

1	Let A is a language over $\Sigma$ where A is $\{0, A, \Omega\}$ Which of the following is not a subset of $A^2$ A) $0A\Omega$ B) $0\Omega$ C) $\Omega A0$ D) $\Omega A0A\Omega$	
2	Let A and B be the arbitrary languages over $\Sigma$ Which of the following is true A) $A(B \cap C) = (B \cap C)A$ B) $A(B \cup C) = (B \cup C)A$ C) $A(BC) = (AB)C$ D) $(AB)C = A(CB)$	
3	If A is any language over $\Sigma$ then $A^*$ is not equal to A) $(A^*)^*$ B) $(A^*)^+$ C) $A^*A^+$ D) $A^*A^*$ E) $(A^+)^*$	
4	If A is any language over $\Sigma$ And $A = \{a^n b^n / n \geq 1\}$ Then which one of the following is not a subset of the language $A^*$ A) ababababababab B) aabbabaaabbb C) aaaabbbbbaaaabbbbb D) ababbaabaabbaaabb	
5	A,B,C are arbitrary sets Which of the Following is false A) $A - \varnothing = A$ B) $A \cap (B - A) = \varnothing$ C) $A \cup (B - A) = \varnothing$ D) $A - (B \cap C) = (A - B) \cup (A - C)$	
6	If U is the universe of sets and A is any arbitrary set then A) $A \cup \bar{A} = A$ B) $A \cap \bar{A} = A$ C) $A \cap \bar{A} = U$ D) $A \cap \bar{A} = \varnothing$ E) $A \cap \bar{A} = A$	
7	If A,B,C,D are arbitrary sets then Match the following A) $A \cup B$ E) $(A \cup C) \subset (B \cup D)$ B) $A \cup (B \cap C)$ F) $D \subset A$ C) $A - B = D$ G) $(A \cup B) \cap (A \cup C)$ D) $A \subset B$ and $C \subset D$ H) $B \cup A$	
8	If A,B are arbitrary sets then $\{x/x \in A \text{ and } x \notin B\}$ is represented by A) AB B) $A+B$ C) $A^B$ D) $A-B$	
9	aabbaaabbbaaaabbbb can be one of the elements of the language A) $(ab)^n$ B) $(a^n b^m)$ C) $(a^k b^j)^n$ D) $(a^n b^n)^m$	
10	There are 60 students in a class, If 40 students wear jackets in a class, 10 wear skirts in a class, 5 wear turbans in a class, 10 wear jackets and turbans then A) NO of students wearing Jackets and skirts has to be more than 10 B) No of students not wearing jackets and turbans is 50 C) No of students wearing something apart from jackets, skirts and turbans is more than 20 D) Number of students wearing turbans is 10	