JAVA that are used to store non fraction values. Explain with
an Example.   [2]
d. Explain logical errors with an example.   [1]
e. Differentiate between jComboBox and jListBox.   [2]
f. Write java code that takes value for principle amount , rate of interest and time from jTextfield1,
jTextfield2 and jTextfield3 and calculate simple interest and display in jTextfield4.
(simple interest= p* r*t/100).
g. What is the use of Documentation?   [2]
Q4.   (a) Write java code to print odd numbers from 1 to 20 using For loop   [1].
       1,3,5......
(b) Rewrite the following using 'do ...while loop' and check how many times will the

following loop get executed.
Int s=0;   [2]

```
for( int i=0 ; i<=55; i+=5)
        s+=i;
```

(c) Distinguish between '/' and '%' operators. [1]

(d) Find the errors in the following code and underlined the corrections made: [2]

```
int a,b==20;

do

{

a=b*2;

b=a/b

while b>40};
```

(e) Rewrite the code using if statement: [2]

```
switch(k)

{

    case 1:Day="Monday";

        break;

    case 2:Day=" Tuesday";

        break;

    case 3:Day=" Wednesday";

        break;

    default: Day="-";

}
```
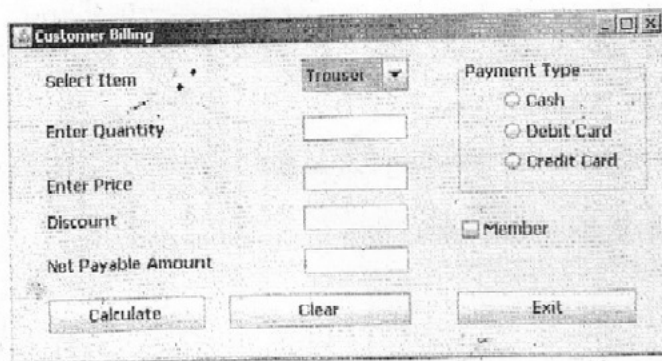
(f) Ms. Shelly works in a shopping mall. To calculate net payable amount, she has developed the following GUI in NetBeans. [2]

The shop accepts payments in three modes- Cash, Debit Card, Credit Cards. The discount given as per mode of payment is as follows. If the Member check box is checked then the customer gets an additional discount of 3% on net payable amount.

Mode of Payment	Discount
Cash	15%
Debit Card	10%
Credit Card	Nil

i) Write the code to make the textfields for Discount(txtDiscount) and Net Payable (txtNetPayable) uneditable.   [1]

ii) When Calculate button is clicked the discount and net payable amount is calculated as per the given criteria and displayed in discount and net payable text boxes.   [4]

iii) When Clear button is clicked all the text boxes and checkbox should be clear.   [1]

iv) Close the application when Exit button is pressed.   [1]

Q5(a). Write SQL commands for the queries (i) to (viii) based on a table EShop   [8]

RELATION : EShop

Code	Names	Company	Qty	City	Price
101	Maggi	Kissan	20	Rajkot	70.00
102	Biscuit	Pule	70	Mehsana	100.00
105	Jam	Maggi	60	Ahmedabad	95.00
109	Sauce	Nestle	50	Rajkot	86.00
110	Chocolate	Cadbury	53	Mehsana	209.00
107	Cake	Hide & Seek	20	Junagadh	380.00

(i) To display names of the items whose name ends with 'e' in ascending order of price.
(ii) To display code, item name and city of the items whose quantity is less than 100.
(iii) To display all items whose price value between 100 to 250.
(iv) To increase the price by 10% of all items.
(v) Add following record to the table.
     11, Pizza, Nestle,40,Rajkot,175.00
(vi) To add one more column totalprice with numeric(10).
(vii) To remove cadbury items from the table.
(viii) To display chocolate, jam and biscuit .

(b) i) Write all arithmetic operators.   [1]
     ii) What is the use of Rtrim() function?   [1]

Q6(a) Write MySQL command for creating a table "**MEMBER**" whose structure is given below:

[2]

Field Name	DataType	Size	Constraints
Mem_Number	Integer	4	Primary Key
Name	Varchar	20	
BirthDate	Date		
Fees	Integer	8	Not Null
Address	Varchar	20	
PhoneNo	Varchar	10	

(b) Remove the whole structure Member. [1]
(c) Write mysql command to see the structure of the table. [1]
(d) Differentiate between char and varchar. [2]
(e) Differentiate between now() function and sysdate() function. [2]
(f) Write SQL statements to do the following [2]
    i) Display the number of characters in the string:"Smart phones".
    ii) Display the year of the date 2 September 2015.

Q.7   (a)   Define E- Governance? Write any two e-Governance sites. [1]
      (b)   Define E- learning? Write any two e-learning sites. [2]
      (c)   Rahul works for the Customer Department. He wishes to create controls on form for the following functions. Choose appropriate controls from TextBox, Label, OptionButton, ChechBox, ComboBox, CommandButton and write in the third column. [2]

S. No.	Control Used to	Control
1	Enter name	
2	Enter gender	
3	Choose Country from a list of cities	
4	Submit form	

SUBJECT : ACCOUNTANCY (SET-I)

Time : 3 Hrs.   M.M.: 90

Instructions :

(i)   Marks for each question are indicated against it.

