



**TEMPLETON ACADEMY INTERNATIONAL  
NAUKUCHIYATAL  
WINTER ACADEMIC ENRICHMENT ASSIGNMENTS**

**GRADE- XII - COMMERCE- ACADEMIC YEAR - 2016-17**

Dear Parents,

Winter vacation has begun and it's time to have a new learning experience. We have compiled a set of assignments to keep our child engaged during these holidays. Creativity is a part of our makeup, as we all agree that without it the purpose of work seems to go nowhere. Children must buckle and exhibit their potential to uplift the academic performance. We expect from you to encourage your child in doing these assignments.

Students must take note of the following points before starting the work:

- Holiday homework is to be done in strip files or in separate notebook subject wise as instructed by the subject teachers.
- Homework has to be submitted on the first day of school after vacation.
- Make sure you complete the home work before coming back to school and submit the same to the subject teacher.
- Please take care of the neatness of the work.

Have a very happy and fruitful vacation!!!



*'Creativity is when sights that everyone sees arouse thinking that nobody else has thought.'*

*-anonymous*

Senior Section Educator



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**GRADE- XII - BUSINESS STUDIES - ACADEMIC YEAR - 2016-17**

*Dear Students,*

*Here are some expected questions for your Board Examination. Prepare all according to the guidelines given in the class room and submit the same on the first day of school after vacation.*

**General Instructions:**

- Use strip file or separate notebook for doing this work.
- All the answers should be in sequence and to be written neatly.
- Draw a neat diagram using pencil and scale wherever required.

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**Nature and significance of Management.**

Q.1 A Cloth manufacturer distributes its defective product at free of cost (after getting them repaired from Nari Niketan at lower cost) to orphanage. Which values are being attested in this solution?

Q.2 An organization has production, purchase, marketing, finance and human resource departments. All of them working together to achieve organizational goals. From your point of view which value which value is reflected here?

Q.3 A manufacturer of fridge has used new technology in place of using harmful gases, which do not cause air pollution. Which value being followed here?

Q.4 A production manager has directed his employees to put/throw different types of wastes like papers, plastics & chemicals in the respective earmarked dustbins. By this which value he want to inculcate among his employees?

Q.5 An industrial unit, working in a backward area opens schools for education at nominal cost for the children of its employees and local people. By this act which value is promoted here?

Q.6 A factory established in a residential locality, uses machines creating heavy noise while running. Factory manager is always ready to provide financial help to local people. Due to noise pollution student can't study properly and residence can't sleep/work properly. The owners also know it. Which values are affected here?

Q.7 A famous doctor charges high for consultation from his patients and refuses to treat the poor patients without consultation charges. He also pays attention to the medical representatives and agents of Pharma Co. he takes gifts and commission also. In your view, is it professional behavior of doctor? Does he follow the code of conduct of doctor?

**Unit –II Principles of Management**

Q.8 In an organization Ashok and Sheela are working at the same posts but being male employee Ashok has more rights than Sheela. Which value is violated here?



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- Q.9 A firm has taken the decision to employ more male employees than female employees because they can work overtime in case of excess work. Which values are being affected here?
- Q.10 An organization proposes the use of CFL's and LED's which consumes less electricity than normal bulbs for its lighting arrangements. Which value is attained by the organization?
- Q.11 An organization has done plantation around its factory premises and only after purifying the wastes, it throws it into the drains. Which values are being followed by the organization?
- Q.12 An entrepreneur wants to start his business in backward area because govt. gives many incentives & rebates in taxes. Which results in low cost and he will be able to see the product at low prices. There he will be able to get large area by deforestation. Which values are being affected here?

**Unit –III Management and Business Environment**

- Q.13 In recent times the Govt. has increased the prices of diesel and LPG. Which value is being overlooked here?
- Q.14 After the change in Government Policies, foreign companies like coca-cola has prohibited working in India. These steps of the government have boosted which values?

**Unit-IV Planning**

- Q.15 Which quality of employee is restricted by the act of planning?
- Q.16 Removal of mobile towers from residential area is being planned by the government to promote which value?
- Q.17 Government is planning to construct a ware house in remote area to store necessary goods so as to make them available even at the time of bad weather regularly. Which values are being considered here to be achieved by the government?
- Q.18 In order to reduce the cost, an organization is planning the following:
- a) To reduce the charities to the social and religious institution.
  - b) To arrange skilled workers from outside instead of semi-skilled local employees.
  - c) To increase the working hours.
  - d) To increase the rate of remuneration. Which value will be affected by the decisions?
- Q.19 Tobacco manufacturer is planning to sell its products outside the School & colleges. Which values are violated here from your point of view?
- Q.20 In an organization executive director takes all the decision himself. He does give order only to the subordinates. Which value is overlooked here?



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**Unit –V Organising**

- Q.21 An electronic company manufacturing TV and Refrigerator wants to bring two new products Washing Machines and AC's in the market. For each product separate division are to be set up. In-charge of working machine division and AC's division will be female and disabled person respectively. Which values have been considered here?
- Q.22 In an organization top level management has not distributed work among the subordinate according to their abilities and skill but has been distributed on the basis of caste and religions. Which values are neglected here?
- Q.23 A manager has kept all right of decision making with himself. Each and every employee has to come to him for orders again and again. Which values are being violated here?
- Q.24 In an organization formal organization is followed strictly where the employees have to work as per the directions only. The employees are performing under pressure. In your view, what changes are required in this company?

**Unit –VI Staffing**

- Q.25 A personnel manager while selecting new employees appoints only those persons who fulfil his personal requirement directly or indirectly. Which values are violated here?
- Q.26 In an organization the female employees are getting promotion late as compared to male employees. Which value is missing here?
- Q.27 An employee has been terminated due to a small mistake without hearing him, while the other one was not terminated on the same mistake. Which value has been neglected here?
- Q.28 An automobile Company runs a factory in a backward area. It has opened a training center to train the people. Which value has been kept in mind here?
- Q.29 An organization places an advertisement for employment mentioning some terms there in. those terms are not followed during selection of employee. Which values are ignored here?
- Q.30 A production manager pays less than the minimum wages and gets their signatures on minimum wages. Which values are not being followed by him?

**Unit –VII Directing**

- Q.31 A Supervisor hears the suggestions and also implements the good suggestions while taking decision for the employees? Which value has been given importance here?
- Q.32 In an organization the good environment, refreshment Corner and entertainment rooms have been made for all employees. Which values have been considered here?
- Q.33 In an organization the employees are being paid fair wages/ remuneration and productivity based bonus. Which values are highlighted here?



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- Q.34 A liquor manufacturing firm provides liquors to its employees at cheaper rates to motivate them. Which values are deficient in this plan?
- Q.35 In an organization, informal communication is stressed instead of formal communication which results in non reaching of proper communication to proper person in proper time. It results in either non completion or delay in work. Which values have been violated her?
- Q.36 A leader solves the problems relating to work and the personal problems also of the followers. Which value he is following here?

**Unit –VIII Controlling**

- Q.37 In controlling process, standards were set according to the efficiency of the average employee. Which value has been kept in mind while setting the standards?
- Q.38 On coming to know the negative deviations, fines are imposed on errorssing employees. Which value is being violated her?
- Q.39 In company employees achieved quantitative standard but could not attain qualitative standards. Which values have been ignored here?
- Q.40 A manager observes that an old employee is not doing the required work. Manager scolds him rudely without asking him the reasons. In your view how the manager would have behaved and which values he should have kept in his mind?
- Q.41 A supervisor observes that during working hours some employees were busy in gossiping instead of working. In spite of instructions they did not start working .when the matter was brought to the notice of management the union threatened to go on strike. In your view was the behavior of employee and the union was justified?

**Unit –IX Financial Management**

- Q.42 In a company profits are heavy and in future less scope of expansion exists. Company has decided to pay a very less dividends. Here which value and whose interest have been affected?
- Q.43 A company wants to show higher profit and for this:
- a) Depreciation was charged at lower rates.
  - b) Goodwill, Patents, Trademarks and other intangible assets were shown at higher value. Explain the value which is affected her?
- Q.44 A wholesaler of onion comes to know that due to less production the prices of onion will increase heavily. He store the onion and during rising prices. Earn heavy profits by selling the stored onion. From the earned profits he provides some money for social activities also. In this situation which values he affects here.



