

NEET MORPHOLOGY OF FLOWERING PLANTS — FAMILIES: FABACEAE, SOLANACEAE, LILIACEAE (OLD SYLLABUS) — PYQS

Max. Marks: 64

Questions: 16

Section A (MCQ) — 16 questions

Q.1 Which of the following floral formula is the correct floral formula of Solanaceae family ?

[NEET (UG) 2026]

- (1) $\oplus \text{ } \overline{\text{K}}_5 \text{ C}_{(5)} \text{ A}_5 \text{ G}_{(2)}$
 (2) $\oplus \text{ } \overline{\text{K}}_5 \text{ C}_5 \text{ A}_5 \text{ G}_{(2)}$
 (3) $\oplus \text{ } \overline{\text{K}}_5 \text{ C}_{(5)} \text{ A}_5 \text{ G}_{(2)}$
 (4) $\oplus \text{ } \overline{\text{K}}_5 \text{ C}_{(5)} \text{ A}_5 \text{ G}_{(2)}$

Scan or tap for the full solution



Q.2 Which of the following are characteristic features of Solanaceae family?

- A. Flowers are bisexual and actinomorphic
 B. Calyx has five sepals, which are united
 C. Androecium has five stamens, which are epipetalous
 D. Ovary is inferior
- (1) B, C and D only (2) A, B and C only
 (3) D only (4) A and B only

[RE-NEET (UG) 2026]

Scan or tap for the full solution



Q.3 Which of the following examples show monocarpellary, unilocular ovary with many ovules?

- A. *Sesbania* B. Brinjal
 C. *Indigofera* D. Tobacco
 E. *Asparagus*

Choose the correct answer from the options given below :

[RE-NEET (UG) 2024]

- (1) B and E only (2) C, D and E only
 (3) A, B and D only (4) A and C only

Scan or tap for the full solution



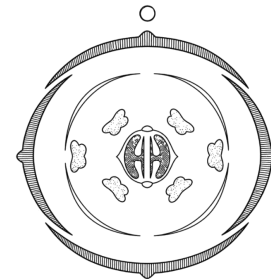
Q.4 Family Fabaceae differs from Solanaceae and Liliaceae. With respect to the stamens, pick out the characteristics specific to family Fabaceae but not found in Solanaceae or Liliaceae. [NEET (UG) 2023]

- (1) Polyadelphous and epipetalous stamens
 (2) Monoadelphous and Monotheous anthers
 (3) Epiphyllous and Ditheous anthers
 (4) Diadelphous and Ditheous anthers

Scan or tap for the full solution



Q.5 The Floral Diagram represents which one of the following families? [NEET (UG) 2022 (Phase 2)]



- (1) Liliaceae (2) Fabaceae
 (3) Brassicaceae (4) Solanaceae

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Q.6 Match Column-I with Column-II

Column-I	
a.	$\% \text{ } \overline{\text{K}}_5 \text{ C}_{1+2+(2)} \text{ A}_{(9)+1} \text{ G}_1$
b.	$\oplus \text{ } \overline{\text{K}}_5 \text{ C}_{(5)} \text{ A}_5 \text{ G}_{(2)}$
c.	$\oplus \text{ } \overline{\text{P}}_{(3+3)} \text{ A}_{3+3} \text{ G}_{(3)}$
d.	$\oplus \text{ } \overline{\text{K}}_{2+2} \text{ C}_4 \text{ A}_{2+4} \text{ G}_{(2)}$
Column-II	
i.	Brassicaceae
ii.	Liliaceae
iii.	Fabaceae
iv.	Solanaceae

Select the correct answer from the options given below. [NEET (UG) 2021]

- (1) (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)
 (2) (a)-(iii), (b)-(iv), (c)-(ii), (d)-(i)
 (3) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)
 (4) (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)

Scan or tap for the
full solution



Q.7 Tricarpellary, syncarpous gynoecium is found in flowers of [NEET 2016 (Phase 1)]

- (1) Fabaceae (2) Poaceae
 (3) Liliaceae (4) Solanaceae

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full solution



Q.8 Keel is the characteristic feature of flower of

[AIPMT 2015 (Cancelled)]

- (1) *Aloe* (2) tomato
 (3) tulip (4) *Indigofera*.

Scan or tap for the
full solution



Q.9 Which one of the following organisms is correctly matched with its three characteristics?

[AIPMT 2012 (Mains)]

- (1) Pea : C_3 pathway, endospermic seed, vexillary aestivation
 (2) Tomato : twisted aestivation, axile placentation, berry
 (3) Onion : bulb, imbricate aestivation, axile placentation
 (4) Maize : C_3 pathway, closed vascular bundles, scutellum

Scan or tap for the
full solution



Q.10 The correct floral formula of soyabean is

[AIPMT 2010 (Mains)]

- (1) % $\text{K}_{(5)} C_{1+(2)+2} A_{(9)+1} \underline{G}_1$
 (2) % $\text{K}_5 C_{1+(2)+2} A_{(9)+1} \underline{G}_1$
 (3) % $\text{K}_{(5)} C_{1+2+(2)} A_{(9)+1} \underline{G}_1$
 (4) % $\text{K}_{(5)} C_{1+2+(2)} A_{1+(9)} \underline{G}_1$

Scan or tap for the
full solution



Q.11 Pentamerous actinomorphic flowers, bicarpellary ovary with oblique septa, and fruit capsule or berry, are characteristic features of [AIPMT 2006]

- (1) Liliaceae (2) Asteraceae
 (3) Brassicaceae (4) Solanaceae

Scan or tap for the
full solution

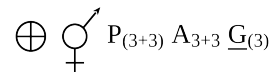


Q.12 Consider the following four statements (i), (ii), (iii) and (iv) and select the right option for two correct statements.

Statements :

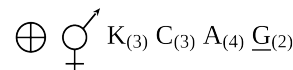
(i) In vexillary aestivation, the large posterior petal is called standard, two lateral ones are wings and two small anterior petals are termed keel.

(ii) The floral formula for Liliaceae is



(iii) In pea flower the stamens are monadelphous.

(iv) The floral formula for Solanaceae is



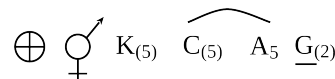
The correct statements are [AIPMT 2010 (Mains)]

- (1) (i) and (iii) (2) (i) and (ii)
 (3) (ii) and (iii) (4) (iii) and (iv)

Scan or tap for the
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Q.13 The floral formula



is that of

[AIPMT 2009]

- (1) soybean (2) sunhemp
 (3) tobacco (4) tulip

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full solution



Q.14 Bicarpellary gynoecium and oblique ovary occurs in

[AIPMT 2001]

- (1) mustard (2) banana (3) *Pisum* (4) brinjal

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full solution



Q.15 Tetradynamous conditions occur in [AIPMT 2001]

- (1) Cruciferae (2) Malvaceae
 (3) Solanaceae (4) Liliaceae

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full solution



Q.16 Which is expressing right appropriate pairing?

[AIPMT 2001]

- (1) Brassicaceae - sunflower
 (2) Malvaceae - cotton
 (3) Papilionaceae - catechu
 (4) Liliaceae - wheat

Scan or tap for the
full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9	10	11
Ans.	3	2	4	4	3	2	3	4	3	3	4
Ques.	12	13	14	15	16						
Ans.	2	3	4	1	2						