(ii)   All parts of a question should be attempted at one place.

(iii)   Show working notes clearly.

Q1.   Which qualitative characteristic of accounting information requires the use of common unit and common format of reporting?   (1)

Q2.   Why are Investors and Creditors interested in Accounting information?   (1)

Q3.   List any two advantages of Accounting.   (1)

Q4.   What is the main objective of setting Accounting Standards?   (1)

Q5.   Vijay, a consultant, during the financial year 2014-15 earned ₹ 4,00,000. Out of which he received ₹ 3,50,000. He incurred an expense of ₹ 1,70,000; out of which ₹ 40,000 are outstanding. He also received consultancy fee relating to previous year ₹ 45,000 and also paid ₹ 20,000 expenses of last year. Determine his income if he follows Accrual basis of Accounting.   (1)

Q6.   How would you classify cost of obtaining license to carry out a business?   (1)

Q7.   Explain briefly : (i) Readymade Software (ii) Customised Software.   (3)

Q8.   Distinguish between Balance Sheet and Trial Balance. (3)

Q9.   Journalise in books of Shri Murlidhar, Timber merchant

      (a)   Received a cheque from J. Peterson ₹ 5,450. Allowed him discount ₹ 150. Cheque is immediately deposited in Bank.

      (b)   Returned goods to Sudershan of value of ₹ 350.

(c) Issued a cheque in favour of M/s Karanvir Timber Co. on account of purchase of timber of ₹ 7,500. (3)

Q10. Distinguish between Receipts and Payments A/c and Cash A/c on following basis : (3)

(a) Period (b) Institutions

(c) Format

Q11. (a) Calculate closing stock from the following details :

Opening stock ₹ 20,000

Cash sales ₹ 60,000

Credit sales ₹ 40,000

Purchase ₹ 70,000

Rate of Gross profit on cost $33\frac{1}{3}$ %

(b) Define Deferred Revenue Expenditure. (2+1=3)

Q12. Give any three factors affecting choice of selection of an accounting software. (3)

Q13. From the following information of a Not-For-Profit organisation, show the 'Sports material' item in the 'Income and Expendiure Account' for the year ending 31st March, 2009 and Balance Sheets as at 31st March, 2008 and 31st March, 2009 :

Particulars	31.3.2008 (₹)	31.3.2009 (₹)
Stock of sports material	2,200	5,800
Creditors for sports material	7,800	9,200
Advance to suppliers for sports material	15,000	25,000

Payment to suppliers for the sports material during the year was ₹ 1,20,000, there were no cash purchases made. (4)

Q14. (a) Mohan, the owner of business receives an order for supply of goods worth ₹ 2,00,000. He has also received ₹ 25,000 against this order. Mohan wants to record it as a sale. Is Mohan correct in doing so? Explain briefly the principle involved.

(2)

(b) R Ltd. purchased 500 sq. metre land for ₹ 1.5 crore to build a factory. At the end of year, the market value of land was ₹ 1.35 crore. R Ltd. treated ₹ 15 lakh as loss and recorded the land at ₹ 1.35 crore. Is it a correct treatment? Explain briefly the principle involved. (2+2=4)

Q15. Hari maintains his books of account on 'Single Entry System'. His books provide the following information :

	1 April, 2015	31 March, 2016
Furniture	200	200
Stock	2,800	3,050
Sundry Debtors	2,100	3,400
Cash	150	200
Sundry Creditors	1,750	1,900
Bill receivable		300
Loan taken		500
Investments		1,000

His drawings during the year were ₹ 1,500. Additional capital introduced ₹ 1,000. Depreciate furniture by 10% and make a Provision for Doubtful Debts @ 10% on Debtors. Prepare the Statement of Profit and Loss for year ending 31 March, 2016. Also, prepare Statement of Affairs for the years ending 31st March, 2015 and 31st March, 2016. (4)

Q16. Explain any four advantages of computerised accounting system. (4)

Q17. (a) Ram Jindal has a policy to provide 10% job reservation for children of employees. He is also running a co-educational English medium school for children of employees of company and for residents of nearby area. Indicate the values involved in the aforesaid policy.

(3)

(b) Ganesh Kumar is engaged in manufacturing cycles. He decided to take group insurance policy for its employees. Terms of policy include free hospitalisation and re-imbursement of all medical expenses. Indicate the values involved in this decision of Ganesh Kumar. (2+2=4)

Q18. On 31st March, 2012, the bank balance as per Rajesh Chauhan's Cash Book was ₹ 17,280 Debit. On comparing the Cash Book with Pass Book following differences were found :

(i) Cheques for ₹ 8,400 sent for collection have not been cleared by the bank so far.

