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CLASS X · SCIENCE (086) · BIOLOGY · CBSE BOARD EXAMINATION 2027

CHAPTER 7

How do Organisms Reproduce?

DNA · Zygote 2n → n

Chapter Practice Booklet · Questions only · Answers in the separate Answer Booklet

12 note blocks + 7 diagrams | 73 practice questions | 3 case studies | Board question index

INSIDE THIS BOOKLET

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STUDENT DETAILS

NAME _____

CLASS & SECTION _____

ROLL NO. _____

BOOKLET STARTED ON _____

CHAPTER TEST SCORE _____ / 20

1

READ THIS FIRST

Chapter Notes

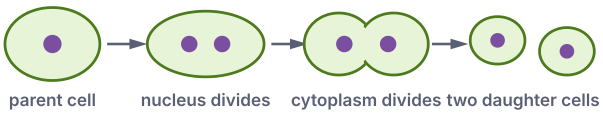
The whole chapter in short-note form: every definition, activity, diagram, formula and reason. Revise from here – you should not need the textbook again.

1 Why reproduce? DNA copying and variation

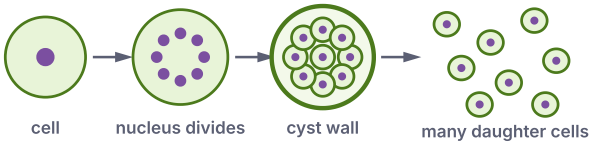
- Reproduction is not needed for one individual to live, but it is needed for the **species** to continue.
- **DNA** in the nucleus carries the information for making proteins; the body design of an organism depends on this. The basic event in reproduction is **making a copy of the DNA**, along with an extra set of cell apparatus, so that the cell can divide into two.
- DNA copying is **not 100% accurate**; small changes give **variations**. Too large a change would not let the new cell survive, so offspring are similar but not identical.
- **Why variation helps:** if the niche (place in the ecosystem) changes – e.g. water warms up – some variants (bacteria that bear heat) survive. So variation helps the **species survive** and is the basis of evolution.
- Reproduction keeps the population of a species **stable**, as the birth of new members balances deaths.

2 Fission in single-celled organisms

Binary fission (Amoeba)



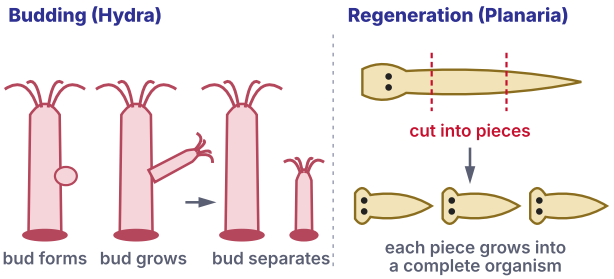
Multiple fission (Plasmodium)



Binary fission in Amoeba and multiple fission in Plasmodium

- **Binary fission:** the cell splits into **two equal halves**. **Amoeba** can split in any plane; **Leishmania** (kala-azar) splits in a **definite plane** because of a whip-like structure at one end. Bacteria and Paramecium also show it.
- **Multiple fission:** the cell divides into **many daughter cells** at once, e.g. **Plasmodium** (malarial parasite), often inside a protective cyst.

3 Fragmentation, regeneration and budding

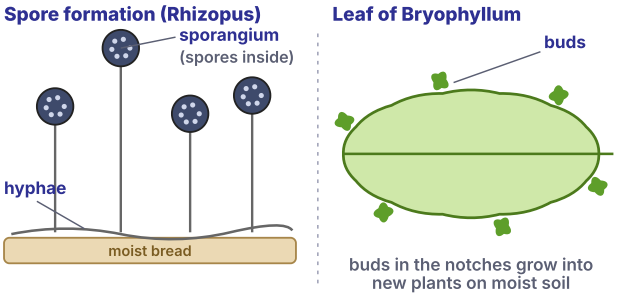


Budding in Hydra; regeneration in Planaria

- **Fragmentation:** a simple multicellular organism breaks into pieces when mature; each piece grows into a new individual, e.g. **Spirogyra**.
- **Regeneration:** a fully differentiated organism regrows its whole body from a cut piece, e.g. **Hydra, Planaria**. Specialised cells divide to make many cells, which then change into different cell types and tissues.
- **Budding:** an outgrowth (bud) forms at one site by repeated cell division; it grows into a tiny individual and **detaches** when mature, e.g. **Hydra**, yeast.