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**Unit –X Financial Market**

- Q.45 A public Ltd. Co. achieved the minimum subscriptions by (private placement). Whose interest has been ignored here?
- Q.46 A fast food manufacturing foreign company plans to open chain of cheap fast food centres near the schools in Delhi. According to you what will be the results of this plan?
- Q.47 A Company does window dressing in its financial statement to attract investors and creditors. Is it correct in your opinion? Which values are affected here?

**Unit –XI Marketing Management**

- Q.48 A tea producer uses such packets/things for packing tea, which can be used even after consuming the tea inside for other purposes. In this which values are being affected by him?
- Q.49 A cosmetics manufacturing co. claims in advertisement that its face cream improves the face complexion. On using it was found incorrect. Here which values are being ignored?
- Q.50 A commercial unit uses rocks, trees, electric poles, historical movements and walls to advertise its products. This advertising policy shows which faults of the company?
- Q.51 A soft drink manufacturing co. uses dangerous stunts in the advertisements claiming that its drinks make the user fearless and stronger. In your view what could be the bad effects of this? How it can be stopped?
- Q.52 One manufacturer of electronic product produces such products which need special care while using it. But the co. has not given the instructions to consumers. If you are the manager of that company, what steps you would take?
- Q.53 A company uses same promotional schemes like buy one get one free, free samples, free gifts and so on to boost the sales of its products and to earn higher profits. This results in unnecessary hike in the prices of the products. In your opinion, is this policy in the interest of society.

**Unit -XII Consumer Protection**

- Q.54 Mr. X is a sweet maker (Halwai), who collects milk from village to village and prepares sweet on Deepawali, due to increased demand; he purchased khoya from other shopkeeper which was adult rated, because it was not possible to meet the demand from collected milk. For meeting the demand quickly he has not maintained cleanliness while preparation of sweets. He kept two children for packing the sweet and one female at cash counter. Which social values he is affecting and how?
- Q.55 A company engaged in selling spice, claims about purity in its advertisement but in laboratories after examination, the spices were found adult rated. Which values are being violated here?
- Q.56 A Pharmacy Co. doesn't provide information for the expiry date on the packet of his drug. This manufacture violates which value?



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- Q.57 A manufacture of food products uses bad quality material for packing the product resulting in spoiling goods the reaching the consumers. Which value is being ignored here?
- Q.58 A toy manufacturing co. uses low quality plastics and harmful colours which affects the health the children. Which value is being ignored here?
- Q.59 Mohan purchased a press for Rs.1000/-. On using it he found it defective. The seller did not respond to the complaint. In your view what should be done by seller as well as Mohan?
- Q.60 A patient didn't read carefully the instructions on the pack of the drug. On using it his health deteriorated further instead of improvement. If you are in his place than what you would do?

**GRADE- XII - ENTREPRENEURSHIP - ACADEMIC YEAR - 2016-17**

Prepare a project report on the topic assigned to you in the classroom. You all need to follow the guide lines mentioned and discussed in the text book of the Entrepreneurship while preparing the report.

***Project Topic:*** Project Report and Market Survey

Prepare a ***handwritten project report and market survey*** of any company which comes in the form of entrepreneur form of business. Collect related facts, figures and details about the company and finalize the report.

***The project report must contain:***

1. Acknowledgement
2. Introduction about the Industry.
3. Introduction about the selected company.
4. Corporate history of the company.
5. List of products.
6. Marketing Mix.
7. SWOT Analysis.
8. Consolidate Balance sheet.
9. Questionnaire.
10. Graphical Representation.
11. Some unknown facts about the company.
12. The top five reasons why they are so popular.
13. Conclusion.
14. Bibliography.



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**GRADE- XII - HINDI - ACADEMIC YEAR - 2016-17**

- 1 जनसंचार एवं पत्रकारिता संबन्धित साठ पश्नों का लेखन एवं याद करना ।
  - 2 'कन्या -भूण- हत्या' तथा 'भ्रष्टाचारकेविरोध में उमडना जनसैलाव' विषय से आलेख लिखें ।
- 

**GRADE- XII - PHYSICAL EDUCATION - ACADEMIC YEAR - 2016-17**

1. Measure BMI of ten members from your family or neighbourhood and show graphical representation of the data as discussed in the class room.
2. Write any two adventure sports activity with detail as explained in the classroom and paste the relevant pictures using A-4 sheets.  
(Submit assignment -1 and 2 in a stick file)
3. Make a collage of different types of postural deformities on a chart paper.





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**GRADE- XII - MATHEMATICS - ACADEMIC YEAR - 2016-17**

**Prepare and revise the complete syllabus and solve the attached sample paper in A-4 sheets. Submit your solution on the first day of school after vacation.**

**Time allowed: 3 hours**

**Maximum Marks: 100**

**General Instructions:**

- (i) All questions are compulsory.
- (ii) This question paper contains 29 questions.
- (iii) Question 1- 4 in Section A are very short-answer type questions carrying 1 mark each.
- (iv) Question 5-12 in Section B are short-answer type questions carrying 2 marks each.
- (v) Question 13-23 in Section C are long-answer-I type questions carrying 4 marks each.
- (vi) Question 24-29 in Section D are long-answer-II type questions carrying 6 marks each.

**Section A**

1. Is R defined on the set  $A=\{1,2,3,4,5,6\}$  as  $R=\{(x,y): y \text{ is divisible by } x\}$  symmetric.
2. Calculate the direction cosines of the vector  $a = 3i - 2j - 5k$ .
3. What is the principal value branch of  $\cos^{-1} x$  ?
4. If  $A = \begin{bmatrix} 1 & 2 \\ 4 & 2 \end{bmatrix}$ , then show that  $|2A| = 4|A|$ .

**Section B**

5. Evaluate:  $\tan^{-1}[2 \cos(2 \sin^{-1}(\sin \frac{\pi}{6}))]$
6. If  $A = \begin{bmatrix} -1 & 5 \\ 3 & 2 \end{bmatrix}$  show that  $(3A)^T = 3A^T$
7. Find  $\frac{dy}{dx}$  if  $y = \frac{\sin(ax+b)}{\cos(cx+d)}$
8. If  $y = (\tan^{-1}x)^2$  show that  $(x^2 + 1)^2 y_2 + 2x(x^2 + 1)y_1 = 2$
9. Evaluate:  $\int f'(ax+b)[f(ax+b)]^x dx$
10. Find the particular Solution of the diff. equation  
 $(1+e^{2x})dy + (1+y^2)e^x dx = 0$  given that  $y = 1$ , when  $x = 0$
11. Show that the points  $A(-2\hat{i} + 3\hat{j} + 5\hat{k})$ ,  $B(\hat{i} + 2\hat{j} + 3\hat{k})$  and  $C(7\hat{i} - \hat{k})$  are collinear.
12. A Box of oranges is inspected by examining three randomly selected oranges drawn without replacement. If all the three oranges are good, the box is approved for sale, otherwise, it is rejected. Find the probability that a box containing 15 oranges out of which 12 are good and 3 are bad ones will be approved for sale.

**Section C**

13. If  $A = \begin{bmatrix} 2 & 0 & 1 \\ 2 & 1 & 3 \\ 1 & -1 & 0 \end{bmatrix}$ , find  $A^2 - 5A + 4I$  and hence find a matrix X such that  $A^2 - 5A + 4I + X = 0$ .
14. Show that the normal at any point  $\theta$  to the curve  $x = a \cos \theta + a \theta \sin \theta$ ,  $y = a \sin \theta - a \theta \cos \theta$  is at a constant distance from origin.
15. Find the intervals in which the function f is given by  $f(x) = \frac{4 \sin x - 2x - x \cos x}{2 + \cos x}$  is (i) increasing (ii) decreasing.
16. Integrate  $\int \frac{dx}{\cos(x+a) \cos(x+b)}$



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17. A bag A contains 4 black and 6 red balls and bag B contains 7 black and 3 red balls. A die is thrown. If 1 or 2 appears on it, then bag A is chosen, otherwise bag B. If two balls are drawn at random (without replacement) from the selected bag, find the probability of one of them being red and another black.
18. An unbiased coin is tossed 4 times. Find the mean and variance of the number of heads obtained.
19. If  $r = x\hat{i} + y\hat{j} + z\hat{k}$ , find  $(r \times \hat{i}) \cdot (r \times \hat{j}) + xy$
20. Find the distance between the point  $(-1, -5, -10)$  and the point of intersection of the line  $\frac{x-2}{3} = \frac{y+1}{4} = \frac{z-2}{12}$  and the plane  $x - y + z = 5$
21. If  $\sin[\cot^{-1}(x+1)] = \cos(\tan^{-1}x)$ , then find  $x$ .
22. If  $y = \tan \frac{\sqrt{1+x^2} + \sqrt{1-x^2}}{\sqrt{1+x^2} - \sqrt{1-x^2}}$   $x < 0$ , then find  $\frac{dy}{dx}$ .