(ii) Cheques issued but not yet presented for payment ₹ 5,600.

(iii) There is a debit of ₹ 80 in the Pass Book for Bank charges but not recorded in the Cash Book.

(iv) Bank has credited ₹ 240 for interest in the Pass Book but these are not recorded in Cash Book.

(v) A customer deposited ₹ 2,000 direct in the Bank but these are recorded only in Pass Book.

(vi) According to standing orders of Rajesh Chauhan, the Bank has made the following payments by debiting his account :

(a) Club fees ₹ 500

(b) Life Insurance Premium ₹ 2,500

These were not recorded in Cash Book. Prepare a Bank Reconciliation statement as on 31st March, 2012. (6)

Q19. Fill up the missing information/figures in the following Journal entries. (6)

Journal of A

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
2015 Jan. 1	.... Dr. .... To .... (Goods sold to B)		....	....

(4)

Jan. 1	....	Dr.	....	
	To			....
	(Acceptance received for three months)			
Feb. 4	....	Dr.	....	
	....	Dr.	....	
	To			40,000
	(Bill discounted from Bank @ 18% p.a.)			
....	B	Dr.	....	
	To Bank A/c			....
	(Bill dishonoured and noting charges paid by bank ₹ 200)			
April 4	B	Dr.	....	
	To Interest			....
	(Interest receivable from B on amount due from him @ 12% p.a. for 2 months)			
April 14	Bill Receivable A/c	Dr.	....	
	To B			....
	(New acceptance received for 2 months)			
....	Cash A/c	Dr.	....	
	To Bill receivable A/c			....
	(The amount of bill received on due date)			

Journal of B

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
2015				
....	....	Dr.	....	
	To			....
	(Goods purchased from A)			

		Dr.	....	....
....	.... To .... (Acceptance given for three months)		....	
....	.... To .... (Bill dishonoured and noting charges payable ₹ 200)	Dr. Dr.	....	....
....	.... To .... (Interest payable for two months)	Dr.	....	....
....	.... To .... (New acceptance given)	Dr.	....	....
....	.... To Cash A/c (Amount to bill paid on due date)	Dr.	41,004	41,004

Q20. On 1st April, 2008, Z Ltd. purchased machinery for ₹ 1,20,000 and on 30th September, 2009, it acquired additional machinery for ₹ 20,000. On 30.06.2010 one of the original machine (purchased on 1.4.2008) which had a cost of ₹ 5,000 was found to have become obsolete and was sold as scrap for ₹ 500. On same date, a new machine was purchased for ₹ 8,000. Depreciation is to be charged @ 15% p.a. on written down value. Accounts are closed on 31st March each year. Show machinery account for first three years. (6)

Q21. Rectify the following errors :

   (a)   Rent paid to landlord ₹ 7,200 debited to Landlord Account as ₹ 2,700.

(b) Goods purchased for personal use of ₹ 400 debited to Purchase Account.

(c) A credit sale of ₹ 4,350 to Madhu has been wrongly passed through Purchase Book.

(d) An amount of ₹ 300 paid for postage was posted twice to Postage account.

(e) Payment side of cash book was overcast by ₹ 500.

(f) A Bill receivable for ₹ 5,500 received from Rohit was passed through Bills Payable Book. (6)

Q22. Enter the following transactions in a Cash Book with Cash and Bank columns. (6)

2011		(₹)
Jan. 1	Bank overdraft	12,000
	Cash in Hand	2,300
Jan. 7	Cheque received from S. Nair	4,000
	Discount allowed	200
Jan. 9	Cheque received from S. Nair deposited in Bank	
Jan. 12	Cheque paid to Radha and	2,500
	Discount allowed by her	50
Jan. 15	S. Nair's cheque dishonoured	
Jan. 20	Money withdrawn from bank for office use	3,400
Jan. 23	Fees of children paid by cheque	75
Jan. 25	Cheque received from Hira and endorsed it to Sunita on 27th Jan.	4,500
Jan. 27	Bank charges	20
Jan. 31	Paid into Bank the entire balance after retaining ₹ 700 at office	

Q23. From the following balances taken from the Trial Balance of M/s Baba & Company, prepare :

(a) Trading and Profit and Loss A/c for year ending 31st March, 2013.

(7)

(b)   Balance Sheet as at 31st March, 2013

Particulars	(₹)	Particulars	(₹)
Opening Stock	8,100	Freehold land	9,70,000
Purchases	7,12,000	Capital	2,33,800
Sales	12,12,150	Freight Inward	1,200
Production Productive expenses	82,400	Freight Outward	2,200
Interest on loan	33,750	Value Added Tax Payable	40,000
Returns Inward	6,600	Interest on Bank deposit	2,400
Returns Outward	3,200	Loan	9,00,000
Loose Tools	8,400	Sundry Debtors	30,000
Goodwill	7,000	Sundry Creditors	12,100
Commission (Cr.)	2,000	Bad debts	1,900
Salaries	11,600	Law charges	800
Investments	2,00,000	Rent	18,000
Cash in Hand	1,700	Motor Car	3,10,000

(a)   Closing stock was valued at ₹ 24,400 (market value ₹ 25,000).

