

NEET SEXUAL REPRODUCTION IN FLOWERING PLANTS — PYQS

Max. Marks: 488

Questions: 122

Section A (MCQ) — 122 questions

Q.1 Arrange the following in the correct developmental sequence related to microsporogenesis :

- A. Microspore tetrads B. Sporogenous tissue
C. Pollen grains D. Pollen mother cells

Choose the correct answer from the options given below : [NEET (UG) 2026]

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

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Q.2 Which one of the following is a triploid cell ?

[NEET (UG) 2026]

- (1) Synergid
(2) Primary endosperm cell
(3) Central cell
(4) Zygote

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Q.3 Which one of the following types of pollination brings genetically different types of pollen grains to the stigma? [NEET (UG) 2026]

- (1) Geitonogamy (2) Xenogamy
(3) Cleistogamy (4) Autogamy

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Q.4 Which of the following plants produces non-albuminous seeds? [RE-NEET (UG) 2026]

- (1) Pea (2) Wheat (3) Maize (4) Barley

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Q.5 Which of the following in female gametophyte of an angiosperm helps in guiding the pollen tube for fertilizing the eggs? [RE-NEET (UG) 2026]

- (1) Polar nucleus (2) Antipodals
(3) Synergids (4) Central cells

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Q.6 If the diploid chromosome number of typical angiosperm is 36, what would be the chromosome number in its endosperm? [RE-NEET (UG) 2026]

- (1) 72 (2) 18 (3) 36 (4) 54

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Q.7 How many thecae are present in each lobe of a typical bilobed angiosperm anther? [RE-NEET (UG) 2026]

- (1) 12 (2) 2 (3) 6 (4) 8

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Q.8 Given below are two statements : One is labelled as **Assertion (A)** and the other is labelled as **Reason (R)**.

Assertion (A): A typical unfertilised, angiosperm embryo sac at maturity is 8 nucleate and 7-celled.

Reason (R): The egg apparatus has 2 polar nuclei.

In the light of the above statements, choose the correct answer from the options given below :

[NEET (UG) 2025]

- (1) A is true but R is false
(2) A is false but R is true
(3) Both A and R are true and R is the correct explanation of A
(4) Both A and R are true but R is NOT the correct explanation of A

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Q.9 Given below are two statements: One is labelled as **Assertion (A)** and the other is labelled as **Reason (R)**.

Assertion (A): Both wind and water pollinated flowers are not very colourful and do not produce nectar.

Reason (R): The flowers produce enormous amount of pollen grains in wind and water pollinated flowers.

In the light of the above statements, choose the correct answer from the options given below:

[NEET (UG) 2025]

- (1) A is true but R is false
 (2) A is false but R is true
 (3) Both A and R are true and R is the correct explanation of A
 (4) Both A and R are true but R is NOT the correct explanation of A

Scan or tap for the full solution



Q.10 How many meiotic and mitotic divisions need to occur for the development of a mature female gametophyte from the megaspore mother cell in an angiosperm plant? [NEET (UG) 2025]

- (1) 1 Meiosis and 3 Mitosis
 (2) No Meiosis and 2 Mitosis
 (3) 2 Meiosis and 3 Mitosis
 (4) 1 Meiosis and 2 Mitosis

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Q.11 Given below are two statements : One is labelled as **Assertion (A)** and other is labelled as **Reason (R)**.
Assertion (A): Cells of the tapetum possess dense cytoplasm and generally have more than one nucleus.

Reason (R): Presence of more than one nucleus in the tapetum increases the efficiency of nourishing the developing microspore mother cells.

In the light of the above statements, choose the most appropriate answer from the options given below:

[NEET (UG) 2025]

- (1) A is true but R is false
 (2) A is false but R is true
 (3) Both A and R are true and R is the correct explanation of A
 (4) Both A and R are true but R is NOT the correct explanation of A

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Q.12 Match List-I with List-II

List - I		List - II	
A.	Scutellum	I.	Persistent nucellus
B.	Non-albuminous seed	II.	Cotyledon of Monocot seed
C.	Epiblast	III.	Groundnut
D.	Perisperm	IV.	Rudimentary cotyledon

Choose the option with all correct matches.

[NEET (UG) 2025]

- (1) A-IV, B-III, C-I, D-II (2) A-II, B-IV, C-III, D-I
 (3) A-II, B-III, C-IV, D-I (4) A-IV, B-III, C-II, D-I

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Q.13 Identify the set of correct statements:

- A. The flowers of *Vallisneria* are colourful and produce nectar.
 B. The flowers of water lily are not pollinated by water.
 C. In most of water-pollinated species, the pollen grains are protected from wetting.
 D. Pollen grains of some hydrophytes are long and ribbon like.
 E. In some hydrophytes, the pollen grains are carried passively inside water.