Regeneration is not the same as reproduction: most organisms would not normally depend on being cut up to reproduce. Complex organisms cannot regenerate fully, because their cells are specialised into tissues, organs and organ systems.

4 Vegetative propagation and spores



Spore formation in Rhizopus; buds on a Bryophyllum leaf

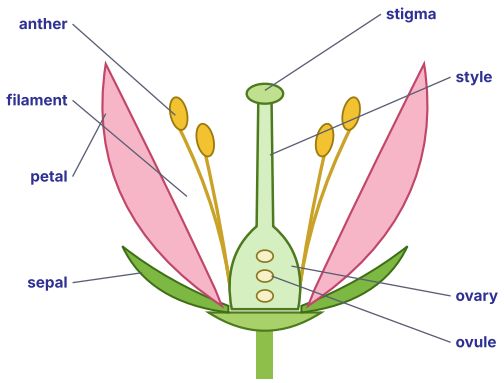
- **Vegetative propagation:** new plants grow from **roots, stems or leaves**. Bryophyllum (leaf notches), money plant (stem cuttings), potato (eyes), sugarcane, rose and grapes (cuttings, layering, grafting), banana (suckers).
- **Advantages:** plants that have **lost the capacity to make seeds** – banana, orange, rose, jasmine – can still be grown; plants flower and fruit **earlier**; all new plants are **genetically like the parent**, so useful characters are kept.
- **Spore formation (Rhizopus, bread mould):** thread-like **hyphae** carry round **sporangia** full of spores. Spores have **thick walls** that protect them until they reach a moist surface, where they grow.

5 Sexual reproduction – why two parents?

- Two individuals combine their DNA, so offspring get **new combinations** – **more variation** than in asexual reproduction.
- If two cells simply fused, the DNA would double each generation. So **germ cells (gametes)** have **half the number of chromosomes** and half the DNA of body cells; fusion restores the full number (human body cell 46 → gametes 23 each → zygote 46).
- Gametes are specialised: the **male gamete** is small and **motile**; the **female gamete** is larger and has **stored food**.

Asexual	Sexual
One parent	Two parents (usually)
No gametes	Gametes fuse (fertilisation)
Offspring nearly identical	Offspring show variation
Fast; many offspring	Slower

6 The flower



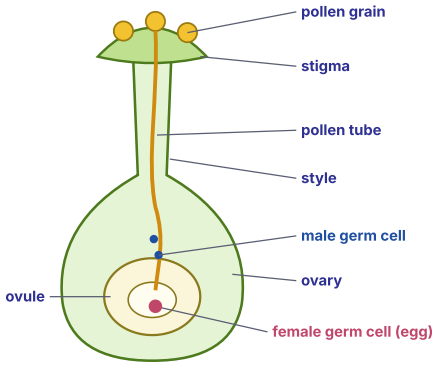
Male part: stamen (anther + filament) · Female part: pistil (stigma + style + ovary)

Longitudinal section of a flower

Sepals, petals	Protect the bud; petals attract insects.
Stamen (male)	**Anther** on a filament makes **pollen grains** (yellowish), which carry the male germ cells.
Pistil (female)	**Stigma** (sticky top), **style** (tube) and swollen **ovary** with **ovules**; each ovule has an egg cell.

- **Bisexual** flowers have both stamens and pistil (hibiscus, mustard). **Unisexual** flowers have only one (papaya, watermelon).