(b)   60% of rent was paid in respect of factory.

(c)   Sundry Debtors included a sum of ₹ 4,000 in respect of one debtor who has become insolvent and 75 paise in a rupee was realisable from him.

(d)   Interest on loan @ 8% p.a. is unpaid for 4 months.

(e)   Depreciation to be charged on Motor Car @ 10% p.a.

(f)   Salaries outstanding ₹2,200.   (8)

OR

Following are the balances taken from the Trial Balance of Jagan & Co. on 31st March, 2013 :

Particulars	(₹)	Particulars	(₹)
Stock on commencement	18,100	Interest on Securities	5,000
Purchases	7,80,000	Land and Building	8,00,000
Sales	14,90,000	Securities in X Ltd.	50,000

(8)

	₹		₹
Wages	1,78,000	Cash in Hand	12,700
Carriage inwards	7,480	Bank overdraft	1,81,000
Freight on Purchases	10,800	Discount Allowed	3,750
Salary	1,44,000	Discount Received	2,100
Insurance Charges	11,400	Bills Payable	32,000
Duty on imported goods	20,500	Loan (Cr.)	58,000
Repairs to machinery	15,700	Bill Receivable	13,810
Withdrawls (for personal use)	71,000	Capital Account	7,50,000
		Plant and Machinery	3,18,900
Debtors	28,800	Rent Received	13,000
Postage	1,250	Commission (Cr.)	1,000
Trade expenses	20,500	Creditors	23,400
Telephone	8,610		
General Expenses	40,200		

Prepare Trading and Profit and Loss Account and Balance Sheet as at 31st March, 2013 taking into consideration the following adjustments :

(i) Closing stock was valued at ₹ 8,125 (Net Realisable Value ₹ 8,000)

(ii) Depreciation to be provided on Land and Building and Plant and Machinery @ 10% p.a.

(iii) Write off ₹ 1,800 as Bad debts and create provision on debtors @ 5% p.a.

(iv) Wages include ₹ 18,000 for construction of building.

(v) Insurance includes premium of ₹ 1,500 on a policy expiring on 30th September, 2013. (8)

Q24. Following is the Receipts and Payment Account of Literacy Club for the year ended 31.3.2016 : 2006

Receipt and Payment Account

Receipts	(₹)	Payments	(₹)
To Balance b/d	19,550	By Salary	3,000
		By Newspapers	2,050

To Subscription			By Electricity Bill		1,000
2004-05	1,200		By Fixed deposit		
2005-06	26,500		(on 1.7.2005 @ 9% p.a.)		20,000
2006-07	500	28,200	By Books		10,600
To sale of old newspaper		1,250	By Rent		6,800
To Government grants		10,000	By Furniture		10,500
To Sale of old furniture			By Balance c/d		11,200
(Book value ₹ 7,000)		5,700			
To Interest on fixed deposits		450			
		65,150			65,150

Adjustments :

(i) Subscriptions outstanding as on 31.3.2005 were ₹ 2,000 and on 31.3.2006 ₹ 2,500.

(ii) On 31.3.2006 salary outstanding was ₹ 600 and rent outstanding was ₹ 1,200.

(iii) The club owned furniture ₹ 15,000 and Books ₹ 7,000 on 1.4.2005.

Prepare Income and Expenditure A/c of club for the year ended 31.3.2006 and ascertain 'Capital Fund' on 31.3.2005. Also prepare the Balance Sheet as at 31st March, 2006. (8)

OR

From the following cash transactions relating to Royal Club, Green Park. Prepare Income and Expenditure account for the year ended 31st March, 2014 and a Balance Sheet as at that date :

Receipts and Payment Account

Receipts	₹	Payments	₹
To Cash in Hand	4,900	By Salaries	20,100
on 1st Apri, 2013		By Travelling expenses	8,600
To Subscriptions	52,100	By Printing & Stationery	1,720
(including ₹ 800 for the		By Rent	16,600

(10)

			By Repairs	450
year ending 31.3.2015)			By Building	30,000
To Dona… s		6,000	By Government Bonds	5,000
To Proceeds from Charity Show		16,200	By Balance c/d on 31.3.2014	32,130
To Sale of Furniture		1,600		
(Book value ₹ 4,000)				
To Life membership fees		9,000		
To Interest on investments		4,800		
(cost of investments ₹ 40,000)				
To Sale of old car		20,000		
		1,14,600		1,14,600

On 1.4.2013, club owned Land and Building valued at ₹ 40,000 and Furniture valued at ₹ 10,500. There was a Bank Loan of ₹ 15,000 as on that date. The book value of car was ₹ 25,000. Subscriptions due on 31st March, 2013 and on 31st March, 2014 were ₹ 3,400 and ₹ 2,000 respectively. Similarly, interest on investments due at the beginning of the year was ₹ 800 and at the end of the year was ₹ 1,000. (8)

