BAL BHARATI PUBLIC SCHOOL, DWARKA

HOLIDAY HOMEWORK (2023-24)

CLASS XI

INDEX

- ➢ Economics
- ➢ English
- ➢ Mathematics
- ➢ Biology
- ➢ Physics
- ➢ Chemistry
- ➢ Psychology
- ➢ Computer Science

ECONOMICS

PROJECT WORK

CBSE guidelines for project work in Economics
Students are supposed to pick any one of the two suggested projects

I. Project (Option One): What's Going Around Us

The purpose of this project is to study the scope and repercussions of various economic events and happenings taking place around the country and the world. (eg. The Dynamics of the Goods &Services Tax and likely impacts on the Indian Economy or the Economics behind the Demonetisation of 500 and 1000 Rupee Notes and the Short Run and Long Run impact on the Indian Economy.

Scope of the project: Student may work upon the following lines:
• Introduction • Details of the topic • Pros and Cons of the economic event/happening • Major criticism related to the topic (if any) • Students' own views / perception / opinion and learning from the work • Any other valid idea as per the perceived notion of the student who is working and presenting the Project-Work.

Marking Scheme: Marks are suggested to be given as –
1. Relevance of the topic (3)
2. Knowledge Content/Research Work (6)
3. Presentation Technique (3)
4. Viva (8)
Total 20 Marks

Suggested list
1.Effect on PPC due to various government policies
2.Goods and service Tax Act
3.Micro and small-scale industries
4.Disinvestment policy
5.Changing consumer awareness among households
6.Self-help groups
7.Any other topic

II. Project (Option Two): Analyse any concept from the syllabus.

The purpose of this project is to –
• Understand the concepts of Economic theory and application of the concept to real life situations.

Scope of the project:
Following essentials are required to be fulfilled in the project.
- Explanation of the concept

- Meaning and Definition
- Application of the concept
- Diagrammatic Explanation (if any)
- Numerical Explanation related to the concept etc. (if any)
- Students' own views/perception/ opinion and learning from the topic.

Suggested list:
1. Demand and its determinants
2. Price Determination
3. Market Structure
4. Central Bank and its functions
5. Any other topic

Multiple Choice Questions

Question 1. The law of scarcity
(a) Does not apply to rich, developed countries.
(b) Applies only to the less developed countries.
(c) Implies that consumers' wants will be satisfied in a socialistic system.
(d) Implies that consumers' wants will never be completely satisfied.

Question 2. The central problem in economics is that of
(a) Comparing the success of command versus market economies.
(b) Guaranteeing that production occurs in the most efficient manner.
(c) Guaranteeing a minimum level of income for every citizen.
(d) Allocating scarce resources in such a manner that society's unlimited needs or wants are satisfied in the best possible manner.

Question 3. An economy achieves "productive efficiency" when:
(a) Resources are employed in their most highly valued uses.
(b) The best resources are employed.
(c) The total number of produced goods is the greatest.
(d) Goods and services are produced at least cost and no resources are wasted.

Question 4. If the PPF is linear, i.e., a straight line, which one of the following statements is true?
(a) As the production of a good increases, the opportunity cost of that good rises.
(b) As the production of a good increases, the opportunity cost of that good falls.
(c) Opportunity costs are constant.
(d) The economy is not at full employment when operating on the PPF.

Question 5. Which one of the following statements is a reason for the negative slope of PPF?
(a) The inverse relationship between the use of technology and the use of natural resources.

(b) Scarcity at any point of time due to limited amounts of productive resources.

(c) Resource specialisation.

(d) Increasing opportunity costs.

Question 6. If the marginal (additional) opportunity cost is a constant, PPC would be

(a) Convex.

(b) A straight line.

(c) Backward bending.

(d) Concave.

Question 7. Which one of the following options is likely to cause an inward shift in a country's PPC?

(a) Earthquake destroying resources of the country.

(b) Scientists discovering new machines.

(c) Workers getting jobs in a new metro- project.

(d) The country finds new reserves of crude oil.

Question 8. The various combinations of goods that can be produced in any economy when it uses its available resources and technology efficiently are depicted by

(a) Demand curve.

(b) Production curve.

(c) Supply curve.

(d) Production possibilities curve

Question 9. Scarcity is a situation in which

(a) wants exceed the resources available to satisfy them

(b) something is being wasted

(c) people are poor

(d) none of them

Question 10. A lot of people die and many factories are destroyed due to floods in a country. How will it affect the production possibility curve? [CBSE 2014]

(a) PPC will shift towards right

(b) PPC will shift towards left.