**Section D**

23. Let  $A = N \times N$  and  $*$  be the binary operation on  $A$  defined by  $(a, b) * (c, d) = (a+c, b+d)$  Show that  $*$  is commutative and associative. Find the identity element for  $*$  on  $A$ , if any.
24. Find the ratio in which the area bounded by the curves  $y^2 = 12x$  and  $x^2 = 12y$  is divided by the line  $x=3$ .
25. Find the equation of the line through the points  $A(3, 4, 1)$  and  $B(5, 1, 6)$  crosses the  $XY$  plane.
26. Integrate  $\int_{\frac{\pi}{4}}^{\frac{\pi}{2}} \cos 2x \log(\sin x) dx$ .
27. The cost of 4 kg onions, 3kg wheat and 2 kg rice is 60. The cost of 2 kg onions, 4kg wheat and 6 kg rice is 90. The cost of 6 kg onions, 2kg wheat and 3 kg rice is 70. Find the per kg cost of each of the three commodities.
28. A manufacturing company makes two models A and B of a product. Each piece of model A requires 9 labour hours for fabricating and 1 labour hour for finishing. Each piece of model B requires 12 labour hours for fabricating and 3 labour hour for finishing. For fabricating and finishing the maximum labour hours available are 180 and 30 respectively. The company makes a profit of Rs. 8000 on each piece of model A and Rs. 12000 on each piece of model B.



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**GRADE- XII - COMPUTER SCIENCE - ACADEMIC YEAR - 2016-17**

**Prepare and revise the complete syllabus and solve the given questions in A-4 sheets. Submit your solution on the first day of school after vacation.**

1. (a) Out of the following, find those identifiers, which cannot be used for naming Variable, Constants or Functions in a C++ program:

\_Cost, Price\*Qty, float, Switch, Address One, Delete,  
Number12, do

- (b) Jayapriya has started learning C++ and has typed the following program. When she compiled the following code written by her, she discovered that she needs to include some header files to successfully compile and execute it. Write the names of those header files, which are required to be included in the code.

```
void main()
{
    float      A,Number,Outcome;
    cin>>A>>Number;
    Outcome=pow(A,Number);
    cout<<Outcome<<endl;
}
```

- (c) Rewrite the following C++ code after removing any/all syntactical errors with each correction underlined.

Note : Assume all required header files are already being included in the program.

```
#define Equation(p,q)=p+2*q void main()
{
    float A=3.2;B=4.1;
    C=Equation(A,B);
    cout<<'Output='<<C<<endl;
}
```

- (d) Find and write the output of the following C++ program code :

Note : Assume all required header files are already included in the program.

```
typedef char  STRING[80]; void
MIXITNOW(STRING S)
{
    int  Size=strlen(S); for(intI=0;I<Size-
    1;I+=2)
    {
        char      WS=S[I];
        S[I]=S[I+1];
        S[I+1]=WS;
    }
    for(I=1;I<Size;I+=2)
        if(S[I]>='M' && S[I]<='U')
            S[I]='@';
}
void main()
{
    STRING  Word="CRACKAJACK";
    MIXITNOW(Word);
    cout<<Word<<endl;
```



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- (e) Find and write the output of the following C++ program code :  
Note : Assume all required header files are already being included in the program.

```
class Stock
{
    long int ID; float
    Rate; int Date;
public:
    Stock(){ID=1001;Rate=200;Date=1;}
    void RegCode(long int I,float R)
    {
        ID=I;
        Rate=R;
    }
    void Change(int New,int DT)
    {
        Rate+=New;
        Date=DT;
    }
    void Show()
    {
        cout<<"Date          :"<<Date<<endl;
        cout<<ID<<"#"<<Rate<<endl;
    }
};
void main()
{
    Stock          A,B,C;
    A.RegCode(1024,150);
    B.RegCode(2015,300);
    B.Change(100,29);
    C.Change(-20,20);
    A.Show();
    B.Show();
    C.Show();
}
```

- (f) Look at the following C++ code and find the possible output(s) from the options (i) to (iv) following it. Also, write the maximum and the minimum values that can be assigned to the variable CHANGER.

Note :

- Assume all the required header files are already being included in the code.
- The function random(n) generates an integer between 0 and n

```
void main()
{
    randomize();    int
    CHANGER;
    CHANGER=random(3);
    char CITY[][25]={"DELHI","MUMBAI","KOLKATA","CHENNAI"}; for(int
    I=0;I<=CHANGER;I++)
    {
```



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```
for(int      J=0;J<=I;J++)
    cout<<CITY[J];
cout<<endl;
}
}
```

(i) DELHI DELHIMUMBAI DELHIMUMBAIKOLKATA	(ii) DELHI DELHIMUMBAI DELHIMUMBAIKOLKATA DELHIMUMBAIKOLKATACHENNAI
(iii) MUMBAI MUMBAIKOLKATA MUMBAIKOLKATACHENNAI	(iv) KOLKATA KOLKATACHENNAI

2. (a) Differentiate between Constructor and Destructor functions giving suitable example using a class in C++. When does each of them execute ?  
(b) Observe the following C++ code and answer the questions (i) and (ii). Assume all necessary files are included:

```
class FICTION
{
    long FCode;
    char FTitle[20]; float
    FPrice;
Public:
    FICTION() //Member Function1
    {
        cout<<"Bought"<<endl;
        FCode=100;strcpy(FTitle,"Noname");FPrice=50;
    }
    FICTION(int C,char T[],float P) // Member Function 2
    {
        FCode=C;
        strcpy(FTitle,T);
        FPrice=P;
    }
    voidIncrease(floatP) // Member Function3
    {
        FPrice+=P;
    }
    voidShow() // Member Function4
    {
        cout<<FCode<<":."<<FTitle<<":."<<FPrice<<endl;
    }
}
```



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```
~FICTION()                                // Member Function5
{
    cout<<"Fiction removed!" <<endl;
}
};
void main()                                //Line 1
{                                           //Line 2
    FICTION F1,F2(101,"Dare",75);         //Line 3
    for (int I=0;I<4;I++)                //Line 4
    {                                       //Line 5
        F1.Increase(20);F2.Increase(15); //Line 6
        F1.Show();F2.Show();             //Line 7
    }                                       //Line 8
}                                           //Line 9
```

- Which specific concept of object oriented programming out of the following is illustrated by Member Function 1 and Member Function 2 combined together?
  - Data Encapsulation
  - DataHiding
  - Polymorphism
  - Inheritance
- (ii) How many times the message "Fiction removed!" will be displayed after executing the above C++ code ? Out of Line 1 to Line 9, which line is responsible to display the message "Fiction removed!"?
- (c) Write the definition of a class METROPOLIS in C++ with following description: Private Members
- MCode //Data member for Code (an integer)
  - MName //Data member for Name (a string)
  - MPop //Data member for Population (a longint)
  - Area //Data member for Area Coverage (a float)
  - PopDens //Data member for Population Density ( a float)
  - CalDen() //A member function to calculate-----  
//Density as PopDens/Area Public
- Members
- Enter() //A function to allow user to enter valuesof  
//Mcode,MName,MPop,Area and call CalDen()  
//function
  - ViewALL() //A function to display all the datamembers  
//also display a message "Highly PopulatedArea"  
//if the Density is more than 12000
- (d) Answer the questions (i) to (iv) based on thefollowing:
- ```
class PRODUCT
{
    int Code;
    char Item[20];
protected:
```