Choose the correct answer from the options given below.

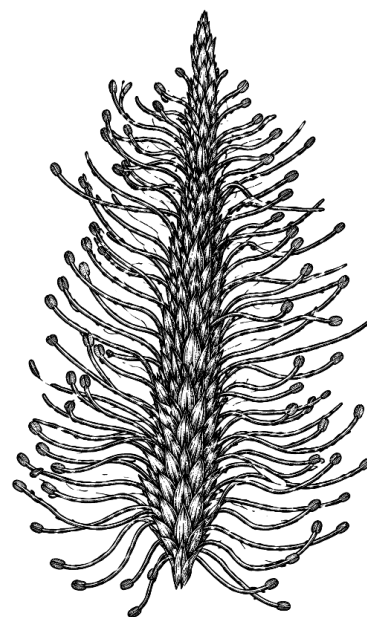
[NEET (UG) 2024]

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

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Q.14 Identify the correct description about the given figure : [NEET (UG) 2024]



- (1) Wind pollinated plant inflorescence showing flowers with well exposed stamens.
 (2) Water pollinated flowers showing stamens with mucilaginous covering.
 (3) Cleistogamous flowers showing autogamy.
 (4) Compact inflorescence showing complete autogamy

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Q.15 Which part of the ovule stores reserve food materials? [RE-NEET (UG) 2024]

- (1) Nucellus (2) Integument
(3) Placenta (4) Funicle

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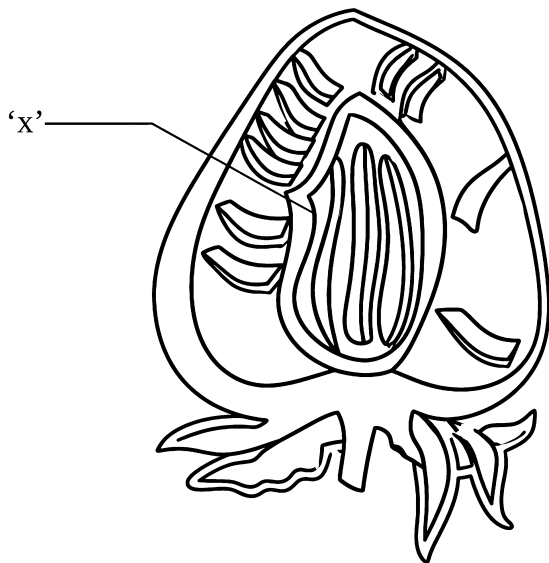
Q.16 Pollen grains remain preserved as fossils due to the presence of : [RE-NEET (UG) 2024]

- (1) Epidermal layer (2) Tapetum
(3) Exine layer (4) Intine layer

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Q.17 The part marked as 'x' in the given figure is [RE-NEET (UG) 2024]



- (1) Endosperm (2) Thalamus
(3) Endocarp (4) Mesocarp

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Q.18 What is the function of tassels in the corn cob?

[NEET (UG) 2023]

- (1) To trap pollen grains
(2) To disperse pollen grains
(3) To protect seeds
(4) To attract insects

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Q.19 Large, colourful, fragrant flowers with nectar are seen in [NEET (UG) 2023]

- (1) Bird pollinated plants
(2) Bat pollinated plants
(3) Wind pollinated plants
(4) Insect pollinated plants

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Q.20 In angiosperm, the haploid, diploid and triploid structures of a fertilized embryo sac sequentially are : [NEET (UG) 2023]

- (1) Antipodals, synergids, and primary endosperm nucleus
(2) Synergids, Zygote and Primary endosperm nucleus
(3) Synergids, antipodals and Polar nuclei
(4) Synergids, Primary endosperm nucleus and zygote

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Q.21 Given below are two statements:

Statement-I: Cleistogamous flowers are invariably autogamous

Statement-II: Cleistogamy is disadvantageous as there is no chance for cross pollination

In the light of the above statements, choose the correct answer from the options given below :

[NEET (UG) 2022]

- (1) Both Statement-I and Statement-II are correct
(2) Both Statement-I and Statement-II are incorrect
(3) Statement-I is correct but Statement-II is incorrect
(4) Statement-I is incorrect but Statement-II is correct

Scan or tap for the full solution



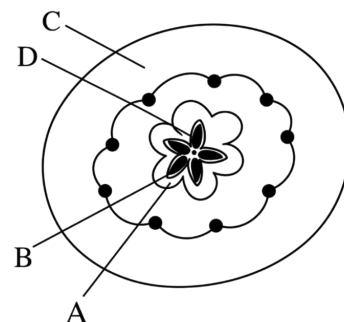
Q.22 Identify the incorrect statement related to Pollination: [NEET (UG) 2022]