(c) PPC will remain the same

(d) None of the above.

Question 11. Which of the following is not a subject matter of microeconomics?

(a) Consumer's behavior

(b) Market structure

(c) Monetary Policy

(d) Pricing of factor services

Question 14. Which of the following is an assumption of Production Possibility Frontier?

(a) Resources are not fully employed.

(b) Resources are not equally efficient for production of the two goods.

(c) Resources are not efficiently employed.

(d) Resources available are not fixed

3 mark questions

Question 15. "Scarcity and choice go all together". Defend or refute.

Question 16. "Only 'Scarce Goods' attract price." Comment.

Question 17. A lot of people died and many factories were destroyed in an earthquake. How will it affect the PPC of the

economy?

Question 18. Massive unemployment will shift PPC to the left. Defend or refute.

Competency Based Questions

Question 19. A country's resources are fully and efficiently employed. The problem of scarcity exists. What advice would be given to raise the efficiency level of the human resource to fight scarcity?

Question 20. In an underdeveloped economy why there is the need of efficient utilization of resources?

Question 21. India is a labour abundance and capital scarce economy. Which technique of production should be used to produce the commodity?

Question 22. As water resources are limited in our country, how can we economise the water resources so that it could not cause a future problem for us? Give any two suggestions.

Question 23. Scarcity of resources is a universal phenomenon and is not confined to poor and backward countries only. Comment.

Question 24. Although water is useful, yet it is cheap. On the contrary, diamond is not much of use, still it is very expensive. Give an economic reason for this paradox.

Question 25. Large number of technical training institutions have been started by the government. State its economic value in the context of production possibility frontier.

Question 26. Unemployment is reduced due to the measures taken by the government. State its economic value in the context of production possibilities frontier.

Question 27. Production in an economy is below to its potentiality due to unemployment. Government starts employment generation schemes. Explain its effects by using production possibility curve.

Question 28. There are various sources of income a teacher has; such as,

1. He can earn Rs 40000 from teaching in school.
2. He can earn Rs 50000 by tuition/ coaching

3. He earns Rs 60000 by writing the help book guides.
   What is the opportunity cost of his teaching in school? Why should he choose teaching profession?

Question 29. Economic slowdown in some parts of the world has adversely affected demand for Indian exports. What will be its effect on the production Possibilities frontier of India?
Explain.

Question 30. Using a diagram explain what will happen to the PPC of Bihar if the river Kosi causes widespread floods?

Question 31. A doctor has a private clinic in New Delhi and his annual earnings are Rs 10 lakh. If he works in a government hospital in New Delhi, his annual earning will be Rs 8 lakh. What is the opportunity cost of having a clinic in New Delhi?

Question 32. What will be the impact of recently launched 'Clean India Mission' (Swachh Bharat Mission) on the Production Possibilities curve of the economy and why?

Question 33. What will likely be the impact of large scale outflow of foreign capital on Production Possibility Curve of the economy and why ?

Question 34. What is likely to be the impact of 'Make in India' appeal to the foreign investors by the Prime Minister of India, on the production possibilities frontiers of India? Explain.

Question 35. What is likely to be the impact of efforts towards reducing unemployment on the production potential of the economy? Explain.

ENGLISH

I. Write a short story: Write a short story on any one of the given topics that are inspired by a real-life event or a personal experience. The story can be fictionalized, but it should have elements that are based on real-life situations.

TOPICS:

1. A Chance Encounter: Write a short story about a chance encounter between two people that changes their lives forever. Include details about the setting, the characters' backgrounds, and how the encounter affects their future.

2. The Haunted House: Write a short story about a haunted house. Include details about the history of the house, the ghostly presence that haunts it, and how the characters react to the spooky events that occur.

3. The Journey: Write a short story about a journey that a character takes, either physically or emotionally. Include details about the challenges the character faces and how they overcome them.

4. The Secret: Write a short story about a character who is keeping a secret from someone close to them. Include details about why the character is keeping the secret, the consequences if the secret is revealed, and how the character deals with the guilt and fear.

5. The Unexpected Twist: Write a short story that starts with a predictable situation, but then takes an unexpected twist. Include details about the characters and their motivations, and how the twist changes the course of the story.

