## SUBJECT: APPLIED MATHEMATICS

1. Students are requested to make spread sheet for addition of matrices, subtraction of matrices and multiplication of matrices with random examples of $3 \times 3$ order matrix.
2. Graphs of an exponential function, demand and supply functions on Excel and study the nature of function at various points, maxima/minima, Matrix operations using Excel Suggested practical using the spreadsheet.

## SUBJECT: ACCOUNTANCY

## SOLVE THE FOLLOWING QUESTIONS:

1. Geet and Meet are partners in a firm. They admit Jeet into partnership for equal share. It was agreed that goodwill will be valued at three years purchase of average profit of last five years. Profits for the last five years were:

| Year | 31.3 .2016 | 31.3 .2017 | 31.3 .2018 | 31.3 .2019 | 31.3 .2020 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| Profits | 90,000 <br> (loss) | $1,60,000$ | $1,50,000$ | 65,000 | $1,77,000$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

Books of account of the firm revealed that:
a) The firm had gain of ₹50,000 from sale of machinery sold in the year ended 31st March 2017.
b) There was an abnormal loss of ₹ 20,000 incurred in the year ended 31st March, 2018 because of a machine becoming obsolete in accident.
c) Overhauling cost of second hand machine purchased on 1st July, 2018 amounting to ₹ $1,00,000$ was debited to Repairs Account. Depreciation is charged @ $20 \%$ p.a. on written down value method.
2. Calculate goodwill of a firm on the basis of three years purchase of the weighted average profit of the last four years. The profits of the last four years ended 31st March, were: 2017 ₹25,000; 2018 ₹27,000; 2019 ₹ 46,900 and 2020 ₹ 53,810 . The weights assigned each year were $1,2,3$ and 4 respectively.
a) On 1st April, 2017, a major plant repair was undertaken for ₹ 10,000 which was charged to revenue. The said sum is to be capitalized for
goodwill calculation subject to adjustment of depreciation of 10\% p.a. on WDV method.
b) The closing stock for the years ended 31st March, 2018 and 2019 were overvalued by ₹1,000 and ₹2,000 respectively.
c) To cover management cost an annual charge of ₹5,000 should be made for the purpose of goodwill valuation.
3. Bhaskar and Pillai are partners sharing profits and losses in the ratio of 3:2. They admit Kanika into partnership for 1/4th share in profits. Kanika brings her share of goodwill in cash. Goodwill for this purpose is to be calculated at two years purchase of the average normal profits of past three years. Profits of the last three years ending 31st March, were:
2018 profit ₹50,000 (including profit on sale of assets ₹5,000)
2019 loss ₹20,000 (including loss by fire ₹30,000)
2020 profit ₹ 70,000 (including insurance claim received ₹ 18,000 and int. on inv. And dividend received ₹8,000)
Calculate the value of goodwill.
4. Capital employed in a business is ₹ $2,00,000$. The normal rate of return on capital employed is $15 \%$. During the year 2002, the firm earned a profit of $₹ 48,000$. Calculate goodwill on the basis of 3 years purchase of super profit. \{NCERT\}
5. The books of Ram and Bharat showed that the capital employed on 31.3.2016 was ₹5,00,000 and the profits for the last 5 years were:

| Year <br> ended | 2012 | 2013 | 2014 | 2015 | 2016 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Profit $(₹)$ | 40,000 | 50,000 | 55,000 | 70,000 | 85,000 |

Calculate goodwill on the basis of 3 years purchase of the average super profits of the last 5 years assuming that the normal rate of return is $10 \%$. \{NCERT\}
6. Capital of the firm of Sharma and Verma is ₹ $2,00,000$ and the market rate of interest is $15 \%$. Annual salary to partners is ₹ 12,000 each. The profits for the last three years were ₹60,000; ₹72,000 and ₹84,000. Goodwill is valued at 2 years purchase of last 3 years average super profit. Calculate goodwill of the firm.
(CBSE, Delhi 2013)
7. The average profit earned by a firm is ₹ 80,000 , which includes undervaluation of stock of $₹ 8,000$ on an average basis. The capital invested in the business is ₹ $8,00,000$ and the normal rate of return is $8 \%$. Calculate goodwill of the firm on the basis of 7 times the super profit.
(CBSE, Delhi 2015)
8. The average profit earned by a firm is ₹ $2,50,000$, which includes overvaluation of stock of ₹ 10,000 on an average basis. The capital invested in a business is $₹ 14,00,000$ and the normal rate of return is $15 \%$. Calculate goodwill of the firm on the basis of 4 times the super profit. (CBSE, All India 2015)
9. On 1st April, 2019, a firm had assets of ₹3,00,000 including cash of ₹5,000. Partners' capital accounts were ₹ $2,00,000$ and the reserve being the rest. If the normal rate of return is $10 \%$ and the goodwill of the firm is valued at ₹2,00,000 at four years purchase of super profits, find the Average Profit of the firm.
10. Calculate capital employed by Liabilities approach and Assets side approach from the following balance sheet:

| Liabilities | Amount | Assets | Amount |
| :--- | :--- | :--- | :---: |
| Capital accounts: |  | Land and building | $3,00,000$ |
| Amrit |  | Goodwill | 60,000 |
| $2,00,000$ | $4,00,000$ | Investments | $1,00,000$ |
| Sudhir | $1,80,000$ | Stock | $1,00,000$ |
| $2,00,000$ | $1,80,000$ | Sundry debtors | $1,40,000$ |
| General reserves | 20,000 | Cash at bank | 60,000 |
| Sundry creditors |  | Advertisement | 20,000 |
| Outstanding |  | expenses |  |
| expenses | $\mathbf{7 , 8 0 , 0 0 0}$ |  | $7,80,000$ |

11. Practice the addition questions and MCQ of Chapter 1.

## SUBJECT: ENGLISH

1. Write an article on any TWO from the following:
(a) Value Education- A Part of Curriculum in Schools
(b) By 2050, India will be amongst the countries which will face acute water shortage. You are highly alarmed and terrified of the future world without water. Write an article on "Save water- are we doing enough?" for the local daily in about 150 words.
(c) The Role of Youth In National Development
(d) You think differently from the way your parents think about food, clothing and lifestyle. Write an article on --- Generation Gap - A Myth or Reality
2. As Principal of Sardar Patel Vidyalaya, Lucknow, draft a notice in not more than 50 words informing students of the change in school timings with effect from 1st of July 20xx. State valid reasons for the change.
3. You are Sports Secretary of Lalwani Public School, Udaipur. Draft a notice in not more than 50 words for your school notice board asking the students to give their names for participation in various events to be held on the Annual Sports Day of your school. Invent the details of the events. Sign as Lalit/Lalita.
4. Learn and Revise all the syllabus of Unit Test 2.

## SUBJECT: ECONOMICS

1.Briefly discuss the meaning of domestic territory.
2. Which of the following are covered under the domestic territory of India?
(a) An Indian Company in London.
(b)Microsoft Office in India.
(c) Company in India owned by a Japanese.
(d) Office of Reliance Industries in New York.
(e) Branch of Foreign Bank in India.
(f) Indian Embassy in Japan
(g) Branch of State Bank of India in China.
(h) Russian Embassy in India.
(i)Tata rented its building to Google in America
3. Identify the following as Normal Residents of India:
(a) Indian officials working in the Indian Embassy in USA.
(b) A Japanese tourist who stays in India for 2 months.
(c) Indians going to Pakistan for watching the cricket match.
(d)Indians working in the UNO office, located in America for less than 1 year.
(e) Indian employees working in WHO, located in India.
(f) Foreign tourists visiting India for a month to see the Taj Mahal
(g) Indian Muslims going for the Haj pilgrimage.

## SUBJECT: BUSINESS STUDIES

## Long Answer Type Questions

1. 'In the absence of management, the productive resources will remain resources and shall never become production'. Explain the importance of management in the light of the above statement.
2. "Management is regarded as an Art by some, as Science or as an inexact Science by others. The truth seem to be somewhere in between". In the light of this statement explain the true nature of management.
3. "Coordination is the orderly arrangement of group efforts to provide unity of action in the pursuit of common purpose". In the light of this statement, explain the nature of coordination.
4. In your school, you observe that books are kept in office, chalks in the library and office records in the staffroom. How will that affect the achievement of school objectives? Which aspect of management is lacking here and why? As a manager, what steps will you take to rectify the shortcomings?
5. What is the principle of 'scalar chain'? Briefly explain the utility of 'Gang Plank' with the help of a diagram.
6. Explain the technique of scientific management which is the strongest motivator for a worker to reach standard performance.
7. Explain why it is said that principles of management are 'mainly behavioral' and 'contingent' in nature. Also explain how principles of management 'provides managers with useful insights into reality' and 'helps in thoughtful decisions-making'.
8. The government of India announced Demonetization of Rs. 500 and Rs.1,000 currency notes with effect from the midnight of November 8, 2016. As a result, the existing 500 and 1,000 currency notes ceased to be legal tender from that date. New currency notes of the denomination of 500 and 72,000 were issued by Reserve Bank of India after the announcement. This step resulted in a substantial increase in the awareness about and use of Point-of-Sale machines, e-wallets, digital cash and other modes of cashless transactions Also, increased transparency in monetary transactions and disclosure led to a rise in government revenue in the form of tax collection.
a. Enumerate the dimensions of the business environment highlighted above.
b. State the features of Demonetization.

