	BCM SCHOOL BASANT AVENUE , DUGRI LUDHIANA **ASSIGNMENT- ANSWER KEY** **XI BIOLOGY**
1	**Both Assertion and reason are true and reason is the correct explanation of assertion .**
2	**Mark the correct labelling.**
	a.The aestivation shown in the calyx and corolla of the above flower is valvate, which means the sepals and petals are arranged in a circle without overlapping[1]. **b. The type of placentation seen in its ovary is axile, which means the ovules are attached to the central axis of the ovary.** **An example of a flower showing such placentation is hibiscus[2].** **c. The floral formula of the given flower is K5 C5 A∞ G (5), which means it has 5 sepals, 5 petals, numerous stamens and a pentalocular ovary[2].** **OR** **b. Four characteristics of its androecium are:** • **It has numerous stamens (A∞)** • **The stamens are free from each other (A)** • **The stamens are attached to the base of the petals (epipetalous)** • **The stamens have long filaments and small anthers (filiform)**
4	**. the correct answer is b. I-i, II-iii, III-ii, IV-v, V-iv[1]**
5	**Aestivation** • **Valvate: Margins of the adjacent petals touch each other but do not overlap e.g., sepals of Hibiscus.** • **Twisted: Margin of one petal overlaps with the margin of another petal e.g., petals of Hibiscus.** • **Imbricate: There is irregular overlapping of petals e.g., Legumes.** • **Quincuntial: It occurs in flower with five petals. ...** • **Vexillary: It occurs in flower whorl of five petals.**
6	• **Marginal** • **Parietal** • **Axile** • **Free central** • **Basal**
7	**The answer is the option (a) C, B, E, A, D**
8	**Methods to break seed dormancy:** • **Temperature as well as other environmental factors can cause physical dormancy to be disrupted. When a seed goes through the intestines of an animal, it loses its physical dormancy.** • **External factors assist in breaking mechanical dormancy. An animal, for instance, could fracture the hard seed covering.** • **Enzymatic activities break chemical dormancy.**