Instructions for students:
1. Choose a topic that interests you and brainstorm ideas for your story.
2. Develop your plot by creating a beginning, middle, and end.
3. Create well-developed characters that have clear motivations and actions.
4. Use descriptive language and imagery to create a vivid setting.
5. Use dialogue to reveal characters and advance the plot.

II. Create a Literary Magazine:

Layout for a literary magazine.
Cover page: This should include the title of the magazine and an eye-catching image that represents the theme.
Table of Contents: This should list the works included in the magazine and their page numbers.
Editor's note: This can include a brief introduction to the theme of the magazine, as well as acknowledgments.
Fiction: This section can include short stories, flash fiction, or excerpts from longer works.

Poetry: This section can include a variety of poetic forms, such as sonnets, free verse, or haikus.

Non-Fiction: This section can include personal essays, memoirs, or journalistic pieces.

Book and Film Reviews: This section can include reviews of recently published books and films related to the theme of the magazine.

Interviews: This section can include interviews with writers or other literary figures. The interview should be accompanied by a brief author bio.

Articles: This section can include longer articles on literary topics related to the theme of the magazine.

Credits: This should include a list of contributors and any necessary acknowledgments, such as for cover art or design.

Remember to use a visually appealing layout that is easy to read and visually engaging. Consider using graphics or images throughout the magazine to break up text and add interest.

MATHEMATICS

<u>**Activity 1**</u>
Through an activity verify or find the following mathematical concepts.
Write your Observations and conclusion about the concept and present your work in a file.
1. If a set has n number of elements, then the total number of subsets is 2^n and also find the number of subsets of a given set

2. For two sets A and B, n (A×B) = pq and the total number of relations from A to B is 2^{pq}, where n(A) = p and n(B) = q.

3. Difference between a Relation and a Function.

4. The relation between the degree measure and the radian measure of an angle.

5. Graphs of sin x, sin 2x, 2sinx and sin 2 x , using same coordinate axes.

6. Values of sine and cosine functions in second, third and fourth quadrants using their given values in first quadrant.

<u>**Activity 2**</u>
Practice the following questions chapter wise and complete in your Notebook.
Complex Numbers and Quadratic equations

ASSIGNMENT   MATHEMATICS
UNIT: 1.   SETS

1. Write down the power set of $\{ \varphi, (1, \varphi)\}$.
2. If X and Y are two sets such that n(X) = 15, n(Y) = 20 and n (X ∪ Y) = 30 ,
   find n(X ∩Y).
3. Write the set $\left\{\dfrac{1}{2},\dfrac{2}{5},\dfrac{3}{10},\dfrac{4}{17},\dfrac{5}{26},\dfrac{6}{37},\dfrac{7}{50}\right\}$ in set builder form.
4. Draw the appropriate Venn diagrams for the following: i. $A' \cup B'$ (ii) $A' \cap B'$
5. Prove for sets A and B: i. $A' \cap B' = (A \cup B)$ ii. $(A - B) - C = A - (B \cup C)$.

6. *If P, Q,* and *R* are three sets such that *n* (*R*) = 42, *n* (*R* ∩ *P*) = 3, *n* (*P* ∪ *Q* ∪ *R*) = 80, *n* (*P* − *Q*) =
   13, *n* (*Q*− *R*) = 23, then find $n\left(A\cap B\cap C\right)$.

7. In an examination 80% of In a class of 60 students, 16 students had seen neither Taj Mahal nor Lotus Temple. 24 students had seen Taj Mahal and 32 students had seen Lotus Temple.How many students had seen exactly one of the two famous buildings?

8. The students passed in mathematics, 72% passed in science and 13% failed in both the subjects. If 312students passed in both the subjects, find the total number of students who appeared in the examination.
9. A college awarded 40 medals in honesty, 15 in punctuality, and 20 for truth. If these medals went to a total of 58 students and only three got medals in all three qualities, how many received medals in exactly two qualities. Which quality according to you is most important as a student. Why.

10. A survey shows that 63% of the Americans like cheese whereas 76% like apples. If x% of the Americans likes both cheese and apples, find the value of x.

11. A survey of 500 television viewers produces the following information: 285 watch football, 195 watch hockey, 115 watch basketball, 45 watch football and basketball, 70 watch football and hockey, 50 watch hockey and basketball, 50 do not watch any of the three games. How many watch all the three games. How many watch exactly one of the three games?