- (1) Pollination by water is quite rare in flowering plants
(2) Pollination by wind is more common amongst abiotic pollination
(3) Flowers produce foul odours to attract flies and beetles to get pollinated
(4) Moths and butterflies are the most dominant pollinating agents among insects

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Q.23 Which part of the fruit, labelled in the given figure makes it a false fruit? [NEET (UG) 2022]



- (1) A → Mesocarp (2) B → Endocarp
(3) C → Thalamus (4) D → Seed

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full solution



Q.24 The residual persistent part which forms the perisperm in the seeds of beet is

[NEET (UG) 2022 (Phase 2)]

- (1) Integument (2) Calyx
(3) Endosperm (4) Nucellus

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full solution



Q.25 To ensure that only the desired pollens fall on the stigma in artificial hybridization process

- A. the female flower buds of plant producing unisexual flowers need not be bagged.
B. there is no need to emasculate unisexual flowers of selected female parent
C. emasculated flowers are to be bagged immediately after cross pollination
D. emasculated flowers are to be bagged after removal of anthers
E. bisexual flowers, showing protogyny are never selected for cross

Choose the correct answer from the options given below

[NEET (UG) 2022 (Phase 2)]

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

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full solution



Q.26 In general the egg apparatus of embryo sac in angiosperm consists of

[NEET (UG) 2022 (Phase 2)]

- (1) One egg cell, two synergids, two antipodal cells, two Polar nuclei
(2) One egg cell, two synergids, three antipodal cells, two Polar nuclei
(3) One egg cell, two synergids, two antipodal cells, three Polar nuclei
(4) One egg cell, three synergids, two antipodal cells, two Polar nuclei

Scan or tap for the
full solution



Q.27 Which of the following can be expected if scientists succeed in introducing apomictic gene into hybrid varieties of crops?

[NEET (UG) 2022 (Phase 2)]

- (1) There will be segregation of the desired characters only in the progeny
(2) Polyembryony will be seen and each seed will produce many plantlets
(3) Seeds of hybrid plants will show longer dormancy
(4) Farmers can keep on using the seeds produced by the hybrids to raise new crop year after year

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full solution



Q.28 The term used for transfer of pollen grains from anthers of one plant to stigma of a different plant which, during pollination, brings genetically different types of pollen grains to stigma, is :

[NEET (UG) 2021]

- (1) Cleistogamy (2) Xenogamy
(3) Geitonogamy (4) Chasmogamy

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full solution



Q.29 A typical angiosperm embryo sac at maturity is :

[NEET (UG) 2021]

- (1) 8-nucleate and 8-celled
(2) 8-nucleate and 7-celled
(3) 7-nucleate and 8-celled
(4) 7-nucleate and 7-celled

Scan or tap for the
full solution



Q.30 In some members of which of the following pairs of families, pollen grains retain their viability for months after release?

[NEET (UG) 2021]

- (1) Rosaceae : Leguminosae
(2) Poaceae : Rosaceae
(3) Poaceae : Leguminosae
(4) Poaceae : Solanaceae

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full solution



Q.31 The body of the ovule is fused with the funicle at

[NEET (UG) 2020]

- (1) Chalaza (2) Hilum
(3) Micropyle (4) Nucellus

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full solution



Q.32 The plant parts which consist of two generations - one within the other

- (i) Pollen grains inside the anther
(ii) Germinated pollen grain with two male gametes
(iii) Seed inside the fruit
(iv) Embryo sac inside the ovule

[NEET (UG) 2020]

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

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full solution



Q.33 In water hyacinth and water lily, pollination takes place by : [NEET (UG) 2020]

- (1) Insects and water (2) Water currents only
 (3) Insects or wind (4) Wind and water

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full solution



Q.34 Which one of the following statements regarding post-fertilization development in flowering plants is incorrect? [NEET (UG) 2019]

- (1) Central cell develops into endosperm
 (2) Ovules develop into embryo sac
 (3) Ovary develops into fruit
 (4) Zygote develops into embryo

Scan or tap for the
full solution



Q.35 Persistent nucellus in the seed is known as

[NEET (UG) 2019]

- (1) Hilum (2) Tegmen
 (3) Chalaza (4) Perisperm

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full solution



Q.36 What is the fate of the male gametes discharged in the synergid? [NEET (UG) 2019]

- (1) One fuses with the egg, other(s) fuse(s) with synergid nucleus.
 (2) One fuses with the egg and other fuses with central cell nuclei.
 (3) One fuses with the egg, other(s) degenerate(s) in the synergid.
 (4) All fuse with the egg.