## SUBJECT:COMPUTER SCIENCE

## Unit/Topic: Revision Tour of class XI

I. Answer the following questions with appropriate example:
i) Differentiate the terms Mutable and Immutable
ii) List and Dictionary
iii) and , or operator
iv) Suntax and Runtime errors
v) Phishing and Pharming

## II. Programming in Python:

i) WAP to find the 2nd largest word in a sentence.
ii) WAP to display all the palindrome numbers present in a list of $n$ integers
iii) WAP to create a dictionary containing n no. of names of students as keys and percentage as values. Find the following out of it.
A) Find the name of the topper/toppers
B) Find the average percentage
C) Display the name of students having same percentage.
II) Answer the following questions:

Topic: User Defined Function
i) Answer following questions with appropriate example:
a) Positional and Keyword argument
b) nonlocal and global keyword
c) What is the use of return keyword.

Programming:
i) WAP to create a function accepting a list of n no. of words as argument and create a dictionary out of it. The keys of dictionary will be 'vowel' and 'consonant'. The values will the tuple of words start with vowel and consonant respectively.
ii) WAP to create a function to check elements of tuples (Elements are float values) whether they are arranged or not. If arranged return 'A' for ascending, 'D' for descending and ' $U$ ' for unordered.
iii) Write a menu driven program to check an integer whether it is a) Armstrong b) Special c) Prime d) Niven e) Spy numbers using separate user defined function.
d) Find the output of the following program code:
i)

$$
x=5
$$

def fun $(a, b=10)$ :
global $x$
for I in range(a,b):

$$
x+=i
$$

return x
print(fun(4))
print(fun(10,15))
ii)
def f1(a,b):
$\mathrm{C}=10$
A $+=b+c$

```
    b-=c
    print(a,b,c)
    def f2(n):
        nonlocal c
        while n:
            c+=n%10
            n//=10
        else:
            return c
    c=f2(543)
    print(C
f1(15,25)
(iii)
```


## s='ENCYCLOPEDIA'

```
def prn( \(n=2\) ):
st="
for I in range(len(s)-1,n,-1):
```

```
        st=st+s[i].lower()
```

        st=st+s[i].lower()
    return st
print(prn())
print(prn(3))
(iv)
s='CbsE@AiisCE23-24'
def fun(lst):
$\mathrm{x}=0$
while $x<$ len(s):
if $s[x]$.isalpha():
if $s[x]$.islower():
Ist.append(s[x].upper())
elif $s[x]$.isupper():
Ist.append(s[x+1])
elif $s[x]$.isdigit():
Ist.append(chr(ord(s[x])+1))
else:
Ist.append('\#')
$x+=1$
else:
return Ist
\#Main Block
Ist=fun(list(s))
print(Ist)
(v)
def outer():

```
```

    x='welcome'
    def inner():
        x='goodbye'
    inner()
    print('x=',x)
    outer()
(vi)
def outer():
x='welcome'
def inner():
nonlocal x
x='goodbye'
inner()
print('x=',x)
outer()
(vii)
def outer():
x='welcome'
def inner():
nonlocal x
x='goodbye'
inner()
print('x=',x)
outer()
(viii)
a=1
def block3():
a=2;b=3
print('block3:',a,b)
def block2():
global a
a=a+100
print('block2:',a,b)
def block1():
print('block1:',a,b)
block1()
block2()
block3()
(ix)
$a=1$
def block3():

```
```

    a=2;b=3
    ```
```

    a=2;b=3
    ```
```

    print('block3:',a,b)
    def block2():
        #nonlocal a
        global a
        a=a+100
        print('block2:',a,b)
        def block1():
            print('block1:',a,b)
        block1()
    block2()
    block3()

```
```