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```
float Qty;
public:
    PRODUCT();
    void GetIn(); void Show();
};
class WHOLESALER
{
    int WCode;
protected:
    char Manager[20]; public:
    WHOLESALER();
    void Enter(); void
    Display();
};
class SHOWROOM : public PRODUCT, private WHOLESALER
{
    char Name[20],City[20]; public:
    SHOWROOM();
    void Input(); void
    View();
};
```

- (i) Which type of Inheritance out of the following is illustrated in the above example?
- Single Level Inheritance
  - Multi Level Inheritance
  - Multiple Inheritance
- (ii) Write the names of all the data members, which are directly accessible from the member functions of classSHOWROOM.
- (iii) Write the names of all the member functions, which are directly accessible by an object of classSHOWROOM.
- (iv) What will be the order of execution of the constructors, when an object of class SHOWROOM is declared?
3. (a) Write the definition of a function FixPay(float Pay[], int N) in C++, which should modify each element of the array Pay having N elements, as per the following rules:

| Existing Value of Pay  | Pay to be changed to         |
|------------------------|------------------------------|
| If less than 100000    | Add 25%in the existing value |
| If >=100000 and <20000 | Add20% in the existing value |
| If >=200000            | Add 15%in the existing value |

(b) T[20][50] is a two dimensional array, which is stored in the memory along the row with each of its element occupying 4 bytes, find the address of the element T[15][5], if the element T[10][8] is stored at the memorylocation52000.

(c) Write the definition of a member function INSERT() for a class QUEUE in C++, to insert an ITEM in a dynamically allocated Queue of items considering the following code is already written as a part of the program.

```
struct ITEM
{
```



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```

int INO; char INAME[20]; ITEM
*Link;
};
class QUEUE
{
    ITEM *R,*F;
public :
    QUEUE() {R=NULL;F=NULL;}
    void INSERT(); void
    DELETE();
~QUEUE();

```

(d) Write definition for a function SHOWMID(int P[][5], int R, int C) in C++ to display the elements of middle row and middle column from a two dimensional array P having R number of rows and C number of columns. For example, if the content of array is as follows:

The function should display the following as output :

|     |     |     |     |     |
|-----|-----|-----|-----|-----|
| 115 | 112 | 116 | 101 | 125 |
| 103 | 101 | 121 | 102 | 101 |
| 185 | 109 | 109 | 160 | 172 |

(e) Convert the following Infix expression to its equivalent Postfix expression, showing the stack contents for each step of conversion.

A/(B+C)\*D-E

4. (a) Write function definition for WORD4CHAR() in C++ to read the content of a text file FUN.TXT, and display all those words, which has four characters in it. Example : If the content of the file fun.TXT is as follows :

The function WORD4CHAR() should display the following :

|                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| When I was a small child, I used to play in the                                                                                                                      |
| <del>wheden</del> <del>with</del> <del>play</del> <del>grand</del> <del>mo</del> <del>.</del> <del>These</del> <del>days</del> <del>imere</del> <del>amazingly</del> |
| funful and I remember all the moments of that time                                                                                                                   |

- (b) Write a definition for function BUMPER() in C++ to read each object of a binary file GIFTS.DAT, find and display details of those gifts, which has remarks as "ON DISCOUNT". Assume that the file GIFTS.DAT is created with the help of objects of class GIFTS, which is defined below :

```

class GIFTS
{
    int ID; char Gift[20], Remarks[20]; float Price; public:
    void Takeonstock()
    {
        cin >> ID; gets(Gift); gets(Remarks); cin >> Price;
    }
    void See()
    {
        cout << ID << " : " << Gift << " : " << Price << " : " << Remarks << endl;
    }
}

```





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```
char *GetRemarks() {return Remarks;}
```

- (c) Find the output of the following C++ code considering that the binary file MEM.DAT exists on the hard disk with a data of 1000members:

```
class MEMBER
{
    int Mcode;char MName[20]; public:
    void Register();void Display();
};
void main()
{
    fstream MFile;
    MFile.open("MEM.DAT", ios::binary|ios::in); MEMBER M;
    MFile.read((char*)&M, sizeof(M));
    cout<<"Rec:"<<MFile.tellg()/sizeof(M)<<endl;
    MFile.read((char*)&M, sizeof(M)); MFile.read((char*)&M,
    sizeof(M)); cout<<"Rec:"<<MFile.tellg()/sizeof(M)<<endl;
    MFile.close();
}
}
```

5. (a) Observe the following STUDENTS and EVENTS tables carefully and write the name of the RDBMS operation which will be used to produce the output as shown in LIST. Also, find the Degree and Cardinality of the LIST.

| STUDENTS |               |
|----------|---------------|
| NO       | NAME          |
| 1        | Tara Mani     |
| 2        | Jaya Sarkar   |
| 3        | Tarini Trikha |

| EVENTS    |             |
|-----------|-------------|
| EVENTCODE | EVENTNAME   |
| 1001      | Programming |
| 1002      | IT Quiz     |

| LIST |               |           |             |
|------|---------------|-----------|-------------|
| NO   | NAME          | EVENTCODE | EVENTNAME   |
| 1    | Tara Mani     | 1001      | Programming |
| 1    | Tara Mani     | 1002      | IT Quiz     |
| 2    | Jaya Sarkar   | 1001      | Programming |
| 2    | Jaya Sarkar   | 1002      | IT Quiz     |
| 3    | Tarini Trikha | 1001      | Programming |
| 3    | Tarini Trikha | 1002      | IT Quiz     |

- (b) Write SQL queries for (i) to (iv) and find outputs for SQL queries (v) to (viii), which are based on the tables.

Table : VEHICLE

| COD | VTYPE        | PERK |
|-----|--------------|------|
| 101 | VOLVO BUS    | 160  |
| 102 | AC DELUXE    | 150  |
| 103 | ORDINARY BUS | 90   |
| 105 | SUV          | 40   |
| 104 | CAR          | 20   |

**Note :**

- PERKM is Freight Charges per kilometer
- VTTYPE is Vehicle Type



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Table : TRAVEL

| NO  | NAM          | TDATE      | KM  | COD | NO |
|-----|--------------|------------|-----|-----|----|
| 101 | Janish Kin   | 2015-11-13 | 200 | 101 | 32 |
| 103 | Vedika Sahai | 2016-04-21 | 100 | 103 | 45 |
| 105 | Tarun Ram    | 2016-03-23 | 350 | 102 | 42 |
| 102 | John Fen     | 2016-02-13 | 90  | 102 | 40 |
| 107 | Ahmed Khan   | 2015-01-10 | 75  | 104 | 2  |
| 104 | Raveena      | 2016-05-28 | 80  | 105 | 4  |
| 106 | Kripal Anya  | 2016-02-06 | 200 | 101 | 25 |

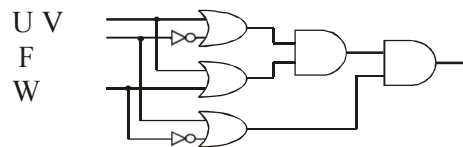
Note :

- NO is Traveller Number
  - KM is Kilometertravelled
  - NOP is number of travellers travelled invehicle
  - TDATE is TravelDate
- (i) To display NO, NAME, TDATE from the table TRAVEL in descending order ofNO.
  - (ii) To display the NAME of all the travellers from the table TRAVEL who are travelling by vehicle with code 101 or102.
  - (iii) To display the NO and NAME of those travellers from the table TRAVEL who travelled between '2015-12-31' and'2015-04-01'.
  - (iv) To display all the details from table TRAVEL for the travellers, who have travelled distance more than 100 KM in ascending order ofNOP.
  - (v) `SELECT COUNT (*), CODE FROM TRAVEL GROUP BY CODE HAVINGCOUNT(*)>1;`
  - (vi) `SELECT DISTINCT CODE FROMTRAVEL;`
  - (vii) `SELECT A.CODE,NAME,VTYPE FROM TRAVEL A,VEHICLEB WHERE A.CODE=B.CODE AND KM<90;`
  - (viii) `SELECT NAME,KM*PERKM FROM TRAVEL A, VEHICLEB WHERE A.CODE=B.CODE AND A.CODE='105';`

6. (a) Verify the following using Boolean Laws :

$$A' + B'.C = A'.B'.C' + A'.B.C' + A'.B.C + A'.B'.C + A.B'.C$$

(b) Write the Boolean Expression for the result of the Logic Circuit as shown below :



(c) Derive a Canonical POS expression for a Boolean function F, represented by the following truth table :

| P | Q | R | F(P, Q, R) |
|---|---|---|------------|
| 0 | 0 | 0 | 0          |
| 0 | 0 | 1 | 1          |

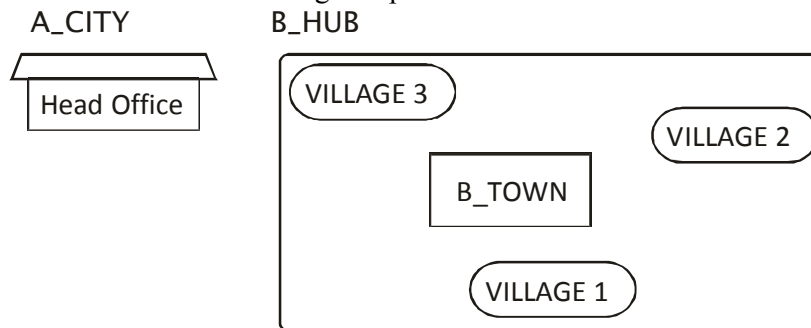


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|   |   |   |   |
|---|---|---|---|
| 0 | 1 | 0 | 1 |
| 0 | 1 | 1 | 0 |
| 1 | 0 | 0 | 0 |
| 1 | 0 | 1 | 0 |
| 1 | 1 | 0 | 1 |
| 1 | 1 | 1 | 1 |

- (d) Reduce the following Boolean Expression to its simplest form using K-Map:  
 $F(X,Y,Z,W) = \sum(2,6,7,8,9,10,11,13,14,15)$
7. (a) Give two examples of PAN and LAN type of networks.  
 (b) Which protocol helps us to browse through web pages using internet browsers? Name any one internet browser.  
 (c) Write two advantages of 4G over 3G Mobile Telecommunication Technologies in terms of speed and services.  
 (d) Write two characteristics of Web2.0. What is the basic difference between Trojan Horse and Computer Worm?  
 (e) Categorise the following under Client Side and Server Side script category:  
 (i) VBScript (ii) ASP (iii) JSP (iv) JavaScript  
 (f) Uplifting Skills Hub India is a knowledge and skill community which has an aim to uplift the standard of knowledge and skills in the society. It is planning to setup its training centers in multiple towns and villages pan India with its head offices in the nearest cities. They have created a model of their network with a city, a town and 3 villages as follows.

As a network consultant, you have to suggest the best network related solutions for their issues/problems raised in (i) to (iv) keeping in mind the distances between various locations and other given parameters.



Shortest distances between various locations:

|                                    |               |
|------------------------------------|---------------|
| <b>VILLAGE 1 to B_TOWN</b>         | <b>2 KM</b>   |
| <b>VILLAGE 2 to B_TOWN</b>         | <b>1.0 KM</b> |
| <b>VILLAGE 3 to B_TOWN</b>         | <b>1.5 KM</b> |
| <b>VILLAGE 1 to VILLAGE 2</b>      | <b>3.5 KM</b> |
| <b>VILLAGE 1 to VILLAGE 3</b>      | <b>4.5 KM</b> |
| <b>VILLAGE 2 to VILLAGE 3</b>      | <b>2.5 KM</b> |
| <b>A_CITY Head Office to B_HUB</b> | <b>25 KM</b>  |

Number of Computers installed at various locations are as follows:



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|                      |            |
|----------------------|------------|
| <b>B_TOWN</b>        | <b>120</b> |
| <b>VILLAGE 1</b>     | <b>15</b>  |
| <b>VILLAGE 2</b>     | <b>10</b>  |
| <b>VLLAGE 3</b>      | <b>15</b>  |
| <b>A_CITY OFFICE</b> | <b>6</b>   |

Note :

- In Villages, there are community centers, in which one room has been given as training center to this organization to install computers.
- The organization has got financial support from the government and top IT companies.
- (i) Suggest the most appropriate location of the SERVER in the B\_HUB (out of the 4 locations), to get the best and effective connectivity. Justify your answer.
- (ii) Suggest the best wired medium and draw the cable layout (location to location) to efficiently connect various locations within the B\_HUB.
- (iii) Which hardware device will you suggest to connect all the computers within each location of B\_HUB?
- (iv) Which service/protocol will be most helpful to conduct live interactions of Experts from Head Office and people at all locations of B\_HUB?



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**GRADE- XII - ENGLISH - ACADEMIC YEAR - 2016-17**

**Prepare and revise the complete syllabus and solve the following sample paper in A-4 sheets. Submit your solution on the first day of school after vacation.**

**Q.1. Read the passage given below and then answer the question which follow:**

- 1 In spite of all the honours that we heaped upon him, Pasteur, as has been said, remained simple at heart. Perhaps the imagery of his boyhood days, when he drew the familiar scenes of his birthplace, and the longing to be a great artist, never wholly left him. In truth he did become a great artist, though after his sixteenth year he abandoned the brush forever. Like every artist of worth, he put his whole soul and energy into his work, and it was this very energy that in the end wore him out. For him, each sufferer was something more than just a case that was to be cured. He looked upon the fight against hydrophobia as a battle, and he was absorbed in his determination to win. The sight of injured children, particularly, moved him to an indescribable extent. He suffered with his patients, and yet he would not deny himself a share in that suffering. His greatest grief was when sheer physical exhaustion made him give up his active work. He retired to the estate at *Villeneuve Etang*, where he had his kennels for the study of rabies, and there he passed his last summer, as his great biographer, Vallery Radot, has said, “practicing the Gospel virtues.”
- 2 “He revered the faith of his fathers,” says the same writer, “and wished without ostentation or mystery to receive its aid during his last period.”
- 3 The attitude of this man to the science he had done so much to perfect can be best summed up in a sentence that he is reputed once to have uttered, concerning the materialism of many of his contemporaries in similar branches of learning to his own: “The more I contemplate the mysteries of Nature, the more my faith becomes like that of a peasant.”
- 4 But even then in retirement he loved to see his former pupils, and it was then he would reiterate his life principles: “Work,” he would say, “never cease to work.” So well had he kept this precept that he began rapidly to sink from exhaustion.
- 5 Finally on September 27, 1895, when someone leant over his bed to offer him a cup of milk, he said sadly: “I cannot,” and with a look of perfect resignation and peace, seemed to fall asleep. He never again opened his eyes to the cares and sufferings of a world, which he had done so much to relieve and to conquer. He was within three months of his seventy-third birthday.
- 6 Thus passed, as simply as a child, the man whom the French people were to vote at a plebiscite as the greatest man that France had ever produced. Napoleon, who has always been considered the idol of France, was placed fifth.
- 7 No greater tribute could have been paid to Louis Pasteur, the tanner’s son, the scientist, the man of peace, the patient worker for humanity.

