

CHAPTER 3

Reproductive Health

CBSE · Biology · Class 12

WHAT THIS CHAPTER DOES

Boards prep that builds confidence, not anxiety.

TODAY'S MISSION

Today's Mission

WHY THIS MATTERS

The Big Picture

TOPIC

Self-Check (Pre-Lecture)

TOPIC

A

Part A — Reproductive Health & Population

TOPIC

The Concept and the Programme

POINT 1

POINT 2

POINT 3

TOPIC

Why Birth Control Became a National Priority

TOPIC

B

Part B — Birth Control Methods

TOPIC

The Five Families of Contraception

POINT 1

POINT 2

POINT 3

TRY IT · SOLVE BEFORE YOU PEEK

Quick Test — 30 seconds

Which of the following is a NON-STEROIDAL, once-a-week oral contraceptive developed in India?

SOLUTION

TOPIC

IUD Mechanism Cheat-Table

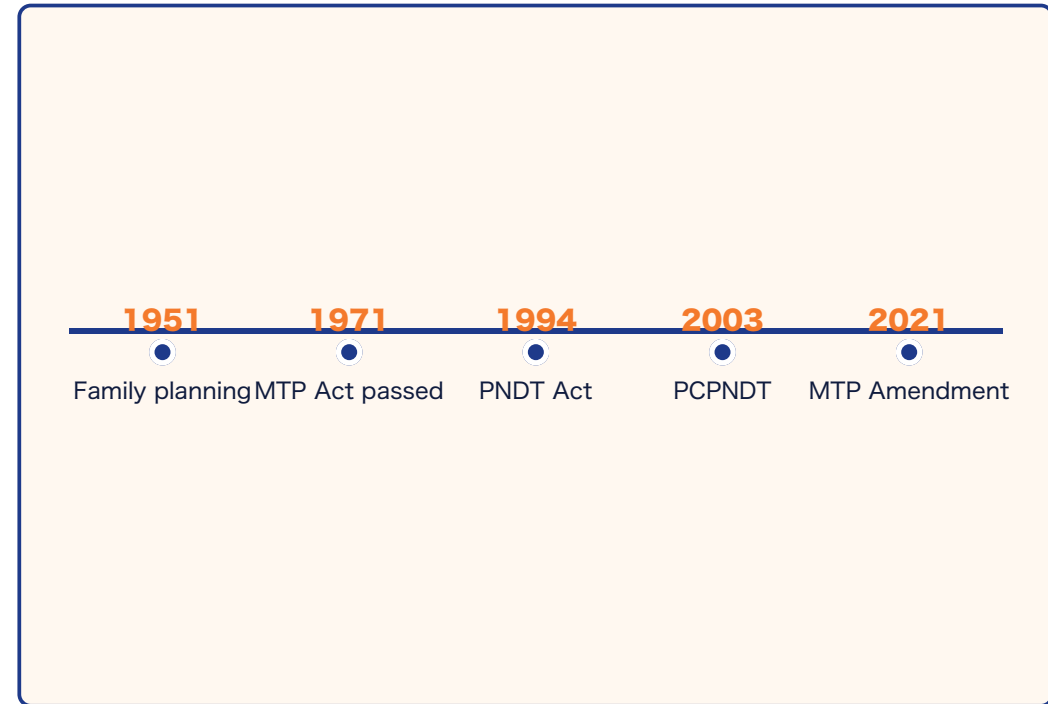
TOPIC

C

Part C — Medical Termination of Pregnancy

WORKED EXAMPLE

The MTP Act — A Legislative Timeline



TRY IT · SOLVE BEFORE YOU PEEK

Quick Test — MTP Limits

Under the amended MTP Act, termination between 20 and 24 weeks for special categories requires the opinion of:

SOLUTION

TOPIC

D

Part D — Sexually Transmitted Infections

TOPIC

STIs at a Glance

POINT 1

POINT 2

POINT 3

TRY IT · SOLVE BEFORE YOU PEEK

Quick Test — STI Routes

Besides sexual contact, hepatitis-B and HIV can ALSO spread through:

SOLUTION

TOPIC

E

Part E — Infertility & ART

WORKED EXAMPLE

Assisted Reproductive Technologies (ART)

TOPIC

ART Quick-Recall Grid

TOPIC

Amniocentesis — Legitimate vs Banned

PYQ PATTERNS

PYQ Pattern Heatmap

MARKS DISTRIBUTION

Where the Marks Are (sub-topic weights)

TOPPER TEMPLATE · MARK-BY-MARK

Topper's Answer — Classify Contraception

TOPPER TEMPLATE · MARK-BY-MARK

Classify the methods of contraception with one example and mode of action each.