7 Pollination and fertilisation



Germination of pollen on the stigma

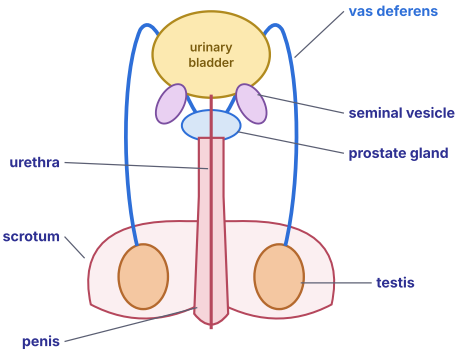
- **Pollination:** transfer of pollen from the anther to the stigma. **Self-pollination** – same flower (or same plant); **cross-pollination** – another plant, by **wind, water or animals** (insects, birds).
- On the stigma, the pollen grain grows a **pollen tube** through the style to the ovule. The male germ cell travels down it.
- **Fertilisation:** fusion of the male germ cell with the female germ cell (egg) in the ovule, forming a **zygote**.

8 After fertilisation – seed and fruit

Part	Becomes
Zygote	Divides to form the **embryo**
Ovule	Develops a tough coat → **seed**
Ovary	Grows and ripens → **fruit**
Petals, sepals, stamens, style, stigma	Shrivel and fall off

- The seed holds the future plant (embryo). In the right conditions (water, air, warmth) it **germinates** into a seedling.
- Parts of the embryo: **plumule** (future shoot), **radicle** (future root) and **cotyledons** (store food).

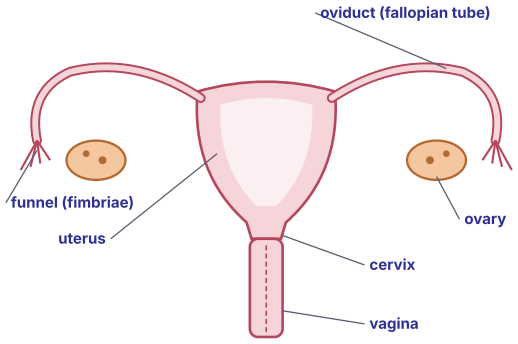
9 Puberty and the male reproductive system



Human male reproductive system (front view)

- **Puberty:** body changes as the reproductive tissues mature. In both: hair in the armpits and genital area, oily skin, pimples. Girls: breasts grow, menstruation starts. Boys: facial hair, voice cracks (deepens).
- **Testes** make sperms and the hormone **testosterone**. They lie **outside the abdomen in the scrotum** because sperm formation needs a **lower temperature** than body temperature.
- Sperms travel through the **vas deferens**, which joins the tube from the bladder; the **urethra** is a common path for sperms and urine.
- **Seminal vesicles** and the **prostate gland** add fluid that makes transport easier and gives nutrition. Sperms are tiny, with a long tail to swim.

10 The female reproductive system and pregnancy



Human female reproductive system

- Two **ovaries** make eggs and hormones. From puberty, **one egg** is released by one ovary **every month**.
- The egg is carried by the **oviduct (fallopian tube)** towards the **uterus**. The two oviducts join the elastic, bag-like uterus, which opens into the **vagina** through the **cervix**.
- Sperms enter through the vagina and travel up; **fertilisation takes place in the oviduct**. The zygote divides and the embryo is **implanted** in the thick lining of the uterus.

11 Placenta, birth and menstruation

- **Placenta:** a disc-like tissue embedded in the uterine wall. On the embryo's side it has **villi**; on the mother's side, **blood spaces** around the villi. It gives a **large surface** for **glucose and oxygen** to pass from mother to embryo, and for **wastes** to pass from embryo to mother's blood.
- The child develops in about **nine months** and is born by rhythmic **contractions of the uterus muscles**.
- **Menstruation:** each month the uterus lining becomes **thick and spongy** to receive a zygote. If the egg is **not fertilised**, it lives about a day; the lining slowly breaks down and comes out through the vagina as **blood and mucus**. This cycle takes about a month; the flow lasts about **2 to 8 days**.

12 Reproductive health

- **Sexually transmitted diseases (STDs):** bacterial – **gonorrhoea, syphilis**; viral – **warts, HIV-AIDS**. A **condom** on the penis helps prevent many of these.