12. Check for the validity of the following statement and justify your answer

     If $A \subset B$ and $x \notin B$, then $x \notin A$.

15. A school decided to award medals to its students of class 11 for three values honesty, punctuality and obedience. It gave 25 medals for honesty, 26 medals for punctuality and 26 medals for obedience, 9 for both honesty and punctuality, 11 for both honesty and obedience, 8 for both punctuality and obedience, and 3 for all three values.
    a)   Find the number of students who got awarded for one value.
    b)   According to you, which value is most essential and why?

16. Draw a venn diagram showing (A - B) ∪ (B - A).

17. Let U be the universal set and $A \cup B \cup C = U$, then find $[(A - B) \cup (B - C) \cup (C - A)]'$.

18. Prove the following for sets A and B,
    i. $A - B = A$, iff $A \cap B = \varphi$.
    ii. $(A \cup B)' = A' \cap B'$

19. Prove that for any three sets A, B and C, $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$.

20. In a class of 35 students, 17 have taken mathematics 10 have taken mathematics but not economics. Find the number of students who have taken both mathematics and economics and the number of students who have taken economics but not mathematics, if it is given that each student has taken either mathematics or economics or both.

UNIT: RELATIONS AND FUNCTIONS

1. If $(\frac{x}{3}, y - \frac{2}{3}) = (\frac{5}{3}, \frac{1}{3})$, find 'x' and 'y'.

2. Let $A = \{1,2,3,4,5,6,7,8,9,10\}$. Define a relation R from A to A by $R = \{(x,y): 2x - y = 0, \text{where } x, y \in A\}$

3. If the ordered pairs (x, -1) and (5, y) belong to the set $\{(a, b) : b = 2a - 3\}$, find the values of x and y.

4. Determine the domain and range of the following relation:-
   $R = \{(x, x^3): x \text{ is a prime number less than a } 10\}$

5. Write the domain of the function, $f(x) = \frac{x+1}{x^2 + 6x + 5}$.

6. Find the domain of the function $f(x) = \sqrt{5|x| - x^2 - 6}$.

7. Draw the graph of the function: $f(x) = |x - 1| + |x - 2|$ Draw the graph of the function, f(x)= x –[x]. Also find its domain and range.

8. If $f: R \to R$, given by $f(x) = \frac{4^x}{4^x + 2}$, for all $x \in R$. Then find $f(x) + f(1 - x)$.

9. Find the domain of the functions: i. $f(x) = \frac{x^2 + 3x + 5}{x^2 - 5x + 4}$ ii. $f(x) = \sqrt{\frac{x^2 - 2x - 3}{x}}$

10. Find the domain and range of 1. $f(x) = \frac{x^2-4}{x-2}$. 2. $f(x) = \frac{1}{\sqrt{9-x^2}}$.

11. Find the domain and range of 1. $f(x) = \frac{x^2-9}{x-3}$. 2. $f(x) = \frac{x}{1+x^2}$.

12. If $f(x) = cos[\pi^2]x + cos[-\pi^2]x$, then find the value of $f(\pi/3)$.

   ii. Let f and g be two real functions defined by $f(x) = \frac{1}{x}$ and $g(x) = \sqrt{9-x^2}$, find

   $(f+g)(2),\ (f-g)(-2),\ (2f+g)(1)\ and\ \left(\frac{f}{g}\right)\left(\frac{1}{2}\right).$

13. Find the domain of the functions: i. $f(x) = \sqrt{\frac{1-|x|}{2-|x|}}$ ii. $f(x) = \sqrt{\frac{x^2-2x-3}{x}}$

14. A relation R is defined on the set of integer as R = { (x, y) | $y = x + \frac{6}{x}$ where $x, y \in N$ & $x <$ 6}. Find R. Also find its domain and range.

15. For a non zero 'x', p f(x) + q f(1/x) = $\frac{1}{x}$ − 5, where $p \neq q$. Find f(x).

16. Draw the graph of the function Y = $\frac{1}{x-5}$. Also write its domain and range.

17. Given that 'f' and 'g' are functions defined from R →R. Find the range of each function:

   1. f(x) = 1 +3 cos 2x 2. g(x) = |x-2| +|x-3|

18. A relation R is defined on the set of integer as R = { (x, y) | $y = x + \frac{6}{x}$ where $x, y \in N$ & $x <$ 6}. Find R. Also find its domain and range.