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full solution



Q.37 Which of the following has proved helpful in preserving pollen as fossils? [NEET 2018]

- (1) Pollenkitt (2) Cellulosic intine
 (3) Oil content (4) Sporopollenin

Scan or tap for the
full solution



Q.38 Winged pollen grains are present in [NEET 2018]

- (1) Mustard (2) *Cycas* (3) Mango (4) *Pinus*

Scan or tap for the
full solution



Q.39 Double fertilization is [NEET 2018]

- (1) fusion of two male gametes of a pollen tube with two different eggs
 (2) fusion of one male gamete with two polar nuclei
 (3) fusion of two male gametes with one egg
 (4) syngamy and triple fusion

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full solution



Q.40 Which one of the following plants shows a very close relationship with a species of moth, where none of the two can complete its life cycle without the other? [NEET 2018]

- (1) Hydrilla (2) *Yucca* (3) Banana (4) *Viola*

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Q.41 Pollen grains can be stored for several years in liquid nitrogen having a temperature of

[NEET 2018]

- (1) -120°C (2) -80°C (3) -196°C (4) -160°C

Scan or tap for the
full solution



Q.42 The morphological nature of the edible part of coconut is [NEET 2017]

- (1) cotyledon (2) endosperm
 (3) pericarp (4) perisperm

Scan or tap for the
full solution



Q.43 Functional megaspore in an angiosperm develops into an [NEET 2017]

- (1) endosperm (2) embryo sac
 (3) embryo (4) ovule.

Scan or tap for the
full solution



Q.44 Attractants and rewards are required for

[NEET 2017]

- (1) entomophily (2) hydrophily
 (3) cleistogamy (4) anemophily.

Scan or tap for the
full solution



Q.45 Flowers which have single ovule in the ovary and are packed into inflorescence are usually pollinated by [NEET 2017]

- (1) bee (2) wind (3) bat (4) water

Scan or tap for the
full solution



Q.46 A dioecious flowering plant prevents both

[NEET 2017]

- (1) autogamy and geitonogamy
- (2) geitonogamy and xenogamy
- (3) cleistogamy and xenogamy
- (4) autogamy and xenogamy.

Scan or tap for the full solution



Q.47 Double fertilisation is exhibited by [NEET 2017]

- (1) algae (2) fungi
- (3) angiosperms (4) gymnosperms

Scan or tap for the full solution



Q.48 The coconut water from tender coconut represents [NEET 2016 (Phase 1)]

- (1) free nuclear proembryo
- (2) free nuclear endosperm
- (3) endocarp
- (4) fleshy mesocarp.

Scan or tap for the full solution



Q.49 Which one of the following statements is not true? [NEET 2016 (Phase 1)]

- (1) Pollen grains of many species cause severe allergies.
- (2) Stored pollen in liquid nitrogen can be used in the crop breeding programmes.
- (3) Tapetum helps in the dehiscence of anther.
- (4) Exine of pollen grains is made up of sporopollenin.

Scan or tap for the full solution



Q.50 Seed formation without fertilisation in flowering plants involves the process of [NEET 2016 (Phase 1)]

- (1) somatic hybridisation (2) apomixis
- (3) sporulation (4) budding.

Scan or tap for the full solution



Q.51 Proximal end of the filament of stamen is attached to the [NEET 2016 (Phase 1)]

- (1) placenta (2) thalamus or petal
- (3) anther (4) connective.

Scan or tap for the full solution



Q.52 Which of the following statements is not correct? [NEET 2016 (Phase 1)]

- (1) Pollen germination and pollen tube growth are regulated by chemical components of pollen interacting with those of the pistil.
- (2) Some reptiles have also been reported as pollinators in some plant species.
- (3) Pollen grains of many species can germinate on the stigma of a flower, but only one pollen tube of the same species grows into the style.
- (4) Insects that consume pollen or nectar without bringing about pollination are called pollen/nectar robbers.

Scan or tap for the full solution



Q.53 In majority of angiosperms [NEET 2016 (Phase 2)]

- (1) egg has a filiform apparatus
- (2) there are numerous antipodal cells
- (3) reduction division occurs in the megaspore mother cells
- (4) a small central cell is present in that embryo sac.

Scan or tap for the full solution



Q.54 Pollination in water hyacinth and water lily is brought about by the agency of [NEET 2016 (Phase 2)]

- (1) water (2) insects or wind
- (3) birds (4) bats.

Scan or tap for the full solution



Q.55 The ovule of an angiosperm is technically equivalent to [NEET 2016 (Phase 2)]

- (1) megasporangium
- (2) megasporophyll
- (3) megaspore mother cell
- (4) megaspore.