Barrier	**Condoms** – stop sperms reaching the egg; also protect against STDs.
Hormonal	**Oral pills** change the hormone balance so that eggs are not released; may have side effects.
Copper-T / loop	Placed in the uterus to prevent pregnancy; may irritate the uterus; **no protection against STDs**.
Surgical	**Vasectomy** – the vas deferens is blocked (no sperms transferred); **tubectomy** – the fallopian tube is blocked (egg cannot reach the uterus). Surgery, if not done properly, can cause infection.

- **Why family planning:** frequent pregnancies harm the mother's health; a small family is easier to look after; it helps control population.
- **Female foeticide** is reducing the number of girls; **prenatal sex determination is banned by law**. A healthy society needs a balanced **sex ratio**.

Explain why – quick answers

Common 1- and 2-mark reasons

Offspring of asexual reproduction look alike – one parent; no fusion of gametes.

Sexual reproduction gives more variation – DNA from two parents combines.

Gametes have half the chromosomes – so the zygote gets the normal number.

Spores survive bad conditions – they have thick protective walls.

Bananas and roses are grown from cuttings or suckers – they have lost the capacity to make seeds.

Complex animals cannot regrow from a piece – their cells are specialised into tissues and organs.

Leishmania splits in a definite plane – it has a whip-like structure at one end.

Testes lie in the scrotum – sperms need a lower temperature than the body.

The uterus lining thickens each month – it prepares to receive a zygote.

Menstruation occurs – the egg is not fertilised, so the lining breaks down.

Condoms are advised for safe sex – they also block STDs such as HIV-AIDS.

A flower with only a pistil can still form seeds – pollen can come from another flower (cross-pollination).

Exam snapshot

What the board asks, and how to prepare

SYLLABUS 2026–27

- Reproduction in animals and plants (asexual and sexual); reproductive health – need and methods of family planning; safe sex vs HIV/AIDS; child bearing and women's health.

BOARD WEIGHTAGE

30 / 80

Biology = 30 marks (Section A). Unit II **World of Living** (Ch 5–8) = 25 marks. This chapter got about 8 marks in the 2026 paper (two MCQs, a 2-mark diagram of pollen germination and most of the 5-mark question) and 5 marks in the 2026–27 sample paper. Every 2025 paper took its 5-mark long answer from this chapter.

MOST ASKED IN BOARD AND SAMPLE PAPERS, 2025–2027 (5 PAPERS CHECKED)

How often	Question type	Marks	Papers
★★★	Asexual reproduction: fission, fragmentation, regeneration, budding, vegetative propagation, spores	1–5	4 of 5
★☆☆	DNA copying, variation, chromosome number in gametes	1	1 of 5
★★★	Sexual reproduction in flowering plants; gametes; pollination and fertilisation	1–5	3 of 5
★★★	Human reproduction: puberty, reproductive systems, fertilisation, placenta, menstruation	1–5	5 of 5
★★★	Reproductive health: contraception, STDs, sex ratio	1–5	4 of 5

MISTAKES THAT COST MARKS

- Mixing up **pollination** (transfer of pollen) and **fertilisation** (fusion of male and female germ cells).
- Saying fertilisation in humans happens in the uterus – it happens in the **oviduct**.
- Writing that the ovary becomes the seed – the **ovule** becomes the seed; the **ovary** becomes the fruit.
- Saying Plasmodium shows binary fission – it shows **multiple** fission.
- Saying a Copper-T or the pill protects against STDs – only a **condom** does.
- Calling regeneration the usual mode of reproduction – it is not.

HOW TO USE THIS BOOKLET

1. **Day 1:** Read the notes and the key tables; then Part A (NCERT).
2. **Day 2:** Part B (Exemplar) and Part C (board pattern). Do every MUST DO question first.
3. **Day 3:** Part D (case studies) and the real board questions listed in Part E.
4. **Thu 7 Jan (zero period): Biology chapter test – 20 marks, 40 minutes.**
5. Check every answer in the **Answer Booklet**. Write each mistake on the My Mistakes page (Part F).

PART A · NCERT PRACTICE

A NCERT Practice

The ideas of every NCERT activity, in-text question and exercise, asked in new words. Finish every question.