SUBJECT : COMPUTER SCIENCE (SET-I)

Time : 3 Hrs.   M.M.: 70

General Instructions :

(i)   *All the questions are compulsory.*

(ii)   *Programming language: C++*

Q1. (a)   State the basic units of the computer and give
           function of each of the unit.   (2)

     (b)   What is difference between interpreter and compiler?
                                                            (2)

     (c)   Convert the following :   (3)

           (i) $(4536)_8$ to decimal

           (ii) $(10101101100101)_2$ to Octal

           (iii) $(63567)_8$ to Hexadecimal

     (d)   Find the 8 bits two's complement form of the following
           decimal number.   (1)

                   -73

     (e)   What is polymorphism? How polymorphism is
           implemented in C++ language? Explain with an
           example.   (2)

Q2. (a)   Differentiate between multiprogramming and
           multiprocessor operating system.   (2)

     (b)   What are literals? Explain any two literals with an
           example.   (2)

     (c)   What are fundamental data types? How many
           fundamental data types exist in C++ language? Name
           all fundamental data types with size.   (3)

     (d)   Write a program to input cost price and to find
           discount based upon the following info.   (3)

Cost price	Discount
<=1000	3%
>1000 & <=5000	5%
>5000 & <=10000	10%
>10000	15%

Q3. (a) Write a program to input any number and to find all factors of that number. (3)

(b) What is the Object Oriented programming paradigm. Write any two advantages of OOPs. (2)

(c) (I) What is the memory requirement for the following constants? (2)

    (i) "Meera\'s Birthday"   (ii) "\?"

    (iii) '\a'   (iv) "my name"

    (II) Differentiate between = and == operators. (1)

(d) What are iterative statements? Draw flowchart of iterative statement. (2)

Q4. (a) What are the characteristics of a good program? (2)

(b) Predict the output of the following code fragment: (2)

(i)
```
int a, b=3;
cin>>a;
if(a)
    b=a++ -1;
cout<<"a="<<a<<endl;
cout<<"b="<<++b<<endl;
```
When the value of a is input as 6.

(ii)
```
cin>>a;
if (a=5)
    cout<<"Five";
else
    cout<<"Not Five";
```
if the input given is 7.

(2)

(c) Observe the following C++ code and find out, which out of the given options (i) to (iv) are the expected correct output. Also assign the maximum and minimum value that can be assigned to the variable 'To'. (2)

```
void main( )
{   int Y[4]=(200,175,100,225);
    int To = random(size(int))+2;
    for (int i = To; i<4; i++)
    cout<<Y[i]<<"$$";
}
```

(i)   200$$175   (ii)   175$$100$$225$$
(iii) 175$$100$$ (iv)   100$$225$$

(d) Write a function FindArray(int a[], int n, int num) in C++, to pass array 'a', size 'n' and num and to check whether given number num exists in the list or not. The function should return 1 if the number exists, 0 if the number does not exist. (3)

(e) What is RAM? (1)

Q5. (a) Which C++ header file(s) will be essentially required to be included to run/execute the following C++ source code (Note : Do not include any header file(s), which is/are not required) : (2)

```
int main( )
{
char T[ ]="Hallow", d[20];
int n=100;
cout<<"Result:"<<strcpy(d, T)<<endl;
cout<<sqrt(n);
if (isupper(T[3]))
    cout<<T;
return(0);
}
```

(3)

(b) Write a program to input n elements (numbers) and replaces the elements having odd values with the thrice its value and the elements having even values twice its values. Display all values on the output screen also.

(3)

(c) What is the difference between typedef and #define in C++.

(2)

(d) Write a program to input any matrix and to interchange first row with last row. Display the resultant matrix on the output screen.

(4)

input :			output :		
1	2	3	7	8	9
4	5	6	4	5	6
7	8	9	1	2	3

Q6. (a) Define the following with an example.

(3)

(i) call by value   (ii) Global Variable

(iii) Explicit type conversion

(b) Rewrite the following program after removing the syntactical error(s) if any. Underline each correction.

```
# include [iostream.h]
typedef char Text (80);
void main( )
{
Text T="Indian";
int Count=strlen(T);
cout<<T<<'has'<<Count<<'characters'<<endl;
}
```

(2)

(c) What will be the output of the following segment?

```
#include<iostream.h>
#include<conio.h>
int a=20;
void demo (int &x, int y, int z)
```

(2)

(4)

```
    {
        a+=x;
        y*=a;
        z=a+y;
    cout<<x<<'\t'<<y<<'\t'<<z<<endl;
    }
    void main( )
    {
        clrscr( );
        int a=15, b=5;
        demo(::a, a, b);
    cout<<::a<<'\t'<<a<<'\t'<<b<<endl;
    }
```

(d) Write a program to input any number and to find the factorial of that number. (2)

Q7. (a) Write a program to input any string and to convert uppercase to lowercase and vice versa. (3)

(b) Define a structure Sports with following descriptions: (4)

- S_code of type long

- S_Name of type character array (String)

- Fees of type integer

- Duration of type integer

Write a program to input S_code and S_name and assign fees and duration based upon the following information.