Scan or tap for the full solution



Q.56 Match **Column-I** with **Column-II** and select the correct option using the codes given below – [NEET 2016 (Phase 2)]

Column I		Column II	
a.	Pistils fused together	i.	Gametogenesis
b.	Formation of gametes	ii.	Pistillate
c.	Hyphae of higher Ascomycetes	iii.	Syncarpous
d.	Unisexual female flower	iv.	Dikaryotic

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

Scan or tap for the
full solution



Q.57 The wheat grain has an embryo with one large, shield shaped cotyledon known as [AIPMT 2015]

- (1) scutellum (2) coleoptile
 (3) epiblast (4) coleorhiza.

Scan or tap for the
full solution



Q.58 Filiform apparatus is characteristic feature of

[AIPMT 2015]

- (1) aleurone cell (2) synergids
 (3) generative cell (4) nucellar embryo.

Scan or tap for the
full solution



Q.59 In angiosperms, microsporogenesis and megasporogenesis [AIPMT 2015]

- (1) involve meiosis
 (2) occur in ovule
 (3) occur in anther
 (4) form gametes without further divisions.

Scan or tap for the
full solution



Q.60 Flowers are unisexual in [AIPMT 2015]

- (1) China rose (2) onion
 (3) pea (4) cucumber.

Scan or tap for the
full solution



Q.61 Coconut water from a tender coconut is

[AIPMT 2015]

- (1) innermost layers of the seed coat
 (2) degenerated nucellus
 (3) immature embryo
 (4) free nuclear endosperm.

Scan or tap for the
full solution



Q.62 Which one of the following fruits is parthenocarpic?

[AIPMT 2015]

- (1) Jackfruit (2) Banana (3) Brinjal (4) Apple

Scan or tap for the
full solution



Q.63 Male gametophyte in angiosperms produces

[AIPMT 2015]

- (1) single sperm and two vegetative cells
 (2) three sperms
 (3) two sperms and a vegetative cell
 (4) single sperm and a vegetative cell.

Scan or tap for the
full solution



Q.64 Which of the following are the important floral rewards to the animal pollinators?

[AIPMT 2015 (Cancelled)]

- (1) Floral fragrance and calcium crystals
 (2) Protein pellicle and stigmatic exudates
 (3) Colour and large size of flower
 (4) Nectar and pollen grains

Scan or tap for the
full solution



Q.65 Which one of the following may require pollinators, but is genetically similar to autogamy?

[AIPMT 2015 (Cancelled)]

- (1) Apogamy (2) Cleistogamy
 (3) Geitonogamy (4) Xenogamy

Scan or tap for the
full solution



Q.66 Which one of the following statements is not true?

[AIPMT 2015 (Cancelled)]

- (1) The flowers pollinated by flies and bats secrete foul odour to attract them.
 (2) Honey is made by bees by digesting pollen collected from flowers.
 (3) Pollen grains are rich in nutrients and they are used in the form of tablets and syrups.
 (4) Pollen grains of some plants cause severe allergies and bronchial afflictions in some people.

Scan or tap for the
full solution



Q.67 Transmission tissue is characteristic feature of

[AIPMT 2015 (Cancelled)]

- (1) dry stigma (2) wet stigma
 (3) hollow style (4) solid style.

Scan or tap for the
full solution



Q.68 Geitonogamy involves

[AIPMT 2014]

- (1) fertilization of a flower by the pollen from another flower of the same plant
- (2) fertilization of a flower by the pollen from the same flower
- (3) fertilization of a flower by the pollen from a flower of another plant in the same population
- (4) fertilization of a flower by the pollen from a flower of another plant belonging to a distant population.

Scan or tap for the full solution



Q.69 Pollen tablets are available in the market for [AIPMT 2014]

- (1) in vitro fertilization
- (2) breeding programmes
- (3) supplementing food
- (4) ex situ conservation.

Scan or tap for the full solution



Q.70 Function of filiform apparatus is to [AIPMT 2014]

- (1) recognize the suitable pollen at stigma
- (2) stimulate division of generative cell
- (3) produce nectar
- (4) guide the entry of pollen tube.

Scan or tap for the full solution



Q.71 Non-albuminous seed is produced in [AIPMT 2014]

- (1) maize
- (2) castor
- (3) wheat
- (4) pea.

Scan or tap for the full solution



Q.72 Perisperm differs from endosperm in [NEET 2013]

- (1) being a diploid tissue
- (2) its formation by fusion of secondary nucleus with several sperms
- (3) being a haploid tissue
- (4) having no reserve food.

Scan or tap for the full solution



Q.73 Advantage of cleistogamy is [NEET 2013]

- (1) no dependence on pollinators
- (2) vivipary
- (3) higher genetic variability
- (4) more vigorous offspring.