Why organisms reproduce

A1. What is the importance of DNA copying in reproduction? MUST DO [2]

A2. Why is variation useful for the survival of a species but not necessarily for an individual? [2]

A3. How does reproduction help in keeping the population of a species stable? [2]

Asexual reproduction

A4. How does binary fission differ from multiple fission? Give one example of each. MUST DO [2]

A5. How will an organism benefit if it reproduces through spores? [2]

A6. Why can complex organisms not give rise to new individuals by regeneration? MUST DO [2]

A7. Why is vegetative propagation used for growing some plants? Give two advantages. MUST DO [2]

A8. How is binary fission in Leishmania different from that in Amoeba? [2]

A9. How does Spirogyra reproduce? Why can't all multicellular organisms reproduce this way? [2]

A10. Describe budding in Hydra. [2]

Sexual reproduction in flowering plants

A11. Name the male and female reproductive parts of a flower and state the function of each part of the pistil. MUST DO [3]

A12. How is pollination different from fertilisation? MUST DO [2]

A13. Describe the process of fertilisation in a flower and the changes that follow it. MUST DO [3]

A14. Name the parts of the embryo in a seed and give the job of each. [2]

A15. Distinguish between unisexual and bisexual flowers, giving examples. [2]

Reproduction in human beings

A16. List the changes seen in boys and in girls at puberty. [3]

A17. What are the functions of the testes? Why are they located outside the abdominal cavity? [2]
MUST DO

A18. What is the role of the seminal vesicles and the prostate gland? MUST DO [2]

A19. Name the parts of the female reproductive system and state the function of the ovary, oviduct and uterus. [3]

A20. How does the embryo get nourishment inside the mother's body? MUST DO [3]

A21. What happens when the egg is not fertilised? MUST DO [2]

Reproductive health

A22. If a woman is using a Copper-T, will it protect her from sexually transmitted diseases? Explain. MUST DO [2]

A23. What are the different methods of contraception? Give one example of each. MUST DO [3]

A24. Give two reasons for adopting contraceptive methods. [2]

A25. Why is prenatal sex determination banned by law? [2]

B

PART B · EXEMPLAR PRACTICE

Exemplar Practice

Exemplar-style questions, one step harder. Give a reason with every short answer.

Multiple choice

1 mark each

B1. In Rhizopus, the thread-like structures that bear sporangia are called: [1]

(a) filaments (b) hyphae (c) rhizoids (d) roots

B2. Vegetative propagation means forming new plants from: [1]

(a) stem, roots and flowers (b) stem, roots and leaves
(c) stem, flowers and fruits (d) stem, leaves and flowers

B3. Which of these is NOT part of the human female reproductive system? [1]

(a) Ovary (b) Uterus (c) Vas deferens (d) Fallopian tube

B4. The anther contains: [1]

(a) sepals (b) ovules (c) carpels (d) pollen grains

B5. Which of these are NOT functions of the testes? (i) formation of germ cells (ii) secretion of testosterone (iii) development of placenta (iv) secretion of oestrogen [1]

(a) (i) and (ii) (b) (ii) and (iii) (c) (iii) and (iv) (d) (i) and (iv)

B6. In a flower, the parts that produce the male and female gametes are: [1]

(a) stamen and anther (b) filament and stigma
(c) anther and ovary (d) stamen and style

B7. The number of chromosomes stays the same from parents to offspring because: [1]

(a) chromosomes double after the zygote forms
(b) chromosomes are halved when gametes form
(c) chromosomes double when gametes form
(d) chromosomes are halved after the zygote forms

B8. Which organism reproduces by multiple fission? [1]

(a) Amoeba (b) Plasmodium (c) Hydra (d) Planaria

B9. Which of these is a sexually transmitted disease caused by a virus? [1]

(a) Gonorrhoea (b) Syphilis (c) HIV-AIDS (d) Malaria

B10. Offspring from asexual reproduction are very similar because: (i) only one parent is involved (ii) no gametes are involved (iii) it happens before sexual reproduction (iv) it happens after sexual reproduction [1]

