## ECONOMICS ASSIGNMENT

## Class - XII C \& D

Q. 1 Explain any four factors on which price elasticity of demand depends.
Q. 2 Distinguish between Price elasticity, Income elasticity and Cross elasticity.
Q. 3 Explain various degrees of Income elasticity of demand.
Q. 4 Explain various degrees of Cross elasticity of demand.

## Class XII E

Q. 1 What is barter system of exchange?
Q. 2 Write any 4 shortcomings of barter system of exchange.
Q. 3 Explain double coincidence of wants.
Q. 4 Distinguish between the following:
A. Currency and Deposit money.
B. Limited and unlimited legal tender money.
C. Convertible and inconvertible money.
Q. 5 Explain the following terms.
A. Fiat money.
B. Deposit money.
C. Token money.

## PHYSICS ASSIGNMENT

## Class XII A

(1) Prepare notes of explained topics.
(2) Solve conceptual problems of explained topics.

## Class - XII B

1.Prepare notes from the marked text in the book.
2. Do numericals $1,4,5,7,8,12,13 \& 16$

HINDI

निम्नलिखित शब्दो को शुद्ध करके लिखिए-

1-उसे मृत्युदंड की सज़ा मिली।
2 -वहाँ अनेकों लोग उपस्थित थे।

3 -रस्सी को पागल से बांधकर ले गए।

4-यह पुस्तक हाथ- हाथ बिक गई।
5-वह चरम रोग से पीड़ित है।

6-लक्ष्मीबाई वीर थी।

## 7-कश्मीर में अनेक दर्शनीय स्थल देखने योग्य हैं।

8-एक गीतों की किताब ला दीजिए। 9 -मेरे को आपसे कुछ कहना है।
10 -लड़के अध्यापक को प्रश्न पूछते हैं।
11-भीष्म आजन्म बहमचारी रहे।

12 -यहाँ मुफ्त आंखो का इलाज होता है।
COMPUTER SCIENCE

## PRACTICE QUESTIONS RELATED TO SOP AND POS EXPRESSIONS

## Question 1.

Q5. (a) A committee has three general members and a group Head, Mr. Amazing. The three general members are Mr. Big, Ms. Creative and Ms. Dynamic. According to the rule a motion passes only when

- The group head and at least any one general member vote yes

OR

- All three general members vote yes

Let us assume that :
Inputs Are:
A: Denotes Mr. Amazing's vote (1 indicates yes and 0 indicates no)
B: Denotes Mr. Big's vote ( 1 indicates yes and 0 indicates no)
C: Denotes Ms. Creative's vote ( 1 indicates yes and 0 indicates no)
D: Denotes Mr. Dynamic's vote (1 indicates yes and 0 indicates no)
Output : M-denotes, the passage of the motion ( 1 indicates YES and 0 indicates NO in all cases)
(a) Draw the truth table for the inputs and outputs given above and write the SOP expression for $M(A, B, C, D)$
(b) Reduce M(A,B,C,D)using Karnaugh's Map
(c) Draw the logic gate diagram for the reduced SOP expression for $M(A, B, C, D)$ using AND and OR gates. You may use gates with two or more inputs. Assume that the variable and their complements are available as inputs.
Solution.

|  | A | B | C | D | M | MINTERM |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ |  |
| 1 | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ |  |
| 2 | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{0}$ |  |
| 3 | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{1}$ | $\mathbf{0}$ |  |
| 4 | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ |  |
| 5 | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ |  |


| 6 | 0 | 1 | 1 | 0 | 0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | 0 | 1 | 1 | 1 | 1 | $A^{\prime} \mathrm{BCD}$ |
| 8 | 1 | 0 | 0 | 0 | 0 |  |
| 9 | 1 | 0 | 0 | 1 | 1 | $A^{\prime} C^{\prime} \mathrm{D}$ |
| 10 | 1 | 0 | 1 | 0 | 1 | $A B^{\prime} C D^{\prime}$ |
| 11 | 1 | 0 | 1 | 1 | 1 | $A^{\prime}{ }^{\prime} \mathrm{CD}$ |
| 12 | 1 | 1 | 0 | 0 | 1 | ABC' ${ }^{\prime}$ |
| 13 | 1 | 1 | 0 | 1 | 1 | ABC'D |
| 14 | 1 | 1 | 1 | 0 | 1 | ABCD' |
| 15 | 1 | 1 | 1 | 1 | 1 | ABCD |

The resultant SOP expression is
$M=A^{\prime} B C D+A B^{\prime} C^{\prime} D+A B^{\prime} C D^{\prime}+A B^{\prime} C D+A B C^{\prime} D^{\prime}+A B C^{\prime} D+A B C D^{\prime}+A B C D$
OR $\quad M(A, B, C, D)=\Sigma(7,9,10,11,12,13,14,15)$

|  | $\begin{aligned} & C^{\prime} D^{\prime} \\ & 00 \end{aligned}$ | 'D |  | $\begin{aligned} & C^{\prime} \\ & 10 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $A^{\prime} B^{\prime}$ | 0 | 0 | 3 | 0 | PAIR $=\mathrm{m}_{7} \cdot \mathrm{~m}_{15}=\mathrm{BCD}$ |
| 00 | 0 | 1 |  | 2 | QUAD1 $=\mathrm{m}_{12} \cdot \mathrm{~m}_{13} \cdot \mathrm{~m}_{15} \cdot \mathrm{~m}_{14}=A B$ |
| $A^{\prime}$ B | 0 | 0 | 1 |  | QUAD2 $=\mathrm{m}_{15} \cdot \mathrm{~m}_{14} \cdot \mathrm{~m}_{10} \cdot \mathrm{~m}_{11}=A C$ |
| 01 | 4 | 5 | 7 | 6 | QUAD3 $=\mathrm{m}_{13} \cdot \mathrm{~m}_{15} \cdot \mathrm{~m}_{11} \cdot \mathrm{~m}_{9}=A D$ |
| AB | 1 | 1 | 1 | 1 |  |
| 11 | 12 | 13 | 15 | 14 |  |
| AB' | 0 |  |  | 1 |  |
| 10 | 8 | 9 | 11 | 10 |  |

Thus the reduced expression is $M(A, B, C, D)=B C D+A B+A C+A D$


Note :-Now do the given question yourself. Remember here you have to derive the POS expression.
PRACTICE QUESTION

Question 2.

A Football Association coach analyzes the criteria for a win/draw of his team depending on the following conditions.

- If the center and forward players performs well but defenders do not perform well.

OR

- If goal keeper and Defenders perform well but the centre players do not perform well.

OR

- If all the players perform well.

The inputs are :
C : centre players perform well
D: defenders perform well
F: forward players perform well
G: goalkeeper performs well
(In all the above cases 1 indicates yes and 0 indicates no )
Output: X- Denotes the win/draw criteria [1 indicates win/draw and 0 indicates defeat in all cases.]
Draw the truth table for the inputs and outputs given above and write the POS expression for X(C, D, F, G)
(a) Reduce X(C,D,F,G)using Karnaugh's Map
(b) Draw the logic gate diagram for the reduced POS expression for X(C,D,F,G)using AND and OR gates. You may use gates with two or more inputs. Assume that the variable and their complements are available as inputs.