Scan or tap for the full solution



Q.74 Megasporangium is equivalent to [NEET 2013]

- (1) nucellus
- (2) ovule
- (3) embryo sac
- (4) fruit.

Scan or tap for the full solution



Q.75 Which one of the following statements is correct?

[NEET 2013]

- (1) Endothecium produces the microspores.
- (2) Tapetum nourishes the developing pollen.
- (3) Hard outer layer of pollen is called intine.
- (4) Sporogenous tissue is haploid.

Scan or tap for the full solution



Q.76 Animal vectors are required for pollination in

[NEET 2013 (Karnataka)]

- (1) *Vallisneria*
- (2) mulberry
- (3) cucumber
- (4) maize.

Scan or tap for the full solution



Q.77 Albuminous seeds store their reserve food mainly in

[NEET 2013 (Karnataka)]

- (1) endosperm
- (2) cotyledons
- (3) hypocotyl
- (4) perisperm.

Scan or tap for the full solution



Q.78 Megaspores are produced from the megaspore mother cells after

[NEET 2013 (Karnataka)]

- (1) mitotic division
- (2) formation of thick wall
- (3) differentiation
- (4) meiotic division.

Scan or tap for the full solution



Q.79 Which one of the following statements is correct?

[NEET 2013 (Karnataka)]

- (1) Cleistogamous flowers are always autogamous.
- (2) Xenogamy occurs only by wind pollination.
- (3) Chasmogamous flowers do not open at all.
- (4) Geitonogamy involves the pollen and stigma of flowers of different plants.

Scan or tap for the full solution



Q.80 Which of the following statements is correct?

[NEET 2013 (Karnataka)]

- (1) Sporopollenin can be degraded by enzymes.
- (2) Sporopollenin is made up of inorganic materials.
- (3) Sporopollenin can withstand high temperatures as well as strong acids and alkalis.
- (4) Sporopollenin can withstand high temperatures but not strong acids.

Scan or tap for the full solution



Q.81 The viability of seeds is tested by :

[NEET 2013 (Karnataka)]

- (1) 2,3,5-triphenyl tetrazolium chloride
- (2) Safranin
- (3) 2,6-dichlorophenol indophenol
- (4) DMSO

Scan or tap for the
full solution



Q.82 What is the function of germ pore?

[AIPMT 2012 (Mains)]

- (1) Emergence of radicle
- (2) Absorption of water for seed germination
- (3) Initiation of pollen tube
- (4) Release of male gametes

Scan or tap for the
full solution



Q.83 Which one of the following statements is wrong?

[AIPMT 2012 (Mains)]

- (1) When pollen is shed at two-celled stage, double fertilization does not take place.
- (2) Vegetative cell is larger than generative cell.
- (3) Pollen grains in some plants remain viable for months.
- (4) Intine is made up of cellulose and pectin.

Scan or tap for the
full solution



Q.84 Plants with ovaries having only one or a few ovules, are generally pollinated by

[AIPMT 2012 (Mains)]

- (1) bees
- (2) butterflies
- (3) birds
- (4) wind

Scan or tap for the
full solution



Q.85 Both, autogamy and geitonogamy are prevented in

[AIPMT 2012 (Prelims)]

- (1) Papaya
- (2) cucumber
- (3) castor
- (4) maize.

Scan or tap for the
full solution



Q.86 An organic substance that can withstand environmental extremes and cannot be degraded by any enzyme is

[AIPMT 2012 (Prelims)]

- (1) cuticle
- (2) sporopollenin
- (3) lignin
- (4) cellulose.

Scan or tap for the
full solution



Q.87 Even in absence of pollinating agents seed-setting is assured in

[AIPMT 2012 (Prelims)]

- (1) *Commelina*
- (2) *Zostera*
- (3) *Salvia*
- (4) fig.

Scan or tap for the
full solution



Q.88 In angiosperms, functional megaspore develops into

[AIPMT 2011 (Mains)]

- (1) embryo sac
- (2) ovule
- (3) endosperm
- (4) pollen sac.

Scan or tap for the
full solution



Q.89 What is common between vegetative reproduction and apomixis?

[AIPMT 2011 (Mains)]

- (1) Both are applicable to only dicot plants
- (2) Both bypass the flowering phase
- (3) Both occur round the year
- (4) Both produce progeny identical to the parent.

Scan or tap for the
full solution



Q.90 Filiform apparatus is a characteristic feature of

[AIPMT 2011 (Prelims)]

- (1) suspensor
- (2) egg
- (3) synergid
- (4) zygote.

Scan or tap for the
full solution



Q.91 Nucellar polyembryony is reported in species of

[AIPMT 2011 (Prelims)]

- (1) *Citrus*
- (2) *Gossypium*
- (3) *Triticum*
- (4) *Brassica*.