S Name	Fees	Duration
Table Tennis	2000	3
Swimming	4000	1
Football	3000	2

Print all information on the output screen.

(c) Find the output of the following program : (2)

```cpp
# include <iosteam.h>
# include <ctype.h>
void strcon(char s[ ])
{
for (int i=0, l=0; s[i]!= '\0'; i++, l++);
for (int j=0; j<l; j++)
{
if (isupper(s[j]))
s[j]=tolower(s[j])+2;
else if (islower(s[j]))
s[j]=toupper(s[j])-2;
else
s[j]='@';
}
}
void main( )
{
char c[ ]="Romeo Juliet";
strcon(c);
cout<<"Text="<<c<<endl;
c=c+3;
cout<<"New Text="<<c<<endl;
c=c+5-2;
cout<<"last Text="<<c;
}
```

(d) Calculate size and number of elements from the following array : (1)

double a[40][10];

(6)

SUBJECT : MATHEMATICS (SET-II)

Time : 3 Hrs.   M.M.: 100

General Instructions :

(i)   *Read all questions carefully.*

(ii)   *The question paper consists of 29 questions.*

(iii) *The question paper consists of four sections A, B, C and D. Section-A comprises of 4 questions of 1 mark each, Section-B comprises of 8 questions of 2 marks each, Section-C comprises of 11 questions of 4 marks each and Section-D comprises of 6 questions of 6 marks each.*

(iv)   *Use of calculators is not allowed.*

SECTION-A

Q1.   Define Greatest Integer function and draw its graph.

Q2.   Find the least value of n for which $1 + 3 + 3^2 + \ldots$ n terms is greater than 7000.

Q3.   Find the 4th term from the end in the expansion of

$$\left(\frac{3}{x^2} - \frac{x^3}{6} \right)^7 .$$

Q4.   Find the coordinates of focus and equation of directrix for $3y^2 = -8x$

SECTION-B

Q5.   Write $A = \{ x : x = \dfrac{n}{n^2 + 1}$ & $1 \le n \le 3$, where $n \in N \}$ in roaster form and find P(A).

Q6.   How many words can be formed out of the letters of the word 'OBEDIENCE' so that vowels and consonants occur together? Write importance of OBEDIENCE in our life.

Q7.   For any two complex numbers z_1 and z_2, prove that

$Im(z_1 z_2) = Re z_1 . Im z_2 + Re z_2 . Im z_1$

Q8. Find the points on the z-axis which are at a distance of 6 units from the point $(-4, 2, -1)$

Q9. If in an A.P., the first term is a and the sum of first p terms is zero, show that the sum of the next q terms is $\dfrac{-a(p+q)q}{p-1}$

Q10. Find the modulus and conjugate of $1 + i\sqrt{3}$

Q11. Find eccentricity, length of conjugate and transverse axes for $y^2 - 16x^2 = 16$.

Q12. In a single throws of two dice, what is the probability of getting :
   (i)   a multiple of 2 on one dice and a multiple of 3 on the other?
   (ii) the sum as a prime number?

SECTION-C

Q13. Find the square root of $-15 - 8i$

Q14. If the fourth term in the expansion of $\left(ax + \dfrac{1}{x}\right)^n$ is $\dfrac{5}{2}$, then find the values of a and n, hence expand $\left(ax + \dfrac{1}{x}\right)^n$

Q15. Evaluate : $\lim\limits_{x \to 0} \dfrac{\tan x - \sin x}{\sin^3 x}$

Q16. Find the domain and range of $f(x) = \dfrac{1}{\sqrt{1-x^2}}$

Q17. Prove that : $\cos 20° \cos 40° \cos 60° \cos 80° = \dfrac{1}{16}$

OR

Prove that : $\dfrac{\sec 8\theta - 1}{\sec 4\theta - 1} = \dfrac{\tan 8\theta}{\tan 2\theta}$

(2)

Q18. Using PMI. prove that :

$$\frac{1}{1.2.3} + \frac{1}{2.3.4} + \frac{1}{3.4.5} + \cdots + \frac{1}{n(n+1)(n+2)} = \frac{n(n+3)}{4(n+1)(n+2)}$$

for all $n \in N$.

Q19. If the points A $(1, 0, -6)$, B $(-3, p, q)$ and C $(-5, 9, 6)$ are collinear, find the values of p and q.

Q20. Find the image of the point $(3, 8)$ with respect to the line $x + 3y = 7$, assuming the line to be a plane mirror.

Q21. Find the equation of the circle passing through the points $(2, 3)$, $(-1, 1)$ and whose centre lie on line $x - 3y = 11$.

OR

Find the coordinates of foci, vertices, the lengths of major axis, minor axis, latus rectum and eccentricity of $9x^2 + 25y^2 = 225$.