(a) (i) and (ii) (b) (i) and (iii) (c) (ii) and (iv) (d) (iii) and (iv)

Short answer

2–3 marks

B11. Why do offspring of sexual reproduction show more variation than those of asexual reproduction? [2]

B12. What is the ratio of the number of chromosomes in a human egg to that in a zygote? How is the full number restored? MUST DO [2]

B13. A flower has a pistil but its stamens have been removed. Can it still form seeds? Explain. MUST DO [2]

B14. Why does bread mould grow well on a moist slice of bread but not on a dry slice? [2]

B15. Match each organism with its mode of reproduction: Amoeba, yeast, Plasmodium, Leishmania, Bryophyllum, Rhizopus. MUST DO [3]

B16. Give three differences between asexual and sexual reproduction. [3]

C

PART C · BOARD PATTERN

Board Pattern Practice

Question types from the 2025 and 2026 board papers and the CBSE sample papers. ★★★ = asked in 3 or more of the 5 papers checked · ★★ = 2 papers · ★ = 1 paper.

ASSERTION–REASON: HOW TO ANSWER

(a) Both A and R are true, and R is the correct explanation of A.
(b) Both A and R are true, but R is not the correct explanation of A.
(c) A is true, but R is false.
(d) A is false, but R is true.

Asexual reproduction

★★★ 4 of 5 papers · 1–5 marks

C1. Which pair has one unicellular and one multicellular organism, both reproducing asexually? [1]

(a) Leishmania and Spirogyra
(b) Plasmodium and Amoeba
(c) Hydra and Planaria
(d) Amoeba and Leishmania

C2. Which plants have lost the capacity to produce seeds and are grown vegetatively? [1]

(a) Banana, orange, rose
(b) Wheat, rice, maize
(c) Mango, pea, gram
(d) Mustard, sunflower, cotton

C3. Yeast cells kept in sugar solution show small outgrowths that later separate. This mode of reproduction is: [1]

(a) binary fission **(b)** budding **(c)** fragmentation **(d)** spore formation

C4. ASSERTION–REASON [1]

Assertion (A): Spirogyra reproduces by fragmentation.
Reason (R): Spirogyra is a simple multicellular organism; each fragment can grow into a new individual.

C5. ASSERTION–REASON [1]

Assertion (A): Regeneration is not the usual way of reproduction in most organisms.
Reason (R): Most organisms would not normally depend on being cut into pieces to reproduce.

C6. What is regeneration? How does it take place in Planaria? [2]

C7. What is vegetative propagation? Explain how a Bryophyllum leaf or a banana plant gives new plants. Give two advantages. MUST DO [3]

C8. Describe spore formation in Rhizopus. Why do spores survive bad conditions? [3]

DNA copying, variation and chromosome number

★☆☆ 1 of 5 papers · 1 marks

C9. A human body cell has 46 chromosomes. The number in a sperm and in a zygote is: [1]

(a) 23 and 46 **(b)** 46 and 46 **(c)** 23 and 23 **(d)** 46 and 92

C10. ASSERTION–REASON [1]

Assertion (A): Variation is useful for the survival of a species over time.
Reason (R): When the niche changes, some variants may be able to survive in the new conditions.

C11. Why must germ cells have only half the number of chromosomes of body cells? MUST DO [2]

Sexual reproduction in flowering plants

★★★ 3 of 5 papers · 1–5 marks

C12. The anthers of some mustard flowers were removed and the flowers were covered with bags. What will happen? [1]

(a) No seeds will form, as no pollen can reach the stigma

(b) Seeds will form by self-pollination

(c) Seeds will form without fertilisation

(d) The flowers will make new anthers

C13. After fertilisation, the ovary develops into the: [1]

(a) seed (b) fruit (c) embryo (d) seed coat

C14. ASSERTION–REASON [1]

Assertion (A): Pollination is followed by the growth of a pollen tube.

Reason (R): The pollen tube carries the male germ cell to the female germ cell in the ovule.