19 Given that 'f' and 'g' are functions defined from R →R. Find the range of each function: 1. f(x) = 1 -3 cos 2x 2. g(x) = |x-2| + |2-x|

20. Let R be a relation defined on the set Z of integers as follows. $R=\{(x,y): x \in Z, y \in Z, x^2 + y^2 = 16\}$. Find R as a set of ordered pairs.

BIOLOGY

1. Write a research paper on any one of the following topics:

a. Umbilical cord cell banking: future ready to beat Alzheimer's.

b. Synthetic organs : boon for organ transplantation.

c. Antibiotics or Probiotics

d. Cancer : a new influenza

Include the following key points in your paper:

i) Introduction

ii) Historical background

iii) Description of problem.

iv) Possible solution proposed

v) Bibliography

Complete the following assignments:

TOPIC: MOVEMENT AND LOCOMOTION

1. Name the compound concerned with the storage of oxygen in muscles.

2. Which type of cartilage is present between vertebrae to allow limited

movement?

3. What lubricates the freely movable joints of the shoulder?

4. Name the contractile protein of thin filament.

5. What property of the muscle fibres enables them to cause movement? Name the thick muscle protein.

6. Name the autoimmune disorder in which there is weakening and paralysis of muscles.

7. Give the differences between white and red muscle fibres.

8. What are synovial joints? Explain.

9. What is osteoporosis? Name two factors which are responsible for osteoporosis.

10. What is osteoarthritis? Name any two body parts usually affected by this disease.

11. Write the differences between actin and myosin.

12. Describe the vertebrochondral ribs.

13. Explain the initiation of muscle contraction. What is the role of sarcoplasmic reticulum, myosin head, and F- actin during contraction in striated muscles?

14. Represent diagrammatically a sracomere and label its parts. Which of these parts shortens during muscle contraction?

15. What is the role of troponin head, calcium ions, and F- actin during muscle contraction?

16. Describe any three disorders of muscular system.

17. Explain the sliding filament theory of mechanism of muscle contraction.

18. Draw a well labeled diagram of bones of hind limb and forelimb.

19. Describe the various types of joints in our body, depending on their mobility, giving one example each.

20. What are the two ways by which cilia of Paramecium help the organism?

21. The human skull is composed of two sets of bones. Name them. How many bones in total are present in our skull?

22. Write a short note on the structure of vertebrae.

23. Write true or false. If false, change the statement so that it is true.

i) Actin is present in thick filament.

ii) Human skeleton has 210 bones.

iii) Humans have procoelus vertebrae.

iv) Axis is the first vertebrae of the human skeleton.

v) H-zone of striated muscle fibres represents both thick and thin filament.

vi) In a muscle fibre, calcium is stored in golgi apparatus.

vii) Red muscles contain hemoglobin which imparts them the red color.

viii) Head of myosin is made up of tropomyosin.

ix) Motor unit is the term used for a single muscle fibre and nerve supplying it.

PHYSICS

Prepare one Investigatory Project on any one of the following topic or any other topic of your choice based on concept of physics (as per CBSE guidelines).

POINTERS FOR MAKING PROJECT REPORT

The material should be placed and bound in the following order:

1. Top Sheet of transparent plastic –The top page of your report should carry the following information in printed form or handwritten in neat block letters:

Title of Project:
Name of Student:
Roll Number:

2. Aim of Project

3. Apparatus required

4. Principle/theory

5. Construction with labeled diagram

6. Working

7. Observations

8. Calculations

9. Result/ Conclusions

10. Applications

11. Graphs if any

12. References/bibliography

13. Back cover of **plastic: may be opaque or transparent**

List of Investigatory Projects

1. To demonstrate that a centripetal force is necessary for moving a body with a uniform speed along a circle, and that the magnitude of this force increases with increase in angular speed.
2. To demonstrate inter-conversion of potential and kinetic energy.
3. To demonstrate conservation of linear momentum.
4. To demonstrate the law of moments.
5. To demonstrate the effect of angle of launch on range of a projectile.
6. To demonstrate that the moment of inertia of a rod changes with the change of position of a pair of equal weights attached to the rod.
7. To study variation of volume of a gas with its pressure at constant temperature using a doctors' syringe.
8. To demonstrate Bernoulli's theorem with simple illustrations
9. To demonstrate free oscillations of different vibrating systems.
10. To demonstrate resonance with a set of coupled pendulums.
11. To demonstrate longitudinal and transverse waves.
12. To demonstrate resonance using an open pipe.