Q22. (i) Evaluate : $\displaystyle \lim_{x \to 0} \frac{(x+2)^{1/3} - 2^{1/3}}{x}$

(ii) Find the derivative of $f(x) = \sqrt{\tan(19x^2 + 10x + 4)}$

Q23. How many numbers are there between 100 and 1000 (including 100 but excluding 1000) such that

(i) at least one of the digits is 5.

(ii) atleast one of the digits is repeated.

OR

Find the number of ways of choosing a committee from four men and six women so that the committee includes atleast two men and exactly twice as many women as men. Should women be given equal rights? What values are being promoted?

SECTION-D

Q24. Find the sum of first n terms of the series :

$6 + 9 + 16 + 27 + 42 + \ldots\ldots$

OR

A line is such that its segment between the lines, $5x - y + 4 = 0$ and $3x + 4y - 4 = 0$ is bisected at the point $(1, 5)$. Obtain its equation.

(3)

Q25. Find the derivatives of :

(i) $f(x) = \dfrac{x\tan x}{\sec x + \tan x}$

(ii) $f(x) = (3x + 4)(5x^2 - 7x + 9)$

Q26. Calculate the mean and standard deviation for the following data :

Wage per day (in ₹)	No. of workers
0-100	9
100-200	17
200-300	32
300-400	23
400-500	40
500-600	18
600-700	1

Q27. (i) Solve : $\cot^2\theta + \dfrac{3}{\sin\theta} + 3 = 0$ (4)

(ii) In a right angled triangle, the difference between two acute angles is $\dfrac{\wedge}{18}$ in radian measure. Express the angles in degrees. (2)

Q28. Solve the following system of linear inequalities graphically:
$12x + 12y \le 840$, $3x + 6y \le 300$, $8x + 4y \le 480$, $x, y \ge 0$

Q29. If the letters of the word ASSASSINATION are arranged at random in a row, find the probability that

(i) four S's come together.

(ii) all A's are not coming together.

(iii) no two A's are coming together.

OR

Find the probability that when a hand of 7 cards is drawn from a well-shuffled deck of 52 cards, it contains (i) all kings (ii) exactly 3 kings (iii) atleast 3 kings.

SUBJECT : BUSINESS STUDIES (SET-I)

Time : 3 Hrs.   M.M.: 90

General Instructions :

(i)   Answers to questions carrying 1 mark may be from one word to one sentence.

(ii) Answers to questions carrying 3 marks may be from 50-75 words.

(iii) Answers to questions carrying 4-5 marks may be about 150 words.

(iv) Answers to questions carrying 6 marks may be about 200 words.

Q1. What is the parameter used by the Government of India to define small-scale service enterprises?   (1)

Q2. Distinguish between e-business and traditional business on the basis of operating cost and nature of human capital.   (1)

Q3. 'Books can be purchased from the post offices through Value Payable Post'. Identify the type of retail trade and state any one of its limitations.   (1)

Q4. Name the type of industry which is concerned with using the natural materials.   (1)

Q5. Sachin's father gifted him a cricket bat on his birthday. The cost of the bat was ₹ 800. Few months later, Sachin sold it to Manish, one of his school friends, for ₹ 850.

Is the transaction between Sachin and Manish a business transaction? Give reason to support your answer.   (1)

Q6. State and explain the type of bank account in which there is no restriction on the number of transactions.   (1)

Q7. Engineers India Ltd. provides engineering and technical services for petroleum refineries and other industrial projects. Its majority of the shares are in the name of President of India. It is registered under the Companies Act and has a separate legal entity. Identify & state the type of public sector enterprise discussed in the above case. (1)

Q8. Explain any two types of postal services. (1)

Q9. Mayaram is a sweet maker (Halwai), who collects milk from village to village and prepares sweets. Due to increased demand on Diwali, he purchased khoya from another shopkeeper which was adulterated.

For meeting the demand quickly, he did not maintain cleanliness while preparing sweets. He kept two children for packing the sweets and one lady at the cash counter.

(a) Identify the interest group towards which he is ignoring his social responsibility.

(b) What are his social responsibilities towards the group identified in (a).

(c) Quote the values that are being violated by him. (3)

Q10. Explain the following documents briefly : (3)

(a) Debit note   (b) Railway Receipt

(c) Performa Invoice

Q11. Mr. Nitin is the owner of a factory manufacturing crackers. He took a fire insurance policy for his factory. While taking the insurance policy, he did not disclose the product being manufactured, as this would have led to payment of much higher premium. The factory caught fire which caused severe damage

and loss. He claimed compensation from the insurance company but his claim was rejected.

(a) Why do you think the insurance company rejected his claim?

(b) Explain the relevant principle in this regard. (3)

Q12. Name that form of business organisation in which a minor can be a full-fledged member. Also, explain its features. (3)

Q13. Rampal Mills, needs funds for meeting its day to day expenses like wages, rent, telephone expenses etc. He approaches his supplier Shyam Lal & Sons and requests them to provide funds for short-term. This would enable them to buy cotton without making immediate payment.

