FINAL YEAR 2002/2003 \& 2002(A)/2003 \\ \section*{SPECIAL EXAMINATION IN BBA/COM 2007/08(Dec \&Jan08/09)} \\ \section*{SPECIAL EXAMINATION IN BBA/COM 2007/08(Dec \&Jan08/09)}

## ECN 2013 - Advanced Economic Theory

1. i. Distinguish between total utility and marginal utility.
ii. Graphically explain the conditions for consumer equilibrium
iii. You are given the following utility function

$$
\begin{aligned}
& U=1 / 2 \mathrm{XY} \\
& \mathrm{U}=\text { utility } \\
& \mathrm{X}, \mathrm{Y}=\text { commodities }
\end{aligned}
$$

The price of the commodity X is $\mathrm{P}_{\mathrm{x}}$ and the price of the commodity Y is $\mathrm{P}_{\mathrm{y}}$ Consumer income is M Drive the demand for commodity X and Y
2. i. Compare and contrast the "Demand pull and mixed inflation"
ii. Examine Philips analyses about the relationship between wage rate and rate of unemployment.
(10 Marks)
3. i. Explain the short run production process of a firm
ii. Consider the following production function

$$
\mathrm{Q}=\mathrm{A} \mathrm{~L}^{\alpha} \mathrm{K}^{\beta}
$$

Calculate the marginal rate of technical substitution
iii. Determine whether the following production function exhibits increasing, constant and decreasing returns to scale
a. $\mathrm{Q}=0.4 \mathrm{X}+0.5 \mathrm{Y}$
b. $Q=1.5 \mathrm{X}^{0.7} \mathrm{Y}^{4.5}$
4. i. Explain in detail what is meant by each of the basic assumption of the perfect competitive firm.
(8 Marks)
ii. Drive mathematically the basic conditions for profit maximization in perfect competition.
(4 Marks)
iii. A perfect competitive firm faces the following cost function

$$
T C=Q^{3}-7 Q^{2}+12 Q+5
$$

The average revenue is Rs $4 /=$ Calculate the total profit of the firm.
(8 Marks)
5. Define the following terms and explain how they can connected, if at all
(a) Balance of trade
(b) Balance of payments
(c) Exchange rate