<u>CHEMISTRY</u>

Prepare one Investigatory Project on any one of the following topic or any other topic of your choice.

POINTERS FOR MAKING PROJECT REPORT

The material should be placed and bound in the following order:

1. Top Sheet of transparent plastic –The top page of your report should carry the following information in printed form or handwritten in neat block letters:

    Title of Project:
    Name of Student:
    Roll Number:

2. Aim of Project

3. Materials required

4. Principle/theory

5. Observations and observation table

6. Result/ Conclusions

7. Applications of the project

8. References/bibliography

TOPICS FOR THE PROJECT:

1. Study of the presence of oxalate ions in guava fruit at different stages of ripening.
2. Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, concentration, time, etc.)
3. Study of digestion of starch by salivary amylase and effect of pH and temperature on it.
4. Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc.
5. Extraction of essential oils present in Saunf (aniseed), Ajwain (carum), Illaichi (cardamom).
6. Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chilli powder and pepper.
7. Testing the hardness, presence of Iron, Fluoride, Chloride, etc., depending upon the regional variation in drinking water and study of causes of presence of these ions above permissible limit (if any).
8. Investigation of the foaming capacity of different washing soaps and the effect of addition of Sodium Carbonate on it.
9. Study the acidity of different samples of tea leaves.
10. Study the effect of acids and bases on the tensile strength of fibers.

PSYCHOLOGY

Q1. Develop a case profile of an individual exhibiting any of the following:

    a.) Is a prodigy and is exhibiting superior/ability in any of the domain (sports, music, academics etc.)

    b.) Requires career counselling

    c.) Has a dysfunctional family.

    d.) Has any of the following difficulties- learning disability, ADHD, speech delays, physical ailment which is impairing everyday functioning.

Q2. Prepare an interview schedule for parents and teachers of a child with learning disability/autism spectrum disorder/ADHD.

Q3. Using the knowledge of environmental psychology and motivation suggest strategies for "Swacch Bharat" campaign in your school.

COMPUTER SCIENCE

Create a power-point presentation on the theme – Society, Law and Ethics. Include Pictures, Videos, Links to Videos to your presentation

Sr. No	Topics to be included in PPT.	Allotted to Student's name starting from
1	**Cyber safety:** safely browsing the web, identity protection, confidentiality, social networks, cyber trolls and bullying. **Appropriate usage of social networks**: spread of rumours, and common social networking sites (Twitter, LinkedIn, and Facebook) and specific usage rules.	A-I
2	**Safely accessing web sites**: adware, malware, viruses, trojans **Safely communicating data**: secure connections, eavesdropping, phishing and identity verification	K-O
3	Intellectual property rights, plagiarism, digital rights management, and licensing (Creative Commons, GPL and Apache), open source, open data, privacy.	P-R
4	Privacy laws, fraud; cyber-crime- phishing, illegal downloads, child pornography, scams; cyber forensics, IT Act, 2000	S
5	Technology and society:	T-Z

	● understanding of societal issues and cultural changes induced by technology. ● E-waste management: proper disposal of used electronic gadgets ● Identity theft, unique ids and biometrics. ● Gender and disability issues while teaching and using computers	

PRACTICAL ASSIGNMENT

Write Python Code for the following programs. Take printouts of coding as well as output.

1) Write a menu driven program to do the following conversions
   1) Convert height given in feet into inches
   2) Convert Money given in Rupees into Paisa
   3) Convert Meter into Centrimeter
   4) Convert temperature given in Fahrenheit into Celsius

2) Write a menu driven program to perform the operations of a calculator. The user will input two numbers and an operator (+ - * /) and result will be displayed.

3) Write a menu driven program to input choice from the user and calculate the area of different shapes
   1) Area of rectangle
   2) Area of circle
   3) Area of square
   4) Area of triangle

4) To input a number and check whether number is even or odd

5) To input three numbers and find the greatest number.

6) A year is a leap year if it is divisible by 4, except that years divisible by 100 are not leap years unless they are also divisible by 400. **Write a program** that asks the user for a year and print outs whether it is a leap year or not.

   Sample Input and Output

   2000 leap year, 1900 not leap year,1996 leap year, 1998 not leap year

7) Write a program to generate the marksheet of a student in a particular term. Input the necessary data and generate the marksheet of a student.