**1.1 Answer the following questions:**

- a. Even accolades and honours did not change the simple man that Pasteur was. Give reasons.
- b. How did Pasteur view those who suffered from diseases?
- c. How did Pasteur engage himself in the estate?
- d. What advice did he always give to his pupils?
- e. How did France, the country of his birth, honour this great scientist?

**1.2 Find the words from the passage which mean the same as:**

- a. to give up (para 1)



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- b. people belonging to the same period (Para - 3)
- c. vote by the people of the country to decide a matter of national importance (para 6)

**Q. 2. Read the passage given below:**

Residents of the Bhirung Raut Ki Gali, where Ustad Bismillah Khan was born on March 21, 1916, were in shock. His cousin, 94-year-old Mohd Idrish Khan had tears in his eyes. Shubhan Khan, the care-taker of Bismillah's land, recalled :

*“Whenever in Dumaraon, he would give rupees two to the boys and rupees five to the girls of the locality”.*

He was very keen to play shehnai again in the local Bihariji's Temple where he had started playing shehnai with his father, Bachai Khan, at the age of six. His original name was Quamaruddin and became Bismillah only after he became famous as a shehnai player in Varanasi.

His father Bachai Khan was the official shehnai player of Keshav Prasad Singh, the Maharaja of the erstwhile Dumaraon estate, Bismillah used to accompany him. For Bismillah Khan, the connection to music began at a very early age. By his teens, he had already become a master of the shehnai. On the day India gained freedom, Bismillah Khan, then a sprightly 31 year-old, had the rare honour of playing from Red Fort. But Bismillah Khan won't just be remembered for elevating he shehnai from an instrument heard only in weddings and naubat khan as tone that was appreciated in concert halls across the world. His life was a

testimony to the plurality that is India. practising Muslim, he would take a daily dip in the Ganga in his younger days after a bout of *kusti* in *Benia Baga Akhada*. Every morning, Bismillah Khan would do *riyaaz* at the Balaji temple on the banks of the river. Even during his final hours in a Varanasi hospital, music didn't desert Bismillah Khan. A few hours before he passed away early on Monday, the shehnai wizard hummed a *thumri* to show that he was feeling better. This was typical of a man for whom life revolved around music.

Throughout his life he abided by the principle that all religions are one. What marked Bismillah Khan was his simplicity and disregard for the riches that come with musical fame. Till the very end, he used a cycle rickshaw to travel around Varanasi. But the pressure of providing for some 60 family members took its toll during his later years.

- 2.1 On the basis of your reading of the above passage make notes using headings and sub-headings. Use recognizable abbreviations wherever necessary.
- 2.2 Make a summary of the above passage in not more than 80 words using the notes made and also suggest a suitable title.

**Section – B - Advanced Writing Skills**

**Q.3** A.K International School is looking for areceptionist for the school. Write an advertisement on behalf of the administrative officer in the classified columns of the local newspaper giving necessary details. Draft the advertisement in not more than 50 words.

**OR**

Suman/Suresh has cleared the Pre-Medical Pre-Dental entrance examination. The family is elated at the achievement and they decide to have a get-together for all friends. Draft an informal invitation for the get-together.

**Q.4.** You are Shekhar/ Tripta a student of A.P Public School. Principals of two schools from Bhutan visited your school as part of a cultural exchange programme. Students of the school put up a cultural show in their honour. Write a report of the programme for your school magazine. (125-150words)



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**OR**

It was raining heavily. You were walking to your house after the school, when suddenly you saw a huge Neem tree coming down and falling on the pavement and the road thereby hitting a car parked on the pavement. The traffic came to a standstill. Describe the chaotic traffic scene in 125-150 words.

- Q. 5.** You are Nitin/Natasha a student of Class XII at K.P.N. Public School Faridabad. A student is required to cope with a lot of peer pressure in today's competitive environment. Write a letter to the editor of a national daily highlighting the kind of pressures an adolescent faces and suggest ways to cope with the same.

**OR**

You are Suresh/Smita. You come across the following advertisement in a national daily. You consider yourself suitable and eligible for the post. Write an application in response to the advertisement given below:

*Application are invited for the post of a Nursery Teacher in a reputed school of Delhi. The candidate must have at least 05 years experience of teaching tiny-tots. The applicant must have a pleasant personality. He/she should be creative and innovative. Attractive salary. Interested candidates should apply to The Principal, AKS International, Indirapuram, New Delhi within 10 days with detailed resume.*

- Q.6.** There has been wide spread devastation caused by the 'Himalayan Tsunami' in Uttarkhand state of India. Multiple reasons have been attributed to the havoc caused by heavy rains. Write an article highlighting the steps taken by the administration to rescue and evacuate the people from the flood hit areas. Also express your opinion on how this kind of tragedy can be averted in future. You are Manish/ Micky. **(150-200 words)**

**OR**

Computer games and video games have become popular with children today. As a result outdoor games seem to have no place in their life anymore. You are Mukesh/ Meena. You decide to write a speech to be delivered in the school assembly on your experiences about the joys of playing outdoor games.

**Section – C Textbooks and Long ReadingText**

**Read the following extract from the poems and answer the questions that follows: Any One**

- Q.7.** *They do not fear them enbeneath the tree;*

*They pace in sleek chivalric certainly.*

- a. Are Aunt Jennifer's tigers real? Give reasons for your answer.
- b. Why do the tigers not fear the man beneath the tree?
- c. What do you understand by 'chivalriccertainty'?

**OR**

*A thing of beauty is a joy for ever Its loveliness increases, it will never Pass into nothingness; but will keep A bower quiet for us.*

- a. 'A thing of beauty is joy for e ver'. Explain
- b. Why does a beautiful thing 'pass into nothingness'?
- c. What does poet mean by 'a bower quiet forus'

- Q. 8. Answer any two of the following questions in about 30-40 words.**

1. According to Pablo Neruda, what is it that human beings can learn from Nature?
2. Why does Spender call Shakespeare wicked and the map a bad example?
3. What is the significance of the parting words of the poet and her smile, in *My Mother at Sixty-six*.





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**Q.9. Answer any six of the following questions in about 30-40 words.**

- a. For Franz, what was much more tempting than going to school and why?
- b. Mention any two hazards of working in the glass bangles industry.
- c. How did Douglas overcome *the old terror*?
- d. The crofter can be called as a *good host*. Give reason.
- e. Even though the Maharaja lost three lakhs of rupees, he was still happy. Why?
- f. Why did Roger Skunk go in the search of the wizard?
- g. Mention any two reasons because of which it would take thirty minutes to an hour for Bama to reach home?

**Q.10. Answer any one of the following in about 100-125 words.**

Franz's attitude towards school as well as towards M. Hamel changes when he comes to know about the takeover of his village by Prussians. Do you agree? Discuss with reference to the *The Last Lesson*.

OR

“The duty of a doctor beckoned Dr. Sadao in helping the injury soldier. “But what made his wife Hana empathies with him in the face of open defiance from the domestic staff?”

**Q. 11. Read the following and answer the question that follows:**

After reading the story ‘The Rattrap’, you feel that moral virtues can change a person’s life. These play a vital role in the moral and spiritual development of a human-being. ‘An eye for an eye will make the whole world blind.’ It is through fellow-feeling, love, compassion and trust in others that can help reform the society. Write a paragraph on ‘ways to reform a wayward personality’ in about 100 words.

**Long Reading Text – The Invisible Man**

**Q.12** Elaborate the character sketch of the following characters----

- (a) Mrs. hall    (b) Mr. Bunting    (c) Mr. Cuss    (d) Dr. Kemp

**Q.13**

- a) Describe the incident of the unveiling of the stranger at the Iping inn?
- b) How did the invisible man recover his books from the Iping inn? Describe in detail.
- c) Describe the incident at the Jolly and Cricketers inn where the invisible man was wounded?
- d) Describe the interaction between Dr. Kemp and the invisible man at the former's house?
- e) What plan did Dr. Kemp make to have the invisible man arrested? Why did it fail?
- f) How was Colonel Adye killed?



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**GRADE- XII - ACCOUNTANCY - ACADEMIC YEAR - 2016-17**

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**Maximum Marks: 80**

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**General Instructions:**

**Solve the given sample paper in a separate note book and submit your solution on the first day school reopened.**

1. This question paper contains Two parts A & B.
2. Both the parts are compulsory for all.
3. All parts of questions should be attempted at one place.
4. Marks are given at the end of each question.