Scan or tap for the
full solution



Q.92 Which one of the following pollinations is autogamous?

[AIPMT 2011 (Prelims)]

- (1) Geitonogamy
- (2) Xenogamy
- (3) Chasmogamy
- (4) Cleistogamy

Scan or tap for the
full solution



Q.93 Wind pollination is common in

[AIPMT 2011 (Prelims)]

- (1) legumes
- (2) lilies
- (3) grasses
- (4) orchids.

Scan or tap for the
full solution



Q.94 What would be the number of chromosomes of the aleurone cells of a plant with 42 chromosomes in its root tip cells?

[AIPMT 2011 (Prelims)]

- (1) 42
- (2) 63
- (3) 84
- (4) 21

Scan or tap for the
full solution



Q.95 Apomictic embryos in *Citrus* arise from

[AIPMT 2010 (Prelims)]

- (1) synergids
- (2) maternal sporophytic tissue in ovule
- (3) antipodal cells
- (4) diploid egg

Scan or tap for the full solution



Q.96 Transfer of pollen grains from the anther to the stigma of another flower of the same plant is called

[AIPMT 2010 (Prelims)]

- (1) xenogamy
- (2) geitonogamy
- (3) karyogamy
- (4) autogamy

Scan or tap for the full solution



Q.97 Wind pollinated flowers are [AIPMT 2010 (Prelims)]

- (1) small, brightly coloured, producing large number of pollen grains
- (2) small, producing large number of dry pollen grains
- (3) large producing abundant nectar and pollen
- (4) small, producing nectar and dry pollen

Scan or tap for the full solution



Q.98 Which one of the following pairs of plant structures has haploid number of chromosomes?

[AIPMT 2008]

- (1) Nucellus and antipodal cells
- (2) Egg nucleus and secondary nucleus
- (3) Megaspore mother cell and antipodal cells
- (4) Egg cell and antipodal cells

Scan or tap for the full solution



Q.99 What does the filiform apparatus do at the entrance into ovule? [AIPMT 2008]

- (1) It brings about opening of the pollen tube.
- (2) It guides pollen tube from a synergid to egg.
- (3) It helps in the entry of pollen tube into a synergid.
- (4) It prevents entry of more than one pollen tube into the embryo sac.

Scan or tap for the full solution



Q.100 Unisexuality of flowers prevents [AIPMT 2008]

- (1) geitonogamy, but not xenogamy
- (2) autogamy and geitonogamy
- (3) autogamy, but not geitonogamy
- (4) both geitonogamy and xenogamy

Scan or tap for the full solution



Q.101 Which one of the following is resistant to enzyme action? [AIPMT 2008]

- (1) Pollen exine
- (2) Leaf cuticle
- (3) Cork
- (4) Wood fibre

Scan or tap for the full solution



Q.102 Male gametes in angiosperms are formed by the division of [AIPMT 2007]

- (1) generative cell
- (2) vegetative cell
- (3) microspore mother cell
- (4) microspore

Scan or tap for the full solution



Q.103 Which one of the following is surrounded by a callose wall? [AIPMT 2007]

- (1) Male gamete
- (2) Egg
- (3) Pollen grain
- (4) Microspore mother cell

Scan or tap for the full solution



Q.104 Long filamentous threads protruding at the end of a young cob of maize are [AIPMT 2006]

- (1) hairs
- (2) anthers
- (3) styles
- (4) ovaries

Scan or tap for the full solution



Q.105 In a cereal grain the single cotyledon of embryo is represented by [AIPMT 2006]

- (1) coleoptile
- (2) coleorhiza
- (3) scutellum
- (4) prophyll.

Scan or tap for the full solution



Q.106 The arrangement of the nuclei in a normal embryo sac in the dicot plants is [AIPMT 2006]

- (1) 3 + 3 + 2
- (2) 2 + 4 + 2
- (3) 3 + 2 + 3
- (4) 2 + 3 + 3

Scan or tap for the full solution



Q.107 In a type of apomixis known as adventive embryony, embryos develop directly from the [AIPMT 2005]

- (1) nucellus or integuments
- (2) zygote
- (3) synergids or antipodals in an embryo sac
- (4) accessory embryo sacs in the ovule.