1 NATURAL + BARRIER

1 m

NATURAL methods avoid sperm-ovum meeting without devices — rhythm/periodic abstinence (avoid coitus during day 10-17 fertile window), coitus interruptus (withdrawal), and lactational amenorrhea (intense breastfeeding suppresses ovulation, reliable up to ~6 months). BARRIER methods physically block sperm-ovum meeting — condoms (Nirodh), diaphragms, cervical caps, vaults.

2 IUDS

1 m

INTRA-UTERINE DEVICES are inserted by a doctor into the uterus: non-medicated (Lippes loop) increase phagocytosis of sperm; copper-releasing (Cu-T, Cu-7, Multiload-375) release Cu ions that suppress sperm motility/fertilising capacity; hormone-releasing (LNG-20, Progestasert) make the uterus unsuitable for implantation and the cervix hostile to sperm. IUDs are India's most widely accepted reversible method.

3 ORAL PILLS

1 m

ORAL CONTRACEPTIVES are progestogen or progestogen-estrogen combinations taken daily for 21 days — they inhibit ovulation and implantation and alter cervical mucus. SAHELI is an Indian non-steroidal, once-a-week pill (developed by CDRI Lucknow) with very few side effects.

4 SURGICAL (STERILISATION)

1 m

SURGICAL/TERMINAL methods block gamete transport: VASECTOMY — the vas deferens is cut/tied in males; TUBECTOMY — the fallopian tubes are cut/tied in females. These are highly effective but generally irreversible.

TOPPER TEMPLATE · MARK-BY-MARK

State the provisions of the MTP Act (1971, amended 2021).

- 1** **DEFINITION + PURPOSE**
1 m

Medical Termination of Pregnancy (MTP) is the intentional/voluntary termination of pregnancy before full term. The Government legalised it through the MTP Act in 1971 (amended in 2021) to check the menace of UNSAFE, illegal abortions and the associated maternal mortality, and as an aid to control population growth.
- 2** **TIME LIMITS**
1 m

Under the amended Act, pregnancy may be terminated up to 20 WEEKS on the opinion of ONE registered medical practitioner (RMP), and between 20 and 24 WEEKS for special categories (e.g., rape survivors, minors, differently-abled women) on the opinion of TWO RMPs.
- 3** **INDICATIONS + CAUTION**
1 m

MTPs are advised where continuation would harm the mother or foetus, in cases of rape, or where contraception has failed. Most MTPs are in the FIRST TRIMESTER (safer). However, MTP is sometimes MISUSED for illegal SEX-SELECTIVE abortion after foetal sex determination — which is banned by the PCPNDT Act.

TOPPER TEMPLATE · MARK-BY-MARK

Name common STIs and state preventive measures.

1 NAME STIS 1 m

Common sexually transmitted infections include gonorrhoea, syphilis, genital herpes, chlamydiasis, genital warts, trichomoniasis, hepatitis-B, and HIV leading to AIDS. Early symptoms are often minor (itching, fluid discharge, pain), so infections may be ignored.

2 CONSEQUENCES 1 m

If untreated, STIs may cause pelvic inflammatory disease (PID), infertility, ectopic pregnancies, abortions, stillbirths, and even cancer of the reproductive tract. Hepatitis-B and HIV also spread via shared needles, transfusion, and from infected mother to foetus.

3 PREVENTION 1 m

Preventive measures: (i) avoid sex with unknown/multiple partners; (ii) always use condoms during coitus; (iii) avoid sharing needles, syringes and blades; (iv) in case of doubt, seek early diagnosis and complete the full treatment course.

PYQ PATTERNS

Top PYQ patterns to drill

#1	Explain any THREE methods of contraception / classify birth control methods with examples. (3 marks)	90%
#2	Name the Act for medical termination of pregnancy and state the conditions / time limits under it. (3 marks)	80%
#3	Name FOUR common STIs and state TWO preventive measures. (3 marks)	75%
#4	Differentiate ART techniques	IVF, ZIFT, GIFT, ICSI — / expand the abbreviations and state where each is used. (3 marks) — 70%
#5	Name the technique used for sex-determination of the foetus that is being misused, and the Act that bans this misuse. (2 marks)	65%

RECAP · MEMORISE THESE

Chapter Summary

1 Reproductive health (WHO) = total physical, emotional, behavioural and social well-being of reproduction; delivered through the RCH programme.

2 Population explosion drove birth control: NATURAL (rhythm, coitus interruptus, lactational amenorrhea), BARRIER (condoms, diaphragms), IUDs (Cu-T, Multiload, LNG-20), ORAL (Saheli — weekly, non-steroidal), SURGICAL (vasectomy,

3 MTP Act 1971 (amended 2021): up to 20 weeks on 1 RMP, 20-24 weeks for special categories on 2 RMPs — to curb unsafe abortions and aid population control.

WHAT'S NEXT

Next Class



Master Reproductive Health in 90 Minutes

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