C15. Distinguish between self-pollination and cross-pollination. Name two agents of cross-pollination. [2]

C16. Draw a labelled diagram to show the germination of a pollen grain on the stigma. MUST DO [2]

C17. List the changes that take place in a flower after fertilisation. MUST DO [3]

C18. Draw a longitudinal section of a flower and label the male and female parts. [3]

Reproduction in human beings

★★★ 5 of 5 papers · 1–5 marks

C19. In humans, fertilisation normally takes place in the: [1]

(a) uterus (b) ovary

(c) oviduct (fallopian tube) (d) vagina

C20. After the embryo is implanted, the uterus: [1]

(a) develops a placenta to nourish the embryo (b) sheds its lining

(c) releases an egg every month (d) becomes thin

C21. ASSERTION–REASON [1]

Assertion (A): The testes lie outside the abdominal cavity, in the scrotum.

Reason (R): Sperm formation needs a temperature lower than normal body temperature.

C22. ASSERTION–REASON [1]

Assertion (A): The lining of the uterus becomes thick and spongy every month.

Reason (R): It prepares to receive and nourish a fertilised egg.

C23. Trace the path of sperms from where they are formed until they leave the body. Name the glands that add fluid to them. MUST DO [2]

C24. What is the placenta? Describe its structure and function. MUST DO [3]

C25. What is menstruation? Why does it occur, and how long does the flow last? [3]

Reproductive health

★★★ 4 of 5 papers · 1–5 marks

C26. In vasectomy and tubectomy respectively, the tubes blocked are the: [1]

(a) vas deferens; fallopian tube (b) urethra; uterus

(c) fallopian tube; vas deferens (d) ureter; cervix

C27. ASSERTION–REASON [1]

Assertion (A): Use of condoms is a good method of safe sex.

Reason (R): Condoms stop sperms reaching the egg and also protect against sexually transmitted diseases.

C28. Name three methods of contraception and give one limitation of each. [3]

C29. Name two bacterial and two viral sexually transmitted diseases. How can their spread be reduced? [2]

Long answer

5 marks

C30. (a) Draw a labelled diagram of the human female reproductive system. (b) State the function of the ovary, oviduct and uterus. (c) How does the embryo get its nourishment? [5] MUST DO

C31. (a) Draw the longitudinal section of a flower and label its reproductive parts. (b) What is pollination? Name its two types. (c) What happens after fertilisation? [5] MUST DO

C32. Explain what will happen when: (i) a sperm fails to reach the egg in the oviduct; (ii) a flower that has only a pistil gets no pollen; (iii) an egg is fertilised and implanted; (iv) a seed is sown in moist, warm soil; (v) a Bryophyllum leaf falls on wet soil. [5] MUST DO

D

PART D · SECTION A CASE STYLE

Case-Based Questions

Each case carries 4 marks (1 + 1 + 2), as in the case-based questions of the board paper.

D1. Case Study · The Kitchen Garden [4]

Gurpreet's grandmother grows a money plant from stem cuttings, new rose plants by grafting, and bananas from the small shoots (suckers) that come up near the old plant. A fallen Bryophyllum leaf in her garden had tiny plants growing along its edges.

(i) Name the method used by the grandmother to grow these plants. [1]

(ii) Name two plants that have lost the capacity to produce seeds. [1]

(iii) Give two advantages of this method. [2]

OR

(iii) How did new plants form on the Bryophyllum leaf? Why are these plants exactly like the parent? [2]

D2. Case Study · Pollination Watch [4]

In a mustard field, students saw bees moving from flower to flower with yellow dust on their legs. Their teacher removed the anthers from some flowers and covered them with paper bags. A few weeks later, the covered flowers had no pods, while the open flowers had pods full of seeds.

(i) What is the transfer of the yellow dust from anther to stigma called? [1]

(ii) Why did the covered flowers not form seeds? [1]

(iii) Describe the events from the landing of a pollen grain on the stigma to the formation of a seed. [2]

OR

(iii) Distinguish between self- and cross-pollination. Which one did the bees bring about here? [2]

D3. Case Study · The Health Talk [4]

A doctor visited Class X and spoke about the changes of puberty, menstrual hygiene and safe health practices. She explained that some infections spread through sexual contact, and that families can plan the number and spacing of children by different methods. She said sex determination before birth is a crime.