(a) State the source of finance being discussed above.

(b) Also, explain its merits. (3)

Q14. A cloth manufacturer distributes its defective products free of cost (after getting them repaired from Nari Niketan at lower costs) to an orphanage.

(a) Identify and explain the objective of business highlighted above.

(b) Also, explain the other objectives of business. (3)

Q15. 'Risk is an essential element of every business'. In the light of this statement, explain the nature of business risks. (4)

Q16. Ram & Co. is a reputed manufacturer in automobiles. It manufactures different models of cars. For this, they interact with different suppliers of diverse inputs like steel, tyres, glass etc. through internet.

Transactions like placing orders, quality specifications, delivery of components, etc. are done electronically. The company finds it quite convenient to deal with its suppliers.

(a) Identify and explain the scope of e-business mentioned in the above case.

(b) Also, explain the other types of e-business transactions. (4)

Q17. 'Pin to Plane is the motto of this retail store'. Identify it and explain any three of its merits. (4)

Q18. Distinguish between business, profession and employment on the following basis : (4)

(a) Capital Investment (b) Risk

(c) Transfer of Interest (d) Code of conduct

Q19. Describe the changing role of public sector after the 'New Industrial Policy. 1991'. (4)

Q20. What benefits do the nations and firms derive by entering into international business? (5)

Q21. Ishaan and Rohit are friends and both of them are in the construction business. Ishaan got a very big order of construction of 5 National Highways for the Government of India. Understanding that the work was very big for him to handle alone. he requested his friend Rohit to help him with this project as a partner.

(a) Identify and explain the type of partnership entered into between Ishaan and Rohit.

(b) Also. explain any other type of partnership.

(c) Discuss any three merits of partnership business. (5)

(4)

Q22. Discuss the role of National Small Industries Corporation (NSIC) and District Industries Centers (DIC) in the promotion and development of small business units. (5)

Q23. 'Business Process Outsourcing is another trend that is radically reshaping business world in India'. In the light of this statement, explain the benefits of outsourcing. (5)

Q24. Evaluate 'Loans from Financial Institutions' as a source of business finance. (6)

Q25. Rajan is the owner of a retail outlet in one of the residential colonies of Delhi. He keeps stock of a variety of daily use consumer items like groceries, confectionery, stationery etc. Sometimes, he also offers credit facility to his regular customers.

(a) Identify and explain the type of small fixed shop retailer that Rajan is.

(b) Explain any other three types of small fixed shop retailers.

(c) Discuss any two services provided by retailers to manufacturers and wholesalers. (6)

Q26. Your firm is planning to import steel manufacturing machinery from France. Explain the first six steps that it would have to complete in the import procedure. (6)

Q27. After receiving the 'Certificate of Incorporation' which is the next stage in the formation of a public company. Explain in detail. (6)

Time: 3 hrs.   M.M.: 70

General Instructions:

(i)   All questions are compulsory.

(ii) Answer to questions (1-11) carrying 1 mark should be in approximately 30 words.

(iii) Answer to questions (12-19) carrying 3 marks should be in approximately 100 words.

(iv) Answer to questions (20-25) carrying 5 marks should be in approximately 150-200 words.

Q1. What do you mean by recovery?   (1)

Q2. What is style?   (1)

Q3. Define sports psychology.   (1)

Q4. What is Static Equilibrium?   (1)

Q5. What do you mean by slow twitch fibers?   (1)

Q6. Define Physical Activity?   (1)

Q7. Enlist the types of doping?   (1)

Q8. What is meditation?   (1)

Q9. What is the aim of Physical Education?   (1)

Q10. What is the aim of CBSE sports?   (1)

Q11. What is technique?   (1)

Q12. Explain any three Elements of Yoga?   (3)

Q13. What are the side effects of anabolic steroids?   (3)

Q14. Discuss any three components of health related physical fitness.   (3)

Q15. What are the traits of Endomorphs?   (3)

Q16. Discuss the major types of Joints.   (3)

Q17. Discuss the law of Inertia and its application in sports.   (3)

Q18. Differentiate between growth and development.   (3)

Q19. What is Overload? Mention the symptoms of overload.   (3)

Q20. What do you mean by test and measurement? Elucidate the importance

of test and measurement in the field of sports.   (5)

Q21. Explain about second wind and changes that occur in our body due to second wind. (5)

Q22. What do you mean by levers? Elaborate the applications of levers in sports.   (5)

Q23. Discuss the laws of learning along with their application in sports. (5)

Or

What do you mean by Plateau? Elaborate the causes of Plateau in the field of physical education and sports

Q24. What do you mean by Sports training? Explain the principles of sports training. (5)

Q25. Define warming up. Explain the types of warming up. (5)

or

Discuss any five principles of physical activity.

Q26. What do you mean by common lifestyle diseases? Discuss any one in detail. (5)

Or

Discuss in detail about Chacha Nehru Sports Award.