**Part - A**  
**Partnership, Share Capital and Debentures**

1. Vinod, Manthan and Dhanraj are partners and sharing profits and losses in the ratio of 3:2:1. To expand the business, they admitted 50 new partners to fulfill the requirement of capital. Is it still a partnership business? Give reason in support of your answer. [1]
2. Vinod and Sampurna share profits and losses in the ratio of 4:3. They admit Karan with  $\frac{3}{7}$ th share, which he gets  $\frac{2}{7}$ th from Vinod and  $\frac{1}{7}$ th from Sampurna. What will the new profit sharing ratio? [1]
3. Vinod Limited invited applications for issuing 20,00,000 Equity Shares of Rs.10 each. The public applied for 17,10,000 shares. Can the company proceed for the allotment of shares? Give reason in support of your answer. [1]
4. Name the asset which we do not transfer in the debit side of Realisation Account but we record it in the credit side of Realisation Account because it brings certain amount of cash against its disposal at the time of dissolution of partnership firm. [1]
5. Pass the necessary journal entry in the books of Vinod Limited when 40,000, 11% Debentures of Rs.100 each are issued as collateral security against the Loan of Rs.32,00,000 taken from HDFC Bank. [1]
6. Vinod, Ramneek and Navrup are partners sharing profits as per the partnership deed 3:2:1. The partnership deed allows interest on capital but there was a loss instead of profit at the end of the year. At what rate interest on capital is to be calculated? [1]
7. Vinod Limited converted its 2,000; 11% Debentures of Rs.100 each into Equity Shares of Rs.10 each. The debentures were issued at a premium of Rs.10 per debentures and the equity Shares were issued at a premium of Rs.2.50 per share. Give journal entries. [3]

8. The partnership firm of Vinod and Purva was dissolved on 1.3.2013. According to the agreement Vinod had agree to undertake the dissolution work for an agreed remuneration of Rs.4,000 and bear all realisation expenses. Dissolution expenses were Rs. 3,000 and the same were paid by the firm. Pass the necessary journal entry for the payment of dissolution expenses. [3]
9. Vinod Limited purchased a running business of Kedia Limited for a sum of Rs. 36,00,000 payable by issue of equity shares of Rs.100 each at a premium of Rs.20 per share. The assets and liabilities consisted of the following: [3]  
Machinery Rs.7,00,000; Land and Building Rs.12,00,000; Stock Rs.9,00,000 and Creditors Rs.2,00,000.  
Give necessary journal entries.
10. On 1st April, 2012, Kamy Ltd. was formed with an authorised capital of Rs. 40,00,000 divided into 4,00,000 equity shares of Rs. 10 each. The company issued prospectus inviting applications for 3,80,000 equity shares. The company received applications for 3,60,000 equity shares. During the first year, Rs. 8 per share were called. Deepti holding 3,000 shares and Divya holding 6,000 shares did not pay first call of Rs. 2 per share. Divya's shares were forfeited after the first call and later on 5,000 of the forfeited shares were re-issued at Rs. 6 per share, Rs. 8 called up. [3]  
Show the following:  
(a) 'Share Capital' in the Balance Sheet of the company as per revised Schedule III of the Companies Act, 2013.  
(b) Also prepare 'Notes to Accounts'.
11. On March 31st, 2016, the balances in the capital accounts of Vinod, Hardik and Anoop after making adjustments for profits and drawings were Rs. 3,20,000, Rs. 2,40,000 and Rs. 1,60,000 respectively. Subsequently, it was discovered that the interest on capital and drawings had been omitted. [4]  
  - The profit for the year ended on 31st March, 2016 was Rs. 90,000.
  - During the year, Vinod and Hardik each withdrew a sum of Rs. 48,000 in equal Instalments in the middle of every month and Anoop withdrew Rs. 60,000.
  - The interest on drawings was to be charged @ 5% p.a. and interest on capital was to be allowed @ 10% p.a.
  - The profit sharing ratio of the partners was 3 : 2 : 1.
Showing your workings clearly pass the necessary rectifying entry.
12. Vinod, David and Mridul are partners in a trading firm. The firm has a fixed total capital of Rs.60,000 held equally by all the partners. Under the partnership deed the partners were entitled to: [4]  
(a) Vinod and David to a salary of Rs.1,800 and Rs.1,600 per month respectively.  
(b) In the event of the death of a partner, Goodwill was to be valued at 2 years purchase of the average profits of the last 3 years.  
(c) Profit upto the date of the death based on the profit of the previous year.  
(d) Partners were to be charged interest on drawings at 5% p.a. and allowed interest on capitals at 6% p.a.  
David died on 1.1.2011. His drawings to the date of death were Rs.2,000 and the interest

thereon was Rs.60. The profits for the three years ending 31.3.2008, 2009 and 2010 were Rs.21,200; Rs.3,200 (Dr.) and Rs.9,000 respectively.

Prepare David's Capital Account to calculate the amount to be paid to his executors.

13. Vinod, Divij and Siddarth were partners in a firm sharing profits in the ratio of 3 : 2 : 1. [6]  
On 30th June, 2014, they decided to dissolve the firm. Following was the Balance Sheet of the firm on that date.

| Liabilities                 | Amount   | Assets     | Amount   |
|-----------------------------|----------|------------|----------|
| Creditors                   | 50,400   | Bank       | 13,700   |
| Investment Fluctuation fund | 10,000   | Stock      | 20,100   |
| Reserve Fund                | 12,000   | Debtors    | 62,600   |
| Capitals: Vinod             | 30,000   | Investment | 16,000   |
| Divij                       | 20,000   | Furniture  | 20,000   |
| Siddarth                    | 10,000   |            |          |
|                             | 1,32,400 |            | 1,32,400 |

The assets were realized and the liabilities were paid off as follows :

- (a) Investments were taken over by Vinod for Rs. 18,000.  
 (b) Stock was taken over by Divij for Rs. 17,500 and furniture was taken over by Siddarth at book value.  
 (c) Rs. 60,500 were realized from the debtors.  
 (d) Creditors were settled in full and realization expenses were Rs. 4,500.  
 Prepare Realisation account, Bank account and Partners' Capital accounts.

14. Vinod, Ayush and Pukhraj were partners in a firm sharing profits in the ratio of 1:2:3. [6]  
Their Balance Sheet as on 31.3.2015 was as follows:

| Liabilities     | Amount   | Assets   | Amount   |
|-----------------|----------|----------|----------|
| Creditors       | 1,00,000 | Land     | 1,00,000 |
| Bills Payable   | 40,000   | Building | 1,00,000 |
| Reserve Fund    | 60,000   | Plant    | 2,00,000 |
| Capitals: Vinod | 2,00,000 | Stock    | 80,000   |
| Ayush           | 1,00,000 | Debtors  | 60,000   |
| Pukhraj         | 50,000   | Bank     | 10,000   |
|                 | 5,50,000 |          | 5,50,000 |

All partners have decided that reconstitution of partnership is to be done with effect from 1<sup>st</sup> April, 2015. For this it was agreed that:

- (a) Creditors of Rs.12,000 were not likely to be claimed and hence be written off.  
 (b) Goodwill of the firm be valued at Rs.3,00,000.  
 (c) Land be revalued at Rs.1,60,000 and building be depreciated by 6%.  
 Prepare Revaluation Account, Partners Capital Account and new Balance Sheet.

15. Give Journal entries in the following cases: [6]  
 (a) Vinod Limited converted 550; 11% Debentures of Rs.1,000 each into new 13% Debentures of Rs.100 each. The new debentures were issued at a premium of 10%.

(b) Vinod refrigerators Ltd. had an outstanding balance of Rs. 10,00,000, 11% Debentures of Rs. 100 each redeemable at a premium of 10%. According to the terms of redemption,

the company redeemed 10% of these debentures by converting them into 13% preference shares of Rs. 100 each issued at a premium of 10%.

16. Vinod Ltd. had an Authorised capital of Rs. 95,50,000 divided into Equity shares of Rs. 100 [8] each. The company offered 84,000 shares to the public at premium.

The amount was payable as follows :

On Application – Rs. 30 per share

On Allotment – Rs. 40 per share (including premium)

On First & Final call – Rs. 50 per share.

Applications were received for 80,000 shares.

All sums were duly received except the following :

Madan, a holder of 200 shares did not pay allotment and call money.

Mayank, a holder of 400 shares did not pay call money.

The company, forfeited the shares of Madan and Mayank subsequently, the forfeited shares were reissued for Rs. 80 per share fully paid-up. Show the entries for the above transaction in the cash book and Journal of the company.

OR

Complete the following journal entries of issue of 10,000 shares by Vinod Limited and applications were received for the same number.

| Date  | Particulars                                                  | L.F | Debit (Rs.) | Credit (Rs.) |
|-------|--------------------------------------------------------------|-----|-------------|--------------|
| ----- | Dr.                                                          |     | ?           |              |
|       | To -----                                                     |     |             | ?            |
|       | (Being Share application money received @ Rs.1)              |     |             |              |
| ----- | Dr.                                                          |     | ?           |              |
|       | To -----                                                     |     |             | ?            |
|       | (Being Application money adjusted)                           |     |             |              |
| ----- | Dr.                                                          |     | ?           |              |
|       | To -----                                                     |     |             | ?            |
|       | (Being Allotment money due @ Rs.2)                           |     |             |              |