Scan or tap for the full solution



Q.108 Which one of the following represents an ovule, where the embryo sac becomes horse-shoe shaped and the funiculus and micropyle are close to each other? [AIPMT 2005]

- (1) Amphitropous (2) Circinotropous
(3) Atropous (4) Anatropous

Scan or tap for the full solution 

Q.109 Through which cell of the embryo sac, does the pollen tube enter the embryo sac? [AIPMT 2005]

- (1) Egg cell
(2) Persistent synergid
(3) Degenerated synergids
(4) Central cell

Scan or tap for the full solution 

Q.110 When a diploid female plant is crossed with a tetraploid male, the ploidy of endosperm cells in the resulting seed is [AIPMT 2004]

- (1) tetraploidy (2) pentaploidy
(3) diploidy (4) triploidy

Scan or tap for the full solution 

Q.111 An ovule which becomes curved so that the nucellus and embryo sac lie at right angles to the funicle is [AIPMT 2004]

- (1) hemitropous (2) campylotropous
(3) anatropous (4) orthotropous.

Scan or tap for the full solution 

Q.112 Anthesis is a phenomenon which refers to [AIPMT 2004]

- (1) reception of pollen by stigma
(2) formation of pollen
(3) development of anther
(4) opening of flower bud.

Scan or tap for the full solution 

Q.113 In a flowering plant, archesporium gives rise to [AIPMT 2003]

- (1) only the wall of the sporangium
(2) both wall and the sporogenous cells
(3) wall and the tapetum
(4) only tapetum and sporogenous cells.

Scan or tap for the full solution 

Q.114 In angiosperms pollen tubes liberate their male gametes into the [AIPMT 2002]

- (1) central cell (2) antipodal cells
(3) egg cell (4) synergids

Scan or tap for the full solution 

Q.115 In angiosperms all the four microspores of tetrad are covered by a layer which is formed by [AIPMT 2002]

- (1) pectocellulose (2) callose
(3) cellulose (4) sporopollenin

Scan or tap for the full solution 

Q.116 What is the direction of micropyle in anatropous ovule? [AIPMT 2002]

- (1) Upwards (2) Downward
(3) Right (4) Left

Scan or tap for the full solution 

Q.117 Adventive embryony in *Citrus* is due to [AIPMT 2001]

- (1) nucellus (2) integuments
(3) zygotic embryo (4) fertilized egg.

Scan or tap for the full solution 

Q.118 In grasses what happens in microspore mother cell for the formation of mature pollen grains? [AIPMT 2001]

- (1) One meiotic and two mitotic divisions
(2) One meiotic and one mitotic divisions
(3) One meiotic division
(4) One mitotic division

Scan or tap for the full solution 

Q.119 Anemophily type of pollination is found in [AIPMT 2001]

- (1) *Salvia* (2) bottle brush
(3) *Vallisneria* (4) coconut.

Scan or tap for the full solution 

Q.120 Hair found in the inflorescence of *Zea mays* are the modification of [AIPMT 2000]

- (1) style (2) stigma (3) spathe (4) filaments.

Scan or tap for the full solution 

Q.121 Endosperm is formed during the double fertilization by [AIPMT 2000]

- (1) two polar nuclei and one male gamete
- (2) one polar nucleus and one male gamete
- (3) ovum and male gamete
- (4) two polar nuclei and two male gametes

Scan or tap for the
full solution



Q.122 Eight nucleated embryo sac is [AIPMT 2000]

- (1) only monosporic (2) only bisporic
- (3) only tetrasporic (4) any of these.

Scan or tap for the
full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7
Ans.	4	2	2	1	3	4	2
Ques.	8	9	10	11	12	13	14
Ans.	1	4	1	3	3	4	1
Ques.	15	16	17	18	19	20	21
Ans.	1	3	2	1	4	2	1
Ques.	22	23	24	25	26	27	28
Ans.	4	3	4	3	2	4	2
Ques.	29	30	31	32	33	34	35
Ans.	2	1	2	1	3	2	4
Ques.	36	37	38	39	40	41	42
Ans.	2	4	4	4	2	3	2
Ques.	43	44	45	46	47	48	49
Ans.	2	1	2	1	3	2	3
Ques.	50	51	52	53	54	55	56
Ans.	2	2	3	3	2	1	3
Ques.	57	58	59	60	61	62	63
Ans.	1	2	1	4	4	2	3
Ques.	64	65	66	67	68	69	70
Ans.	4	3	2	4	1	3	4
Ques.	71	72	73	74	75	76	77
Ans.	4	1	1	2	2	3	1
Ques.	78	79	80	81	82	83	84
Ans.	4	1	3	1	3	1	4
Ques.	85	86	87	88	89	90	91
Ans.	1	2	1	1	4	3	1
Ques.	92	93	94	95	96	97	98
Ans.	4	3	2	2	2	2	4
Ques.	99	100	101	102	103	104	105
Ans.	3	3	1	1	4	3	3
Ques.	106	107	108	109	110	111	112
Ans.	3	1	1	3	1	1	4
Ques.	113	114	115	116	117	118	119
Ans.	2	4	1	2	1	2	4
Ques.	120	121	122				
Ans.	1	1	4				