(i) Name one viral sexually transmitted disease. [1]

(ii) Name the surgical method of contraception for women. [1]

(iii) Which contraceptive method also protects against STDs? Explain how. [2]

OR

(iii) Why is prenatal sex determination banned, and why is family planning good for women's health? [2]

PART E · REAL BOARD QUESTIONS

E Board PYQ Index

Real questions from recent Science board papers and CBSE sample papers, by type. Open the official paper and solve the listed questions.

Frequency	Question type	Marks	Where asked (year: paper code, question number)	Practise here
★★★	**Asexual reproduction: fission, fragmentation, regeneration, budding, vegetative propagation, spores**	1–5	**2026:** 31/1/1 Q2 (mode shown in a diagram), Q3 (asexual reproduction, unicellular/multicellular), Q16 OR (spores, Bryophyllum, Spirogyra) · **2025:** OD Set 1 Q10 (match organisms and modes) · **2025:** Delhi Set 1 Q7 (plants that lost seed-forming capacity), Q35 (regeneration, Spirogyra) · **SQP 2024–25:** Q35 (banana suckers, vegetative propagation)	A4–A10, B1–B2, B8, B10, B14–B15, C1–C8, C32, D1
★☆☆	**DNA copying, variation, chromosome number in gametes**	1	**SQP 2026–27:** Q6 (chromosomes in a gamete and a body cell)	A1–A3, B7, B11–B12, B16, C9–C11
★★★	**Sexual reproduction in flowering plants; gametes; pollination and fertilisation**	1–5	**2026:** 31/1/1 Q11 OR (pollination vs fertilisation), Q12 (pollen germination diagram), Q16 (pistil-only flower; seed in soil) · **2025:** Delhi Set 1 Q8 (male gametes) · **SQP 2026–27:** Q4 (bagged flowers with anthers removed)	A11–A15, B4, B6, B13, C12–C18, C31, D2
★★★	**Human reproduction: puberty, reproductive systems, fertilisation, placenta, menstruation**	1–5	**2026:** 31/1/1 Q16 (sperm reaching the egg; egg not fertilised) · **2025:** OD Set 1 Q35 (puberty, testes outside OR female parts, uterus) · **2025:** Delhi Set 1 Q35 OR (male reproductive parts) · **SQP 2024–25:** Q35 OR (placenta) · **SQP 2026–27:** Q12 (uterus after implantation)	A16–A21, B3, B5, C19–C25, C30, C32
★★★	**Reproductive health: contraception, STDs, sex ratio**	1–5	**2026:** 31/1/1 Q16 OR (Copper-T) · **2025:** OD Set 1 Q35 (contraception) · **2025:** Delhi Set 1 Q35 OR (surgical contraception) · **SQP 2026–27:** Q5 (vasectomy and tubectomy)	A22–A25, B9, C26–C29, D3

PAPERS CHECKED (5)

- 2026 board paper 31/1/1 (Set 1) – first paper with separate Biology, Chemistry and Physics sections
- 2025 board paper, Outside Delhi Set 1
- 2025 board paper, Delhi Set 1
- CBSE Sample Question Paper 2024–25
- CBSE Sample Question Paper 2026–27 (the pattern for your exam)

★★★ = asked in 3 or more of the 5 papers checked · ★★ = 2 papers · ★ = 1 paper. Codes: OD = Outside Delhi. Each paper was read question by question; questions from the 2026–27 Sample Paper after Q20 were checked from a summary of the paper. Download the official papers from cbse.gov.in → Previous Year Question Papers and cbseacademic.nic.in → Sample Question Papers, and solve the exact questions listed.

F

PART F · YOUR RECORD

My Mistakes

Write down each mistake from this chapter, including the chapter test.

Every wrong answer is a free lesson. Write it here, find the rule you missed, and redo the question after three days. Bring this page to class before the chapter test.

Date	Part & Q No.	What went wrong	Correct rule or method	Redone ✓