| ----- | Dr.                                                          |     | ?           |              |
|       | To -----                                                     |     |             | ?            |
|       | (Being allotment money received except on 100 shares of Ram) |     |             |              |
| ----- | Dr.                                                          |     | ?           |              |
|       | To -----                                                     |     |             | ?            |
|       | To -----                                                     |     |             | ?            |
|       | (Being 100 shares forfeited)                                 |     |             |              |
| ----- | Dr.                                                          |     | ?           |              |
|       | To -----                                                     |     |             | ?            |
|       | (Being first call money due @ Rs.3)                          |     |             |              |

----- Dr. ? ?  
 To-----  
 (Being first call money received except on  
 150 shares of Mohan)

----- Dr. ? ?  
 To-----  
 To-----  
 (Being 150 shares forfeited)

----- Dr. ? ?  
 To-----  
 (Being second & final call money due)

----- Dr. ? ?  
 To-----  
 (Being second call money received except  
 on 50 shares from Sohan)

----- Dr. ? ?  
 To-----  
 To-----  
 (Being 50 shares forfeited)

----- Dr. ?  
 ----- Dr. ?  
 To-----  
 (Being 300 forfeited shares re-issued @  
 Rs.9)

----- Dr. ?  
 To-----  
 (Being balance of share forfeiture account  
 Transferred to capital reserve)

Complete the above given entries.

17. Vinod, Mohan and Sohan are partners in a firm sharing profits and losses in the ratio of 3:2:1. Their Balance Sheet as at 31<sup>st</sup> December, 2014 is as under: [8]

| Liabilities      | Amount   | Assets                   | Amount   |
|------------------|----------|--------------------------|----------|
| Capitals : Vinod | 40,000   | Cash in hand             | 18,000   |
| Mohan            | 40,000   | Debtors           25,000 |          |
| Sohan            | 12,000   | Less : Provision   3,000 | 22,000   |
| Creditors        | 30,000   | Stock                    | 18,000   |
| Bills Payable    | 16,000   | Furniture                | 30,000   |
| General Reserve  | 12,000   | Machinery                | 70,000   |
|                  |          | Goodwill                 | 10,000   |
|                  | 1,68,000 |                          | 1,68,000 |

Mohan retired on 1<sup>st</sup> January, 2015 on the following terms:

- (i) Provision for doubtful debts will be raised by Rs.1,000.
  - (ii) Stock will be depreciated by 10% and Furniture by 5%.
  - (iii) There is an outstanding claim for damages of Rs.1,100 and it is to be provided for in the books.
  - (iv) Creditors will be written back by Rs.6,000.
  - (v) Goodwill of the firm is valued at Rs.22,000, which is not to be shown in the books of new firm.
  - (vi) Mohan is paid in full with the cash brought in by Vinod and Sohan in such a manner that their capitals are in proportion to their profit sharing ratio of 3:2.
- Prepare Revaluation Account, Partners Capital Account and B/ Sof of new firm.

**OR**

Vinod and Krishna are partners in a firm sharing profits in the ratio of 3:2. Their Balance Sheet as at 31<sup>st</sup> December, 2015 stood as:

| <b>Liabilities</b> | <b>Amount</b> | <b>Assets</b>   | <b>Amount</b> |
|--------------------|---------------|-----------------|---------------|
| Capitals: Vinod    | 70,000        | Machinery       | 66,000        |
| Krishna            | 60,000        | Furniture       | 30,000        |
| General Reserve    | 20,000        | Investment      | 40,000        |
| Bank Loan          | 18,000        | Stock           | 46,000        |
| Creditors          | 72,000        | Debtors         | 38,000        |
|                    |               | Less: Provision | 4,000         |
|                    |               | Cash in hand    | 24,000        |
|                    | 2,40,000      |                 | 2,40,000      |

On that date, they admitted Vimanyu into partnership for 1/ 4<sup>th</sup> share in the profits on the following terms:

- (i) Vimanyu brings capital proportionate to his share. He brings Rs.14,000 in cash as his share of goodwill.
  - (ii) All debtors are good.
  - (iii) Depreciate stock by 5% and Furniture by 10%.
  - (iv) An outstanding bill for repairs Rs.2,000 will be brought in the books.
  - (v) Half of the investments were to be taken over by Vinod and Krishna in their profit sharing ratio at book value.
  - (vi) Bank loan is paid off.
  - (viii) Partners have decided to share future profits in the ratio of 3:3:2.
- Prepare necessary accounts and balance sheet of new firm.

### Part- B

#### Financial Statement Analysis

18. Vinod Limited is carrying on a Mutual Fund business. The company had invested [1]  
Rs.18,00,000 in the shares of Alliance Limited and Rs.20,00,000 in the Debentures of MTPC Limited. Company received Rs.60,000 as dividend and Rs.1,60,000 as interest. Find out the Cash Flow from Investing Activities.
19. Give any two transactions which result into outflow of cash. [1]

20. (a) Under which major headings and sub-headings the following items will be shown in the Balance Sheet of a company as per Schedule III, of the Companies Act, 2013. [4]

- (i) Securities Premium Reserve
- (ii) Cash in hand
- (iii) Bank Balance
- (iv) Rent Outstanding

(b) State any two advantages of Financial Statement Analysis.

21. Vinod was the Managing Director of Lalit Plastics Ltd. For the last six years the company had been consistently earning good profits. Vinod followed democratic style of leadership. He believed in giving respect to his subordinates by agreeing to their good suggestions. The company also opened a school for girls in the locality and also contributed towards the cleanliness of the locality. Following is the comparative 'Statement of Profit & Loss' of Lalit Plastics Ltd. for the years ended 31st March, 2014 :

| Particulars                      | Note No. | 2012-13 (Rs) | 2013-14 (Rs) | Absolute Change (Rs) | % Change |
|----------------------------------|----------|--------------|--------------|----------------------|----------|
| Revenue from operations          |          | 12,00,000    | 16,00,000    | 4,00,000             | 33.33    |
| Less: Employees benefit expenses |          | 3,00,000     | 4,00,000     | 1,00,000             | 33.33    |
| Profit before tax                |          | 9,00,000     | 12,00,000    | 3,00,000             | 33.33    |
| Tax at 40% rate                  |          | 3,60,000     | 4,80,000     | 1,20,000             | 33.33    |
| Profit after tax                 |          | 5,40,000     | 7,20,000     | 1,80,000             | 33.33    |

(a) Calculate Net Profit ratio for the years ending 31st March, 2013 and 2014.

(b) Identify any 2 values which are being communicated to the society.

22. Prepare Common-Size Statement of P/ L form the following information of Vinod Limited as on 31<sup>st</sup> March 2016: [4]

|                                           |           |
|-------------------------------------------|-----------|
| Revenue from operations (Net sales) ..... | 30,00,000 |
| Interest received on investment .....     | 50,000    |
| Cost of Material Consumed .....           | 10,00,000 |
| Other Expenses .....                      | 1,50,000  |
| Tax Payable                               | 40%       |

23. Following was the Balance Sheet of Vinod Ltd. as on 31st March, 2014 : [6]

|    | Particular                    | Note No. | 31.3.2014 (Rs) | 31.3.2013 (Rs) |
|----|-------------------------------|----------|----------------|----------------|
| I  | <b>Equity and Liabilities</b> |          |                |                |
| 1. | <b>Shareholder's Funds:</b>   |          |                |                |
|    | a) Share Capital              |          | 7,00,000       | 6,00,000       |
|    | b) Reserve and Surplus        |          | 2,00,000       | 1,10,000       |

|              |                                                                                                  |  |                            |                            |
|--------------|--------------------------------------------------------------------------------------------------|--|----------------------------|----------------------------|
| 2.           | <b>Non-Current Liabilities:</b><br>Long-Term Borrowings (Debentures)                             |  | 3,00,000                   | 2,00,000                   |
| 3.           | <b>Current Liabilities:</b><br>a) Trade Payables                                                 |  | 30,000                     | 25,000                     |
| <b>Total</b> |                                                                                                  |  | 12,30,000                  | 9,35,000                   |
| II           | <b>Assets:</b>                                                                                   |  |                            |                            |
| 1.           | <b>Non-Current Assets:</b><br>a) <b>Fixed Assets:</b><br>i. Tangible (Machinery)                 |  | 11,00,000                  | 8,00,000                   |
| 2.           | <b>Current Assets:</b><br>a) Inventories<br>b) Trade Receivables<br>c) Cash and Cash equivalents |  | 70,000<br>32,000<br>28,000 | 60,000<br>40,000<br>35,000 |
| <b>Total</b> |                                                                                                  |  | 12,30,000                  | 9,35,000                   |

Adjustments: During the year a piece of machinery of the book value of Rs.80,000 was sold Rs.65,000. Depreciation provided on tangible assets during the year amounted to Rs.2,00,000. Prepare a Cash Flow Statement.